

# Appendix S

## Groundwater Analytical Results

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

### Westinghouse Electric Company

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

Project Name: CVOC

Lot Number: **UH14136**

Date Completed: 08/16/2019



08/16/2019 3:55 PM

Approved and released by:  
Project Manager: Grant Wilton



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# SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

## **Case Narrative Westinghouse Electric Company Lot Number: UH14136**

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 NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

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

# SHEALY ENVIRONMENTAL SERVICES, INC.

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**Sample Summary**  
**Westinghouse Electric Company**  
**Lot Number: UH14136**  
**Project Name: CVOC**  
**Project Number:**

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<b>Sample Number</b>	<b>Sample ID</b>	<b>Matrix</b>	<b>Date Sampled</b>	<b>Date Received</b>
001	L-1 (10-15)	Aqueous	08/14/2019 1500	08/14/2019
002	L-1 (28-33)	Aqueous	08/14/2019 1612	08/14/2019
003	L-1 (48-53)	Aqueous	08/14/2019 1802	08/14/2019
004	TB-1	Aqueous	08/14/2019 1810	08/14/2019

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(4 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

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**Detection Summary**  
**Westinghouse Electric Company**  
**Lot Number: UH14136**  
**Project Name: CVOC**  
**Project Number:**

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	L-1 (28-33)	Aqueous	cis-1,2-Dichloroethene	8260D	3.8		ug/L	6
002	L-1 (28-33)	Aqueous	Vinyl chloride	8260D	2.7		ug/L	6

(2 detections)

# Volatile Organic Compounds by GC/MS

Client: <b>Westinghouse Electric Company</b>	Laboratory ID: <b>UH14136-001</b>
Description: <b>L-1 (10-15)</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>08/14/2019 1500</b>	Project Name: <b>CVOC</b>
Date Received: <b>08/14/2019</b>	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/15/2019 2223	STM		26047

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		112	70-130
1,2-Dichloroethane-d4		114	70-130
Toluene-d8		100	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: <b>Westinghouse Electric Company</b>	Laboratory ID: <b>UH14136-002</b>
Description: <b>L-1 (28-33)</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>08/14/2019 1612</b>	Project Name: <b>CVOC</b>
Date Received: <b>08/14/2019</b>	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/15/2019 2246	STM		26047

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
<b>cis-1,2-Dichloroethene</b>	<b>156-59-2</b>	<b>8260D</b>	<b>3.8</b>		<b>1.0</b>	<b>ug/L</b>	<b>1</b>
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
<b>Vinyl chloride</b>	<b>75-01-4</b>	<b>8260D</b>	<b>2.7</b>		<b>1.0</b>	<b>ug/L</b>	<b>1</b>

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		117	70-130
Toluene-d8		96	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: <b>Westinghouse Electric Company</b>	Laboratory ID: <b>UH14136-003</b>
Description: <b>L-1 (48-53)</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>08/14/2019 1802</b>	Project Name: <b>CVOC</b>
Date Received: <b>08/14/2019</b>	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/15/2019 2311	STM		26047

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		99	70-130
1,2-Dichloroethane-d4		117	70-130
Toluene-d8		97	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: <b>Westinghouse Electric Company</b>	Laboratory ID: <b>UH14136-004</b>
Description: <b>TB-1</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>08/14/2019 1810</b>	Project Name: <b>CVOC</b>
Date Received: <b>08/14/2019</b>	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/15/2019 2159	STM		26047

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		98	70-130
1,2-Dichloroethane-d4		112	70-130
Toluene-d8		94	70-130

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

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**Chain of Custody  
and  
Miscellaneous Documents**



## Chain of Custody Record

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
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 Telephone No. 803-791-8700 Fax No. 803-791-9111  
 www.shealylab.com

Number 101199

Client: <b>Westinghouse Columbia Fuel Fabrication Facility</b> Address: <b>5801 Bluff Road</b> City: <b>Hopkins</b> State: <b>SC</b> Zip Code:	Report to Contact: <b>Diana Joyner</b> Sample's Signature: <i>Charles K Suddeth</i> Printed Name: <b>Charles K Suddeth</b>	Telephone No. / E-mail: <b>803-647-1920 / joynerd@westinghouse.com</b> Analyze (Attach list if more space is needed)	Quote No.: Page:   of:
Project No.: P.O. No.:		No. of Containers by Preservative Type	
Sample ID / Description (Containers for each sample may be combined on one line.)	Date Time	Matrix Air Soil Water Sediment Sludge Other	By Bottle HCL HF HNO3 H2SO4 Other
L-1 (10-15)	8/14/19 1500		3
L-1 (28-33)	8/14/19 1612		3
L-1 (48-53)	8/14/19 1802		3
TB-1	8/14/19 1810		2
Remarks / Cooler I.D.: Analyze for Chlorinated VOCs only			

Turn Around Time Required (Prior lab approval required for expedited MAT.) <input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush (Specify) <b>24 hr (ASAP)</b>	Sample Disposal <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab	Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown
Relinquished by: <i>Charles K Suddeth</i>	Date: <b>8/14/19</b> Time: <b>12:07</b>	1. Received by:
Relinquished by:	Date: Time:	2. Received by:
Relinquished by:	Date: Time:	3. Received by:
Relinquished by:	Date: Time:	4. Laboratory received by: <i>Jarby Nusto</i>
Note: All samples are retained for four weeks from receipt unless other arrangements are made.		Date: <b>8/14/19</b> Time: <b>1907</b> Receipt Temp: <b>5.0 °C</b> Yes No Ice Pack Receipt Temp: <b>N/A</b>

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Shealy Environmental Services, Inc.  
Document Number: ME001 RC-14

Page 1 of 1  
Effective Date: 8/2/2018

## Sample Receipt Checklist (SRC)

Client: Westinghouse Columbia Fuel Cooler Inspected by/date: DMN / 08/14/19 Lot #: UH14136

Means of receipt: <input type="checkbox"/> SESI <input checked="" type="checkbox"/> Client <input type="checkbox"/> LPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA	
5.0 / 5.0 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (retinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pca-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625 (< 0.5mg/l.) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # NA
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 mg/L (If #19 is no) and were adjusted accordingly in sample 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: BMG Date: 08/14/19	
Comments:	

# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

### Westinghouse Electric Company

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

Project Name: CVOC

Lot Number: **UH15060**

Date Completed: 08/16/2019



08/16/2019 5:18 PM

Approved and released by:  
Project Manager: Grant Wilton



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# SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

## **Case Narrative Westinghouse Electric Company Lot Number: UH15060**

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.

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

# SHEALY ENVIRONMENTAL SERVICES, INC.

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Sample Summary  
Westinghouse Electric Company  
Lot Number: UH15060  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-1 (63-68)	Aqueous	08/15/2019 1000	08/15/2019
002	L-1 (78-83)	Aqueous	08/15/2019 1205	08/15/2019
003	L-1 (78-83)-DUP	Aqueous	08/15/2019 1205	08/15/2019
004	TB-02-091519	Aqueous	08/15/2019 1650	08/15/2019

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(4 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

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Detection Summary  
Westinghouse Electric Company  
Lot Number: UH15060  
Project Name: CVOC  
Project Number:

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Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
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(0 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH15060-001
Description: L-1 (63-68)	Matrix: Aqueous
Date Sampled: 08/15/2019 1000	Project Name: CVOC
Date Received: 08/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/16/2019 0413	STM		26047

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		103	70-130
1,2-Dichloroethane-d4		119	70-130
Toluene-d8		101	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH15060-002
Description: L-1 (78-83)	Matrix: Aqueous
Date Sampled: 08/15/2019 1205	Project Name: CVOC
Date Received: 08/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/16/2019 0436	STM		26047

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		108	70-130
1,2-Dichloroethane-d4		123	70-130
Toluene-d8		104	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH15060-003
Description: L-1 (78-83)-DUP	Matrix: Aqueous
Date Sampled: 08/15/2019 1205	Project Name: CVOC
Date Received: 08/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/16/2019 0459	STM		26047

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		98	70-130
1,2-Dichloroethane-d4		119	70-130
Toluene-d8		98	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH15060-004
Description: TB-02-091519	Matrix: Aqueous
Date Sampled: 08/15/2019 1650	Project Name: CVOC
Date Received: 08/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/16/2019 0350	STM		26047

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		117	70-130
Toluene-d8		95	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



**Chain of Custody Record**

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
 106 Vantage Point Drive • West Columbia, SC 29172  
 Telephone No. 803-791-9700 Fax No. 803-791-9111  
 www.shealylab.com

**Number 101198**

Client Westinghouse Columbia Fuel Fabrication Facility		Report to Contact Diana Joyner		Telephone No. / E-mail 803-647-1920 / djoyner@pe		Dumps No.	
Address 5801 Bluff Road		Sampler's Signature Charles K. Suddeth		Analysis (Attach list if more space is needed)		Page 1 of 1	
City Hopkins		Printed Name Charles K. Suddeth		500A Reanalysis		Barcode UH15060	
Project Name Westinghouse Columbia Fuel Fabrication Facility		P.O. No.		No. of Containers by Preservative Type		Remarks / Cooler I.D.	
State SC		Date		Matrix		GC Requirements (Specify)	
Zip Code		Time		Approx		Date / Time	
Sample ID / Description (Containers for each sample may be combined in one list)		Date		Time		Date / Time	
L-1 (63-68)		8/15/19		1000		8/15/19 1725	
L-1 (78-83)		8/15/19		1205		8/15/19 1725	
L-1 (78-83)-DUP		8/15/19		1205		8/15/19 1725	
TB-02-081519		8/15/19		1650		8/15/19 1725	
Turn Around Time Required (Prior lab approval required for expedited TAT.)		Sample Disposal		Possible Hazard Identification		Date / Time	
Standard K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub> (Specify) 48 hr or 520 hr		1. Return to Client		Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown <input type="checkbox"/>		Date / Time	
1. Relinquished by Charles K. Suddeth		Date 8/15/19		Time 1225		Date / Time	
2. Relinquished by		Date		Time		Date / Time	
3. Relinquished by		Date		Time		Date / Time	
4. Relinquished by		Date		Time		Date / Time	
Note: All samples are retained for four weeks from receipt unless other arrangements are made.							
Laboratory received by: Diana Joyner Received on ice (Circle) Yes No Receipt Temp: 5/10°C LAB USE ONLY Received on ice (Circle) Yes No							

**DISTRIBUTION: WHITE & YELLOW-Return to Laboratory with Samples; PINK-Field/Client Copy**

Document Number: F-AD-133 Effective Date: 06-01-2014

# SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.  
Document Number: ME6018C-14

Page 1 of 1  
Effective Date: 8/2/2018

## Sample Receipt Checklist (SRC)

Client: Westinghouse Columbia Cooler Inspected by/date: DMN / 08/15/19 Lot #: UH15060

Means of receipt: <input type="checkbox"/> SFSI <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>NA</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>NA</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: <u>NA</u> <u>5.9 / 5.9 °C NA / NA °C NA / NA °C NA / NA °C</u>	
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles IR Gun ID: <u>5</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # <u>NA</u>
<b>Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)</b>	
Sample(s) <u>NA</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>NA</u> mL of circle one: H <sub>2</sub> SO <sub>4</sub> , HNO <sub>3</sub> , HCl, NaOH using SR # <u>NA</u> Time of preservation <u>NA</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) <u>TB-02-081519 (2)</u> were received with bubbles >6 mm in diameter.	
Sample(s) <u>NA</u> were received with TRC > 0.5 mg/L (If #19 is no) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: <u>NA</u>	
SR barcode labels applied by: <u>DMN</u> Date: <u>08/15/19</u>	

Comments:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# SHEALY ENVIRONMENTAL SERVICES, INC.

---

## Report of Analysis

### Westinghouse Electric Company

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

Project Name: CVOC

Lot Number: **UH16068**

Date Completed: 08/20/2019



08/20/2019 3:37 PM

Approved and released by:  
Project Manager: Grant Wilton



The electronic signature above is the equivalent of a handwritten signature.  
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# **SHEALY ENVIRONMENTAL SERVICES, INC.**

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

## **Case Narrative Westinghouse Electric Company Lot Number: UH16068**

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 NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

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

# SHEALY ENVIRONMENTAL SERVICES, INC.

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Sample Summary  
Westinghouse Electric Company  
Lot Number: UH16068  
Project Name: CVOC  
Project Number:

---

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-17 (15-20)	Aqueous	08/16/2019 1003	08/16/2019
002	L-17 (25-30)	Aqueous	08/16/2019 1122	08/16/2019
003	TB-03-081619	Aqueous	08/16/2019 1200	08/16/2019

---

(3 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

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Detection Summary  
Westinghouse Electric Company  
Lot Number: UH16068  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	L-17 (15-20)	Aqueous	cis-1,2-Dichloroethene	8260D	6.2		ug/L	5
002	L-17 (25-30)	Aqueous	cis-1,2-Dichloroethene	8260D	5.4		ug/L	6

(2 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH16068-001
Description: L-17 (15-20)	Matrix: Aqueous
Date Sampled: 08/16/2019 1003	Project Name: CVOC
Date Received: 08/16/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/19/2019 1211	TML		26312

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	6.2		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		103	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		108	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH16068-002
Description: L-17 (25-30)	Matrix: Aqueous
Date Sampled: 08/16/2019 1122	Project Name: CVOC
Date Received: 08/16/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/19/2019 1235	TML		26312

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	5.4		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		102	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		108	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH16068-003
Description: TB-03-081619	Matrix: Aqueous
Date Sampled: 08/16/2019 1200	Project Name: CVOC
Date Received: 08/16/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/19/2019 1059	TML		26312

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		102	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		108	70-130

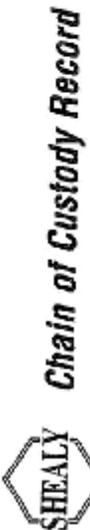
LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range  
 ND = Not detected at or above the LOQ      N = Recovery is out of criteria      P = The RPD between two GC columns exceeds 40%  
 H = Out of holding time      W = Reported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

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Chain of Custody  
and  
Miscellaneous Documents

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**Number 101201**



Client: Westinghouse Columbia Fuel Fabrication Facility  
 Address: 5801 Bluff Road  
 City: Hopkins State: SC Zip Code: \_\_\_\_\_  
 Project Name: Westinghouse Columbia Fuel Fabrication Facility  
 Project No.: \_\_\_\_\_ P.O. No.: \_\_\_\_\_

Report to Contact: Diana Joyner  
 Sample's Signature: Charles K. Subbath  
 Printed Name: Charles K. Subbath

Telephone No. / Email: 803-647-1920 / Joynerdp@Westinghouse.com  
 Analysis (Attach list if more space is needed): Chlorinated VOCs

QC Requirements (Specify):  
 Standard  Rush (Specify) 48 hr or better  
 Return to Client  Disposal by Lab Typ 1008  
 Skin Irritant  Flammable  Poison  Unknown

Sample ID / Description (Combine for each sample may be analyzed on one line.)	Date	Time	No. of Containers by Preservative Type					Matrix	Sample Disposed	Sample Disposal	Possible Hazard Identification	GC Requirements (Specify)
			Water	Acid	Base	Other	As Stated					
L-17 (15-20)	8/16/19	1003				3						
L-17 (25-30)	8/16/19	1122				3						
TB-03 - 081619	8/16/19	1200				2						

1. Relinquished by: Charles K. Subbath Date: 8/16/19 Time: 1008  
 2. Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 3. Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 4. Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

1. Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 2. Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 3. Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 4. Laboratory received by: [Signature] Date: 8/16/19 Time: 1008

LAB USE ONLY  
 Received on Ice (Circle) Yes  No  Receipt Temp: 2.7 °C

Note: All samples are retained for four weeks from receipt unless other arrangements are made.



# SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.  
Document Number: ME0018C-14

Page 1 of 1  
Effective Date: 8/2/2018

## Sample Receipt Checklist (SRC)

Client: Westinghouse Columbia Cooler Inspected by/date: BMG / 08/16/19 Lot #: UH16068

Means of receipt: <input type="checkbox"/> SESI <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>NA</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>NA</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: <u>NA</u> <u>5.7 / 5.7 °C NA / NA °C NA / NA °C NA / NA °C</u>	
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles IR Gun ID: <u>5</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # <u>NA</u>
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) <u>NA</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>NA</u> mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # <u>NA</u> Time of preservation <u>NA</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) <u>TB-03-081619 (2)</u> were received with bubbles >6 mm in diameter.	
Sample(s) <u>NA</u> were received with TRC > 0.5 mg/L (If #19 is <i>no</i> ) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: <u>NA</u>	
SR barcode labels applied by: <u>DMN</u> Date: <u>08/16/19</u>	

Comments:

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# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

### Westinghouse Electric Company

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

Project Name: CVOC

Lot Number: **UH19033**

Date Completed: 08/28/2019



08/29/2019 10:47 AM

Approved and released by:  
Project Manager: Grant Wilton



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# **SHEALY ENVIRONMENTAL SERVICES, INC.**

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

## **Case Narrative Westinghouse Electric Company Lot Number: UH19033**

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 NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

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

# SHEALY ENVIRONMENTAL SERVICES, INC.

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Sample Summary  
Westinghouse Electric Company  
Lot Number: UH19033  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	EB-01-081919	Aqueous	08/19/2019 1315	08/19/2019
002	L-10 (9-14)	Aqueous	08/19/2019 1250	08/19/2019
003	TB-04-081919	Aqueous	08/19/2019 1315	08/19/2019

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(3 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

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Detection Summary  
Westinghouse Electric Company  
Lot Number: UH19033  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	EB-01-081919	Aqueous	Nitrate - N	353.2	0.089		mg/L	5
002	L-10 (9-14)	Aqueous	Nitrate - N	353.2	1.1		mg/L	7

(2 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH19033-001
Description: EB-01-081919	Matrix: Aqueous
Date Sampled: 08/19/2019 1315	Project Name: CVOC
Date Received: 08/19/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	08/28/2019 0439	GMH		27287
1		(Nitrate - N) 353.2	1	08/21/2019 0014	MDD		26536

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	ND		0.10	mg/L	1
Nitrate - N		353.2	0.089		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH19033-001
Description: EB-01-081919	Matrix: Aqueous
Date Sampled: 08/19/2019 1315	Project Name: CVOC
Date Received: 08/19/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/21/2019 2258	ALR1		26707

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		109	70-130
Toluene-d8		97	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH19033-002
Description: L-10 (9-14)	Matrix: Aqueous
Date Sampled: 08/19/2019 1250	Project Name: CVOC
Date Received: 08/19/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	08/28/2019 0455	GMH		27287
1		(Nitrate - N) 353.2	1	08/21/2019 0015	MDD		26536

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	ND		0.10	mg/L	1
Nitrate - N		353.2	1.1		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH19033-002
Description: L-10 (9-14)	Matrix: Aqueous
Date Sampled: 08/19/2019 1250	Project Name: CVOC
Date Received: 08/19/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/21/2019 2322	ALR1		26707

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		91	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		98	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH19033-003
Description: TB-04-081919	Matrix: Aqueous
Date Sampled: 08/19/2019 1315	Project Name: CVOC
Date Received: 08/19/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/21/2019 2345	ALR1		26707

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		109	70-130
Toluene-d8		96	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



**Chain of Custody Record**

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**Number 097985**

Client: Westinghouse Columbia Fuel Fabrication Facility Telephone No. / E-mail: 803-647-1920 / jayperdp@westinghouse.com Quote No. \_\_\_\_\_  
 Address: 5801 Bluff Road City: Hopkins State: SC Zip Code: \_\_\_\_\_  
 Project Name: Westinghouse Columbia Fuel Fabrication Facility Project No.: \_\_\_\_\_  
 Report to Contact: Diana Jaylor Sample's Signature: Charles K Rubble Printed Name: Charles K Rubble  
 Analysis (Attach list if more spaces is needed)

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Matrix		No. of Containers by Preservative Type						Remarks / Cooler I.D.	
			Agar	Streak	Urease	NO2	NO3	Fluoride	Other	Other		
L-18 (15-20)	8/19/19	1450	G	X						3		48 hr TAT or sooner
L-18 (24-29)	8/19/19	1612	G	X						3		48 hr TAT or sooner
EB-01-081919	8/19/19	1315	G	X	1					3	X	Standard TAT
L-10 (9-14)	8/19/19	1750	G	X	1					3	X	Standard TAT
TB-04-081919	8/19/19	1375	G	X						2	X	Standard TAT

Turn Around Time Required (Prior lab approval required for expedited TAT.)  
 Standard  Rush (Specify) See Remarks  
 Relinquished by: Charles K Rubble Date: 8/19/19 Time: 1840  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

QC Requirements (Specify):  
 Non-Hazard  Flammable  Skin Irritant  Poison  Unknown

1. Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 2. Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 3. Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 4. Laboratory received by: Jay Perdp Date: 8/19/19 Time: 1840

LAB USE ONLY  
 Received on ice (Circle)  Yes  No Use P/ask Receipt Temp: 5.7 °C NO TO

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

# SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.  
Document Number: ME0018C-14

Page 1 of 1  
Effective Date: 8/2/2018

## Sample Receipt Checklist (SRC)

Client: Westinghouse Columbia Cooler Inspected by/date: DMN / 08/19/19 Lot #: UH19033

Means of receipt: <input type="checkbox"/> SFSI <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>NA</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>NA</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: <u>NA</u> <u>5.7 / 5.7</u> °C <u>NA / NA</u> °C <u>NA / NA</u> °C <u>NA / NA</u> °C	
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles IR Gun ID: <u>5</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # <u>NA</u>
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) <u>NA</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>NA</u> mL of circle one: H <sub>2</sub> SO <sub>4</sub> , HNO <sub>3</sub> , HCl, NaOH using SR # <u>NA</u>	
Time of preservation <u>NA</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) <u>TB-04-081919 (2)</u> were received with bubbles >6 mm in diameter.	
Sample(s) <u>NA</u> were received with TRC > 0.5 mg/L (If #19 is <i>no</i> ) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: <u>NA</u>	
SR barcode labels applied by: <u>BMG</u> Date: <u>08/19/19</u>	

Comments:

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# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

### Westinghouse Electric Company

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

Project Name: CVOC

Lot Number: **UH19036**

Date Completed: 08/22/2019

Project Manager: **Grant Wilton**



08/26/2019 5:15 PM

Approved and released by:  
Project Manager: Cathy S. Dover



The electronic signature above is the equivalent of a handwritten signature.  
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# **SHEALY ENVIRONMENTAL SERVICES, INC.**

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

## **Case Narrative Westinghouse Electric Company Lot Number: UH19036**

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 NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

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

# SHEALY ENVIRONMENTAL SERVICES, INC.

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Sample Summary  
Westinghouse Electric Company  
Lot Number: UH19036  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-18 (15-20)	Aqueous	08/19/2019 1450	08/19/2019
002	L-18 (24-29)	Aqueous	08/19/2019 1450	08/19/2019

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(2 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

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Detection Summary  
Westinghouse Electric Company  
Lot Number: UH19036  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	L-18 (24-29)	Aqueous	cis-1,2-Dichloroethene	8260D	1.2		ug/L	6
002	L-18 (24-29)	Aqueous	Vinyl chloride	8260D	1.1		ug/L	6

(2 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH19036-001
Description: L-18 (15-20)	Matrix: Aqueous
Date Sampled: 08/19/2019 1450	Project Name: CVOC
Date Received: 08/19/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/21/2019 0105	STM		26540

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		96	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		103	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH19036-002
Description: L-18 (24-29)	Matrix: Aqueous
Date Sampled: 08/19/2019 1450	Project Name: CVOC
Date Received: 08/19/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/21/2019 0129	STM		26540

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	1.2		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	1.1		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		104	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



**Chain of Custody Record**

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

**Number 097985**

Client: Westinghouse Columbia Fuel Fabrication Facility  
 Address: 5801 Bluff Road  
 City: Hopkins State: SC Zip Code:  
 Project Name: Westinghouse Columbia Fuel Fabrication Facility  
 Project No. P.O. No.  
 Report to Contact: Diana Joyner  
 Telephone No. / E-mail: 803-647-1920 / joynerdpc@westinghouse.com  
 Analysts (Attach list if more space is needed):  
 Sampler's Signature: Charles K Suddeth  
 Printed Name: Charles K Suddeth

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Matrix										No. of Containers by Preservative Type	Remarks / Cooler ID.	
			Asbestos	Lead	Mercury	PCBs	Organics	PCBOS	HMOB	CH	NOV	RV 2000			
L-18 (15-20)	8/19/19	1450	X											3	48 hr TAT or sooner
L-18 (24-29)	8/19/19	1612	X											3	48 hr TAT or sooner
EB-01-08(919)	8/19/19	1315	X											3	Standard TAT
L-10 (9-14)	8/19/19	1750	X											3	Standard TAT
TB-04-08(919)	8/19/19	1315	X											2	Standard TAT

Turn Around Time Required (Prior lab approval required for expedited TAT.)  
 Standard  Rush (Specify) See Remarks  
 1. Relinquished by: Charles K Suddeth Date: 8/19/19 Time: 1840  
 2. Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 3. Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 4. Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

QC Requirements (Specify):  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Date: 8/19/19 Time: 1840

LAB USE ONLY  
 Received on ice (Cycle): Yes No Ice Pack: Yes Receipt Temp: 0.7 °C No th

# SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.  
Document Number: ME0018C-14

Page 1 of 1  
Effective Date: 8/2/2018

## Sample Receipt Checklist (SRC)

Client: Westinghouse Columbia Cooler Inspected by/date: DMN / 08/19/19 Lot #: U119036

Means of receipt: <input type="checkbox"/> SESI <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>NA</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>NA</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: <u>NA</u> 5.7 / 5.7 °C <u>NA</u> / <u>NA</u> °C <u>NA</u> / <u>NA</u> °C <u>NA</u> / <u>NA</u> °C	
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles IR Gun ID: <u>5</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present > "pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # <u>NA</u>
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) <u>NA</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>NA</u> ml. of circle one: H2SO4, HNO3, HCl, NaOH using SR # <u>NA</u> . Time of preservation <u>NA</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) <u>NA</u> were received with bubbles >6 mm in diameter.	
Sample(s) <u>NA</u> were received with TRC > 0.5 mg/L (If #19 is no) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: <u>NA</u> .	
SR barcode labels applied by: <u>BMG</u> Date: <u>08/19/19</u>	

Comments:

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# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

### Westinghouse Electric Company

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

Project Name: CVOC

Lot Number: **UH20071**

Date Completed: 09/04/2019



09/05/2019 9:09 AM

Approved and released by:  
Project Manager: Grant Wilton



The electronic signature above is the equivalent of a handwritten signature.  
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# SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

## **Case Narrative Westinghouse Electric Company Lot Number: UH20071**

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 NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

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

Volatile Organic Analysis – Method 8260B

The following sample was received with headspace in the sample vial UH20071-006.

# SHEALY ENVIRONMENTAL SERVICES, INC.

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Sample Summary  
Westinghouse Electric Company  
Lot Number: UH20071  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-10 (18-23)	Aqueous	08/20/2019 1105	08/20/2019
002	L-10 (28-33)	Aqueous	08/20/2019 1235	08/20/2019
003	L-19 (7-12)	Aqueous	08/20/2019 1505	08/20/2019
004	L-19 (21-26)	Aqueous	08/20/2019 1615	08/20/2019
005	L-8 (8-13)	Aqueous	08/20/2019 1640	08/20/2019
006	TB-05-082019	Aqueous	08/20/2019 1105	08/20/2019

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(6 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

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Detection Summary  
Westinghouse Electric Company  
Lot Number: UH20071  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	L-10 (18-23)	Aqueous	Nitrate - N	353.2	0.18		mg/L	5
002	L-10 (28-33)	Aqueous	Nitrate - N	353.2	0.19		mg/L	7
003	L-19 (7-12)	Aqueous	Fluoride	9056A	7.8		mg/L	9
003	L-19 (7-12)	Aqueous	Nitrate - N	353.2	0.092		mg/L	9
003	L-19 (7-12)	Aqueous	cis-1,2-Dichloroethene	8260D	1.0		ug/L	10
003	L-19 (7-12)	Aqueous	trans-1,2-Dichloroethene	8260D	1.3		ug/L	10
004	L-19 (21-26)	Aqueous	Fluoride	9056A	0.16		mg/L	11
004	L-19 (21-26)	Aqueous	Nitrate - N	353.2	0.10		mg/L	11
005	L-8 (8-13)	Aqueous	Fluoride	9056A	0.26		mg/L	13
005	L-8 (8-13)	Aqueous	Nitrate - N	353.2	0.081		mg/L	13

(10 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH20071-001
Description: L-10 (18-23)	Matrix: Aqueous
Date Sampled: 08/20/2019 1105	Project Name: CVOC
Date Received: 08/20/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	09/04/2019 0102	GMH		27866
1		(Nitrate - N) 353.2	1	08/21/2019 0025	MDD		26536

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	ND		0.10	mg/L	1
Nitrate - N		353.2	0.18		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH20071-001
Description: L-10 (18-23)	Matrix: Aqueous
Date Sampled: 08/20/2019 1105	Project Name: CVOC
Date Received: 08/20/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/22/2019 0141	ALR1		26707

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		101	70-130
1,2-Dichloroethane-d4		113	70-130
Toluene-d8		98	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH20071-002
Description: L-10 (28-33)	Matrix: Aqueous
Date Sampled: 08/20/2019 1235	Project Name: CVOC
Date Received: 08/20/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	09/04/2019 0118	GMH		27866
1		(Nitrate - N) 353.2	1	08/21/2019 0026	MDD		26536

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	ND		0.10	mg/L	1
Nitrate - N		353.2	0.19		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH20071-002
Description: L-10 (28-33)	Matrix: Aqueous
Date Sampled: 08/20/2019 1235	Project Name: CVOC
Date Received: 08/20/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/22/2019 0205	ALR1		26707

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		92	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		95	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH20071-003
Description: L-19 (7-12)	Matrix: Aqueous
Date Sampled: 08/20/2019 1505	Project Name: CVOC
Date Received: 08/20/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	09/04/2019 0135	GMH		27866
1		(Nitrate - N) 353.2	1	08/21/2019 0027	MDD		26536

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	7.8		0.10	mg/L	1
Nitrate - N		353.2	0.092		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH20071-003
Description: L-19 (7-12)	Matrix: Aqueous
Date Sampled: 08/20/2019 1505	Project Name: CVOC
Date Received: 08/20/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/22/2019 0228	ALR1		26707

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	1.0		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	1.3		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		91	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		96	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH20071-004
Description: L-19 (21-26)	Matrix: Aqueous
Date Sampled: 08/20/2019 1615	Project Name: CVOC
Date Received: 08/20/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	09/04/2019 0151	GMH		27866
1		(Nitrate - N) 353.2	1	08/21/2019 0029	MDD		26536

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	0.16		0.10	mg/L	1
Nitrate - N		353.2	0.10		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH20071-004
Description: L-19 (21-26)	Matrix: Aqueous
Date Sampled: 08/20/2019 1615	Project Name: CVOC
Date Received: 08/20/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/22/2019 0251	ALR1		26707

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		98	70-130
1,2-Dichloroethane-d4		112	70-130
Toluene-d8		98	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH20071-005
Description: L-8 (8-13)	Matrix: Aqueous
Date Sampled: 08/20/2019 1640	Project Name: CVOC
Date Received: 08/20/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	09/04/2019 0207	GMH		27866
1		(Nitrate - N) 353.2	1	08/21/2019 0030	MDD		26536

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	0.26		0.10	mg/L	1
Nitrate - N		353.2	0.081		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH20071-006
Description: TB-05-082019	Matrix: Aqueous
Date Sampled: 08/20/2019 1105	Project Name: CVOC
Date Received: 08/20/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/22/2019 0314	ALR1		26707

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		102	70-130
1,2-Dichloroethane-d4		114	70-130
Toluene-d8		98	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



# SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.  
Document Number: ME0018C-14

Page 1 of 1  
Effective Date: 8/2/2018

## Sample Receipt Checklist (SRC)

Client: Westinghouse      Cooler Inspected by/date: DMN / 8/20/19      Lot #: UH20071

Means of receipt: <input checked="" type="checkbox"/> SESI <input type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA      Chlorine Strip ID: NA      Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt      %Solid Snap-Cup ID: NA	
4.8 / 4.8 °C   NA / NA °C   NA / NA °C   NA / NA °C	
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles   IR Gun ID: 5   IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # NA
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H <sub>2</sub> SO <sub>4</sub> , HNO <sub>3</sub> , HCl, NaOH using SR # NA	
Time of preservation NA. If more than one preservative is needed, please note in the comments below.	
Sample(s) -006 (2) were received with bubbles >6 mm in diameter.	
Sample(s) NA were received with TRC > 0.5 mg/L (If #19 is <b>no</b> ) and were adjusted accordingly in sample 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: BMG      Date: 8/20/19	

Comments:

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# SHEALY ENVIRONMENTAL SERVICES, INC.

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## Report of Analysis

### Westinghouse Electric Company

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

Project Name: RI Implementation

Lot Number: **UH21060**

Date Completed: 09/10/2019



09/10/2019 12:25 PM

Approved and released by:  
Project Manager: Grant Wilton



The electronic signature above is the equivalent of a handwritten signature.  
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# SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

## **Case Narrative Westinghouse Electric Company Lot Number: UH21060**

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 NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

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

# SHEALY ENVIRONMENTAL SERVICES, INC.

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Sample Summary  
Westinghouse Electric Company  
Lot Number: UH21060  
Project Name: RI Implementation  
Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-8 (17-22)	Aqueous	08/21/2019 0940	08/21/2019
002	L-9 (10-15)	Aqueous	08/21/2019 1018	08/21/2019
003	L-8 (25-30)	Aqueous	08/21/2019 1125	08/21/2019
004	L-9 (23-28)	Aqueous	08/21/2019 1135	08/21/2019
005	L-9 (23-28)-DUP	Aqueous	08/21/2019 1135	08/21/2019
006	L-9 (32-37)	Aqueous	08/21/2019 1423	08/21/2019
007	L-8 (41-46)	Aqueous	08/21/2019 1520	08/21/2019
008	EB-01-082119	Aqueous	08/21/2019 1550	08/21/2019
009	TB-06-082119	Aqueous	08/21/2019 1025	08/21/2019

(9 samples)

# SHEALY ENVIRONMENTAL SERVICES, INC.

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Detection Summary  
Westinghouse Electric Company  
Lot Number: UH21060  
Project Name: RI Implementation  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	L-9 (10-15)	Aqueous	Fluoride	9056A	0.48		mg/L	7
002	L-9 (10-15)	Aqueous	Nitrate - N	353.2	5.4		mg/L	7
002	L-9 (10-15)	Aqueous	Tetrachloroethene	8260D	6.5		ug/L	8
002	L-9 (10-15)	Aqueous	Trichloroethene	8260D	3.0		ug/L	8
003	L-8 (25-30)	Aqueous	Tetrachloroethene	8260D	2.2		ug/L	10
003	L-8 (25-30)	Aqueous	Trichloroethene	8260D	2.1		ug/L	10
007	L-8 (41-46)	Aqueous	Fluoride	9056A	0.14		mg/L	17

(7 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH21060-001
Description: L-8 (17-22)	Matrix: Aqueous
Date Sampled: 08/21/2019 0940	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	09/10/2019 0016	GMH		28380
1		(Nitrate - N) 353.2	1	08/22/2019 0113	MDD		26725

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	ND		0.10	mg/L	1
Nitrate - N		353.2	ND		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH21060-001
Description: L-8 (17-22)	Matrix: Aqueous
Date Sampled: 08/21/2019 0940	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2019 2320	STM		26947

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		98	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		99	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH21060-002
Description: L-9 (10-15)	Matrix: Aqueous
Date Sampled: 08/21/2019 1018	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	09/10/2019 0037	GMH		28380
1		(Nitrate - N) 353.2	5	08/22/2019 0115	MDD		26725

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	0.48		0.10	mg/L	1
Nitrate - N		353.2	5.4		0.10	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH21060-002
Description: L-9 (10-15)	Matrix: Aqueous
Date Sampled: 08/21/2019 1018	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2019 1945	STM		26947

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	6.5		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	3.0		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		99	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		99	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH21060-003
Description: L-8 (25-30)	Matrix: Aqueous
Date Sampled: 08/21/2019 1125	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	09/10/2019 0223	GMH		28380
1		(Nitrate - N) 353.2	1	08/22/2019 0033	MDD		26725

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	ND		0.10	mg/L	1
Nitrate - N		353.2	ND		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH21060-003
Description: L-8 (25-30)	Matrix: Aqueous
Date Sampled: 08/21/2019 1125	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2019 2009	STM		26947

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	2.2		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	2.1		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		101	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		101	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH21060-004
Description: L-9 (23-28)	Matrix: Aqueous
Date Sampled: 08/21/2019 1135	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	09/10/2019 0244	GMH		28380
1		(Nitrate - N) 353.2	1	08/22/2019 0035	MDD		26725

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	ND		0.10	mg/L	1
Nitrate - N		353.2	ND		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH21060-004
Description: L-9 (23-28)	Matrix: Aqueous
Date Sampled: 08/21/2019 1135	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2019 2033	STM		26947

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		100	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		102	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH21060-005
Description: L-9 (23-28)-DUP	Matrix: Aqueous
Date Sampled: 08/21/2019 1135	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	09/10/2019 0305	GMH		28380
1		(Nitrate - N) 353.2	1	08/22/2019 0040	MDD		26725

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	ND		0.10	mg/L	1
Nitrate - N		353.2	ND		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH21060-005
Description: L-9 (23-28)-DUP	Matrix: Aqueous
Date Sampled: 08/21/2019 1135	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2019 2057	STM		26947

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		102	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		103	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH21060-006
Description: L-9 (32-37)	Matrix: Aqueous
Date Sampled: 08/21/2019 1423	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	09/10/2019 0326	GMH		28380
1		(Nitrate - N) 353.2	1	08/22/2019 0041	MDD		26725

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	ND		0.10	mg/L	1
Nitrate - N		353.2	ND		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH21060-006
Description: L-9 (32-37)	Matrix: Aqueous
Date Sampled: 08/21/2019 1423	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2019 2121	STM		26947

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		101	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		103	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH21060-007
Description: L-8 (41-46)	Matrix: Aqueous
Date Sampled: 08/21/2019 1520	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	09/10/2019 0347	GMH		28380
1		(Nitrate - N) 353.2	1	08/22/2019 0043	MDD		26725

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	0.14		0.10	mg/L	1
Nitrate - N		353.2	ND		0.020	mg/L	1

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

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

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH21060-007
Description: L-8 (41-46)	Matrix: Aqueous
Date Sampled: 08/21/2019 1520	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2019 2145	STM		26947

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		102	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		102	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UH21060-008
Description: EB-01-082119	Matrix: Aqueous
Date Sampled: 08/21/2019 1550	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Fluoride) 9056A	1	09/10/2019 0408	GMH		28380
1		(Nitrate - N) 353.2	1	08/22/2019 0044	MDD		26725

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Fluoride	16984-48-8	9056A	ND		0.10	mg/L	1
Nitrate - N		353.2	ND		0.020	mg/L	1

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

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

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH21060-008
Description: EB-01-082119	Matrix: Aqueous
Date Sampled: 08/21/2019 1550	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2019 2209	STM		26947

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		99	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		100	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UH21060-009
Description: TB-06-082119	Matrix: Aqueous
Date Sampled: 08/21/2019 1025	Project Name: RI Implementation
Date Received: 08/21/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	08/24/2019 2233	STM		26947

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		102	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		102	70-130

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

Shealy Environmental Services, Inc.  
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Chain of Custody  
and  
Miscellaneous Documents

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
 106 Vantage Point Drive • West Columbia, SC 29172  
 Telephone No. 803-791-8700 Fax No. 803-791-9111  
 www.shealylab.com

Number 097990

**Chain of Custody Record**

Client: Westinghouse Columbia Fuel Fabrication Facility  
 Address: 5801 Bluff Rd.  
 City: Hopkins State: SC Zip Code: \_\_\_\_\_  
 Project Name: RE Implementation  
 Project No.: \_\_\_\_\_

Report to Contact: Diana Joyner  
 Sampler's Signature: Charles K. Sublett  
 Printed Name: Charles K. Sublett

Telephone No. / E-mail: 803-247-1920 / JoynerD@Westinghouse.com  
 Analysis (Attach list if more space is needed): \_\_\_\_\_

Client No.: \_\_\_\_\_ Page: 1 of 1

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Matrix	No. of Containers by Preservation Type						Remains / Cooler I.D.
				GC	MS	GC/MS	GC/MS	GC/MS	GC/MS	
L-8 (17-22)	8/21/19	0940	GC	1	3					
L-9 (10-15)	8/21/19	1018	GC	1	3					
L-8 (25-30)	8/21/19	1125	GC	1	3					
L-9 (23-28)	8/21/19	1135	GC	1	3					
L-9 (23-28) - DUP	8/21/19	1135	GC	1	3					
L-9 (32-37)	8/21/19	1423	GC	1	3					
L-8 (41-46)	8/21/19	1520	GC	1	3					
EB-01-082119	8/21/19	1550	GC	1	3					
TB-06-082119	8/21/19	1025	GC	1	2					

Turn Around Time Required (Prior lab approval required for expedited TAT):  
 Standard  Rush (Specify) \_\_\_\_\_

Sample Disposal:  
 Return to OWS  Dispose by Lab

Disposal by Lab: \_\_\_\_\_ Date: 8/21/19 Time: 1704

1. Retinquished by: Charles K. Sublett Date: \_\_\_\_\_ Time: \_\_\_\_\_

2. Retinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3. Retinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

4. Retinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

OC Requirements (Specify): \_\_\_\_\_

Possible Hazard Identification:  
 Non-Hazard  Flammable  Skin Irritant  Poison  Unknown

1. Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

2. Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3. Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

4. Laboratory received by: Jim Brown Date: 8/21/19 Time: 1704

LAD USE ONLY  
 Received on ice (Circle) Yes No  Yes  No   
 Receipt Temo: 17 C: TBV

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

# SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.  
Document Number: ME0918C-14

Page 1 of 1  
Effective Date: 8/2/2018

## Sample Receipt Checklist (SRC)

Client: Westinghouse Electric Cooler Inspected by/date: BMG / 08/21/19 Lot #: UH21060

Means of receipt: <input type="checkbox"/> SRSI <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>NA</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>NA</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: <u>NA</u> <u>1.7 / 1.7 °C NA / NA °C NA / NA °C NA / NA °C</u>	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: <u>5</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # <u>NA</u>
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) <u>NA</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>NA</u> mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # <u>NA</u>	
Time of preservation <u>NA</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) <u>TBs</u> were received with bubbles >6 mm in diameter.	
Sample(s) <u>NA</u> were received with TRC > 0.5 mg/L (If #19 is <i>no</i> ) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: <u>NA</u>	
SR barcode labels applied by: <u>BMG/JSB</u> Date: <u>08/21/19</u>	
Comments: _____ _____ _____ _____	

### Regulatory Compliance Samples

Responsible Engineer <b>Cynthia Logsdon</b>	Phone <b>3171</b>	Location <b>EH&amp;S</b>	Lab Report No. <b>2020144963</b>
Sample Type <b>Well Samples</b>			Sample Date <b>12-09-2020</b>

Remarks

**Analysis Method**

Sample ID.	LIMS No.	Parameters	Results	Units	Data Entry @	Analyst
<b>Fluoride</b>						
L-37-17-21	2020144963	F	<0.100	ppm	12/10/20 17:18	38195
L-37-26-30	2020144964	F	0.108	ppm	12/10/20 17:47	38195
L-38-17-21	2020144965	F	0.133	ppm	12/10/20 00:00	38195
L-38-26-30	2020144966	F	0.155	ppm	12/10/20 00:00	38195
<b>True Temperature</b>						
L-37-17-21	2020144963	True Temperat	0.700		12/10/20 18:06	38208
L-37-26-30	2020144964	True Temperat	0.700		12/10/20 18:07	38208
L-38-17-21	2020144965	True Temperat	0.700		12/10/20 18:08	38208
L-38-26-30	2020144966	True Temperat	0.700		12/10/20 18:10	38208

*Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.*

**Chain of Custody**

Time Collected: 13:23 -17:15  
Sampler: R. Crews  
Released to: RDM

**Laboratory Approval**

### Regulatory Compliance Samples

Responsible Engineer <b>Cynthia Logsdon</b>	Phone <b>3171</b>	Location <b>EH&amp;S</b>	Lab Report No. <b>2020144554</b>
Sample Type <b>Well Samples</b>			Sample Date <b>12-08-2020</b>

Remarks

**Analysis Method**

Sample ID.	LIMS No.	Parameters	Results	Units	Data Entry @	Analyst
<b>Fluoride</b>						
L-35-11-15	2020144554	F	<0.100	ppm	12/09/20 04:04	36512
L-35-21-25	2020144555	F	<0.100	ppm	12/09/20 04:05	36512
L-35-30-34	2020144556	F	<0.100	ppm	12/09/20 04:05	36512
L-36-18-22	2020144557	F	0.100	ppm	12/09/20 04:06	36512
L-36-18-22-MS	2020144558	F	0.133	ppm	12/09/20 04:06	36512
L-36-18-22-MSD	2020144559	F	0.115	ppm	12/09/20 04:07	36512
L-36-27.5-31.5	2020144560	F	<0.100	ppm	12/09/20 04:08	36512
L-36-27.5-31.5-Dup	2020144561	F	<0.100	ppm	12/09/20 04:08	36512
L-36-37-41	2020144562	F	<0.100	ppm	12/09/20 04:08	36512

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Time Collected: 08:43 - 16:15  
Sampler: R. Crews  
Released to:

**Laboratory Approval**

Rob Campbell-Kelly  
12/09/20 15:03

### Regulatory Compliance Samples

Responsible Engineer <b>Cynthia Logsdon</b>	Phone <b>3171</b>	Location <b>EH&amp;S</b>	Lab Report No. <b>2020144554</b>
Sample Type <b>Well Samples</b>			Sample Date <b>12-08-2020</b>

Remarks

**Analysis Method**

Sample ID.	LIMS No.	Parameters	Results	Units	Data Entry @	Analyst
<b>True Temperature</b>						
L-35-11-15	2020144554	True Temperat	3.000		12/09/20 04:04	36512
L-35-21-25	2020144555	True Temperat	3.000		12/09/20 04:05	36512
L-35-30-34	2020144556	True Temperat	3.000		12/09/20 04:05	36512
L-36-18-22	2020144557	True Temperat	3.000		12/09/20 04:06	36512
L-36-18-22-MS	2020144558	True Temperat	3.000		12/09/20 04:07	36512
L-36-18-22-MSD	2020144559	True Temperat	3.000		12/09/20 04:07	36512
L-36-27.5-31.5	2020144560	True Temperat	3.000		12/09/20 04:08	36512
L-36-27.5-31.5-Dup	2020144561	True Temperat	3.000		12/09/20 04:08	36512
L-36-37-41	2020144562	True Temperat	3.000		12/09/20 04:08	36512

*Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.*

**Chain of Custody**

Time Collected: 08:43 - 16:15  
Sampler: R. Crews  
Released to:

**Laboratory Approval**

Rob Campbell-Kelly  
12/09/20 15:03

### Regulatory Compliance Samples

Responsible Engineer <b>Cynthia Logsdon</b>	Phone <b>3171</b>	Location <b>EH&amp;S</b>	Lab Report No. <b>2020140297</b>
Sample Type <b>Well Samples</b>			Sample Date <b>11-25-2020</b>

Remarks

**Analysis Method**

Sample ID.	LIMS No.	Parameters	Results	Units	Data Entry @	Analyst
<b>Fluoride</b>						
L-42-24-28	2020140297	F	<0.100	ppm	12/09/20 16:30	36695
L-42-36-40	2020140298	F	0.373	ppm	12/09/20 16:33	36695

*Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.*

**Chain of Custody**

Time Collected: 11:45 - 12:52  
Sampler: R. Crews  
Released to: RDM

**Laboratory Approval**



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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: RI Implementation

Lot Number: **VK17064**

Date Completed: 11/19/2020

11/20/2020 8:18 AM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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# 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: VK17064**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: VK17064  
Project Name: RI Implementation  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-39-31-35	Aqueous	11/16/2020 1511	11/17/2020
002	L-40-33-37	Aqueous	11/17/2020 1424	11/17/2020

---

(2 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: VK17064  
Project Name: RI Implementation  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	L-39-31-35	Aqueous	cis-1,2-Dichloroethene	8260D	1.8		ug/L	5
001	L-39-31-35	Aqueous	Tetrachloroethene	8260D	10		ug/L	5
001	L-39-31-35	Aqueous	Trichloroethene	8260D	5.9		ug/L	5
002	L-40-33-37	Aqueous	Trichloroethene	8260D	1.1		ug/L	6

(4 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK17064-001
Description: L-39-31-35	Matrix: Aqueous
Date Sampled: 11/16/2020 1511	Project Name: RI Implementation
Date Received: 11/17/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/18/2020 1443	TML		73912

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	1.8		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	10		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	5.9		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		83	70-130
1,2-Dichloroethane-d4		86	70-130
Toluene-d8		86	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK17064-002
Description: L-40-33-37	Matrix: Aqueous
Date Sampled: 11/17/2020 1424	Project Name: RI Implementation
Date Received: 11/17/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/18/2020 1508	TML		73912

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	1.1		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		94	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		97	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



# PACE ANALYTICAL SERVICES, LLC



**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: AHD: 11/17/20 Lot #: VK17064

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: _____ Chlorine Strip ID: _____ Tested by: _____	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: _____	
<u>3.0; 3.6</u> °C / _____ °C / _____ °C / _____ °C	
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles IR Gun ID: _____ IR Gun Correction Factor: _____ °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # _____
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with _____ mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # _____.	
Time of preservation _____, If more than one preservative is needed, please note in the comments below.	
Sample(s) _____ were received with bubbles >6 mm in diameter.	
Sample(s) _____ were received with TRC > 0.5 mg/L (If #19 is <i>no</i> ) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub> ) with Shealy ID: _____.	
SR barcode labels applied by: <u>EAC</u> Date: <u>11/17/20</u>	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **VK19098**

Date Completed: 12/09/2020  
Revision Date: 12/09/2020

12/09/2020 11:08 AM  
Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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# 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: VK19098**

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.

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

This report supersedes and replaces any prior reports issued under this lot number. Upon client request, samples VK19098-003, VK19098-005 were analyzed for VOC Library Search method 8260D.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: VK19098  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-21-28-32	Aqueous	11/18/2020 1230	11/19/2020
002	L-22-26-30	Aqueous	11/18/2020 1649	11/19/2020
003	L-22-8-12	Aqueous	11/19/2020 0951	11/19/2020
005	L-22-8-12-DUP	Aqueous	11/19/2020 0951	11/19/2020
006	L-23-31-35	Aqueous	11/19/2020 1512	11/19/2020
007	L-23-20-24	Aqueous	11/19/2020 1633	11/19/2020
008	TB-111820-01	Aqueous	11/19/2020	11/19/2020

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(7 samples)

# PACE ANALYTICAL SERVICES, LLC

Detection Summary  
 Westinghouse Electric Company  
 Lot Number: VK19098  
 Project Name: CVOC  
 Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	L-21-28-32	Aqueous	Tetrachloroethene	8260D	4.7		ug/L	5
002	L-22-26-30	Aqueous	Tetrachloroethene	8260D	150		ug/L	6
002	L-22-26-30	Aqueous	Trichloroethene	8260D	96		ug/L	6
003	L-22-8-12	Aqueous	Ethylbenzene	8260D	23		ug/L	7
003	L-22-8-12	Aqueous	Benzene, 2-propenyl-	8260D	25		ug/L	7
003	L-22-8-12	Aqueous	Benzene, 4-ethyl-1,2-	8260D	35		ug/L	7
003	L-22-8-12	Aqueous	Benzene, 1-ethenyl-3-	8260D	21		ug/L	7
003	L-22-8-12	Aqueous	Benzene, 1,2,4,5-	8260D	20		ug/L	7
003	L-22-8-12	Aqueous	Unknown	8260D	58		ug/L	7
003	L-22-8-12	Aqueous	Naphthalene, 1,2,3,4-	8260D	25		ug/L	7
003	L-22-8-12	Aqueous	Naphthalene	8260D	80		ug/L	7
003	L-22-8-12	Aqueous	Naphthalene, 2-methyl-	8260D	49		ug/L	7
003	L-22-8-12	Aqueous	Naphthalene, 1-methyl-	8260D	37		ug/L	7
005	L-22-8-12-DUP	Aqueous	Ethylbenzene	8260D	24		ug/L	9
005	L-22-8-12-DUP	Aqueous	Benzene, 2-propenyl-	8260D	26		ug/L	9
005	L-22-8-12-DUP	Aqueous	Benzene, 1-ethyl-2,3-	8260D	36		ug/L	9
005	L-22-8-12-DUP	Aqueous	Benzene, 1-ethenyl-3-	8260D	22		ug/L	9
005	L-22-8-12-DUP	Aqueous	Benzene, 1,2,3,5-	8260D	20		ug/L	9
005	L-22-8-12-DUP	Aqueous	Benzene, 1,2,4,5-	8260D	60		ug/L	9
005	L-22-8-12-DUP	Aqueous	Naphthalene, 1,2,3,4-	8260D	26		ug/L	9
005	L-22-8-12-DUP	Aqueous	Naphthalene	8260D	84		ug/L	9
005	L-22-8-12-DUP	Aqueous	Naphthalene, 2-methyl-	8260D	57		ug/L	9
005	L-22-8-12-DUP	Aqueous	Naphthalene, 1-methyl-	8260D	45		ug/L	9
006	L-23-31-35	Aqueous	cis-1,2-Dichloroethene	8260D	4.5		ug/L	11
006	L-23-31-35	Aqueous	Tetrachloroethene	8260D	360		ug/L	11
006	L-23-31-35	Aqueous	Trichloroethene	8260D	83		ug/L	11
007	L-23-20-24	Aqueous	Tetrachloroethene	8260D	89		ug/L	12
007	L-23-20-24	Aqueous	Trichloroethene	8260D	2.8		ug/L	12

(28 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK19098-001
Description: L-21-28-32	Matrix: Aqueous
Date Sampled: 11/18/2020 1230	Project Name: CVOC
Date Received: 11/19/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/23/2020 1439	TML		74493

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	4.7		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		96	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		92	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK19098-002
Description: L-22-26-30	Matrix: Aqueous
Date Sampled: 11/18/2020 1649	Project Name: CVOC
Date Received: 11/19/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/23/2020 1503	TML		74493

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	150		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	96		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		94	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		90	70-130

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

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# Library Search

Client: Westinghouse Electric Company	Laboratory ID: VK19098-003
Description: L-22-8-12	Matrix: Aqueous
Date Sampled: 11/19/2020 0951	Project Name: CVOC
Date Received: 11/19/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/23/2020 1526	ECB		75445

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Ethylbenzene		8260D	23			ug/L	1
Benzene, 2-propenyl-		8260D	25			ug/L	1
Benzene, 4-ethyl-1,2-dimethyl-		8260D	35			ug/L	1
Benzene, 1-ethenyl-3-ethyl-		8260D	21			ug/L	1
Benzene, 1,2,4,5-tetramethyl-		8260D	20			ug/L	1
Unknown		8260D	58			ug/L	1
Naphthalene, 1,2,3,4-tetrahydro-		8260D	25			ug/L	1
Naphthalene		8260D	80			ug/L	1
Naphthalene, 2-methyl-		8260D	49			ug/L	1
Naphthalene, 1-methyl-		8260D	37			ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK19098-003
Description: L-22-8-12	Matrix: Aqueous
Date Sampled: 11/19/2020 0951	Project Name: CVOC
Date Received: 11/19/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/23/2020 1526	TML		74493
2	5030B	8260D	1	11/25/2020 0256	DJG		74720

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	2
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	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130		115	70-130
1,2-Dichloroethane-d4		94	70-130		112	70-130
Toluene-d8		90	70-130		106	70-130

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

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# Library Search

Client: Westinghouse Electric Company	Laboratory ID: VK19098-005
Description: L-22-8-12-DUP	Matrix: Aqueous
Date Sampled: 11/19/2020 0951	Project Name: CVOC
Date Received: 11/19/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/23/2020 1550	ECB		75445

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Ethylbenzene		8260D	24			ug/L	1
Benzene, 2-propenyl-		8260D	26			ug/L	1
Benzene, 1-ethyl-2,3-dimethyl-		8260D	36			ug/L	1
Benzene, 1-ethenyl-3-ethyl-		8260D	22			ug/L	1
Benzene, 1,2,3,5-tetramethyl-		8260D	20			ug/L	1
Benzene, 1,2,4,5-tetramethyl-		8260D	60			ug/L	1
Naphthalene, 1,2,3,4-tetrahydro-		8260D	26			ug/L	1
Naphthalene		8260D	84			ug/L	1
Naphthalene, 2-methyl-		8260D	57			ug/L	1
Naphthalene, 1-methyl-		8260D	45			ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK19098-005
Description: L-22-8-12-DUP	Matrix: Aqueous
Date Sampled: 11/19/2020 0951	Project Name: CVOC
Date Received: 11/19/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/23/2020 1550	TML		74493

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		93	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		88	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK19098-006
Description: L-23-31-35	Matrix: Aqueous
Date Sampled: 11/19/2020 1512	Project Name: CVOC
Date Received: 11/19/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/23/2020 1613	TML		74493
2	5030B	8260D	5	11/25/2020 0319	DJG		74720

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	4.5		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	360		5.0	ug/L	2
Trichloroethene	79-01-6	8260D	83		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130		114	70-130
1,2-Dichloroethane-d4		93	70-130		112	70-130
Toluene-d8		91	70-130		105	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK19098-007
Description: L-23-20-24	Matrix: Aqueous
Date Sampled: 11/19/2020 1633	Project Name: CVOC
Date Received: 11/19/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/23/2020 1637	TML		74493

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	89		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	2.8		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		91	70-130
Toluene-d8		89	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK19098-008
Description: TB-111820-01	Matrix: Aqueous
Date Sampled: 11/19/2020	Project Name: CVOC
Date Received: 11/19/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/23/2020 1153	TML		74493

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		95	70-130
Toluene-d8		92	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



**Chain of Custody Record**

**SHEALY ENVIRONMENTAL SERVICES, INC.**  
 106 Vantage Point Drive • West Columbia, SC 29172  
 Telephone No. 803-791-9700 Fax No. 803-791-9111  
 www.shealylab.com

Number **101469**

Client <b>Westinghouse</b>	Report to Contact <b>Diana Joyner</b>	Telephone No. / Email <b>joynerd@westinghouse.com</b>	Quote No.
Address <b>5801 Bluff Road</b>	Sampler's Signature <i>[Signature]</i>	Analysis (Attach list if more species is needed)	Page <b>1</b> of <b>1</b>
City <b>Hopkins</b>	Printed Name <b>Jeremy Grant</b>		
Project Name <b>RI Implementation</b>			
Project No. <b>605951049</b>	F.O. No.		
Samples ID / Description (Containers for each sample may be combined on one line.)	Date	Time	
L-21-28-32	11/18/20	12:30	6
L-22-26-30	11/18/20	16:49	6
L-22-8-12	11/19/20	09:51	6
L-22-8-12-DUP	11/19/20	09:51	6
L-23-31-35	11/19/20	15:12	6
L-23-20-24	11/19/20	16:33	6
TB-11820-01			

Turn Around Time Required (Pilot Lab approval required for expedited TAT.)	Sample Disposal		Possible Hazard Identification		CC Requirements (Specify)	
	Return to Client	Disposal by Lab	Non-Hazard	Harmful	Poison	Unknown
Standard <input checked="" type="checkbox"/> Rush (Specify) <b>72 hr</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. Relinquished by <i>[Signature]</i>	Date <b>11/13/20</b>	Time <b>18:00</b>	1. Received by	Date	Time	
2. Relinquished by	Date	Time	2. Received by	Date	Time	
3. Relinquished by	Date	Time	3. Received by	Date	Time	
4. Relinquished by	Date	Time	4. Laboratory removed by <i>[Signature]</i>	Date <b>11/19/20</b>	Time <b>18:00</b>	

LAB USE ONLY		Receipt Temp. <b>2-8</b> °C
Received on ice (Circle)	Yes	No

Note: All samples are retained for four weeks from receipt unless other arrangements are made.



**Samples Receipt Checklist (SRC) (ME0018C-15)**  
Issuing Authority: Pace ENV - WCOL



3/29/2020  
Page 1 of 1

## Sample Receipt Checklist (SRC)

Client: Westinghouse Cooler Inspected by/date: KBS / 11/19/2020 Lot: BRAG

Means of receipt:  Pace  Client  UPS  FedEx  Other:

Yes  No 1. Were custody seals present on the cooler?

Yes  No  NA 2. If custody seals were present, were they intact and unbroken?

pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA

Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA  
2.8 / 2.8 °C NA / NA °C NA / NA °C NA / NA °C

Method:  Temperature Blank  Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C

Method of coolant:  Wet Ice  Ice Packs  Dry Ice  None

Yes  No  NA 3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified?  
PM was Notified by: phone / email / face-to-face (circle one).

Yes  No  NA 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?

Yes  No 7. Were sample IDs listed on all sample containers?

Yes  No 8. Was collection date & time listed on the COC?

Yes  No 9. 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 1/2 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?

Yes  No  NA 16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?

Yes  No  NA 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 19. Were all applicable NH<sub>3</sub>/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?

Yes  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 # NA

**Sample Preservation** (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H<sub>2</sub>SO<sub>4</sub>, HNO<sub>3</sub>, 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 mg/L (If #19 is *no*) and were adjusted accordingly in sample 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: KBS Date: 11/19/2020

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **VK21049**

Date Completed: 11/25/2020

11/30/2020 12:09 PM  
Approved and released by:  
Project Manager I: **Blaire M. Gagne**



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# 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: VK21049**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: VK21049  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-23-12-16	Aqueous	11/20/2020 1001	11/20/2020
002	L-24-11-15	Aqueous	11/20/2020 1556	11/20/2020
003	TB-01-112020	Aqueous	11/20/2020	11/20/2020

---

(3 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: VK21049  
Project Name: CVOC  
Project Number:

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Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
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(0 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK21049-001
Description: L-23-12-16	Matrix: Aqueous
Date Sampled: 11/20/2020 1001	Project Name: CVOC
Date Received: 11/20/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/24/2020 1240	TML		74609

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		93	70-130
1,2-Dichloroethane-d4		90	70-130
Toluene-d8		85	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK21049-002
Description: L-24-11-15	Matrix: Aqueous
Date Sampled: 11/20/2020 1556	Project Name: CVOC
Date Received: 11/20/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/24/2020 1303	TML		74609

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		94	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		87	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK21049-003
Description: TB-01-112020	Matrix: Aqueous
Date Sampled: 11/20/2020	Project Name: CVOC
Date Received: 11/20/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/24/2020 1105	TML		74609

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		93	70-130
1,2-Dichloroethane-d4		91	70-130
Toluene-d8		86	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



# PACE ANALYTICAL SERVICES, LLC



**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: KSC / 11/21/2020

Lot #: VK21049

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt: %Solid Snap-Cup ID: NA	
2.9 / 2.9 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>4</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 FRC > 0.5 mg/L (If #19 is no) and were adjusted accordingly in sample 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: KSC Date: 11/21/2020	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **VK24054**

Date Completed: 12/05/2020

12/07/2020 3:22 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



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# 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: VK24054**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: VK24054  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-20-20-28	Aqueous	11/23/2020 1230	11/24/2020
002	L-20-12-16	Aqueous	11/23/2020 1440	11/24/2020
003	L-24-25-29	Aqueous	11/23/2020 1523	11/24/2020
004	TB-01-112320	Aqueous	11/23/2020	11/24/2020

---

(4 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: VK24054  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	L-20-20-28	Aqueous	Nitrate - N	353.2	2.4		mg/L	5
002	L-20-12-16	Aqueous	Nitrate - N	353.2	11		mg/L	7

(2 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: VK24054-001
Description: L-20-20-28	Matrix: Aqueous
Date Sampled: 11/23/2020 1230	Project Name: CVOC
Date Received: 11/24/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	11/25/2020 0000	SRB		74705

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		2.4	0.040	mg/L 1

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

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

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK24054-001
Description: L-20-20-28	Matrix: Aqueous
Date Sampled: 11/23/2020 1230	Project Name: CVOC
Date Received: 11/24/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260D	1	12/03/2020 2050	DJG		75469

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

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		105	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		100	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: VK24054-002
Description: L-20-12-16	Matrix: Aqueous
Date Sampled: 11/23/2020 1440	Project Name: CVOC
Date Received: 11/24/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	11/25/2020 0000	SRB		74705

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	11	0.20	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK24054-002
Description: L-20-12-16	Matrix: Aqueous
Date Sampled: 11/23/2020 1440	Project Name: CVOC
Date Received: 11/24/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/01/2020 1823	TML		75125

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		111	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		101	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK24054-003
Description: L-24-25-29	Matrix: Aqueous
Date Sampled: 11/23/2020 1523	Project Name: CVOC
Date Received: 11/24/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/01/2020 1846	TML		75125

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		107	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		98	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VK24054-004
Description: TB-01-112320	Matrix: Aqueous
Date Sampled: 11/23/2020	Project Name: CVOC
Date Received: 11/24/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/01/2020 1326	TML		75125

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		106	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		97	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



# PACE ANALYTICAL SERVICES, LLC



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

Revised: 9/29/2020

Issuing Authority: Pace ENV - WCOL

Page 1 of 1

## Sample Receipt Checklist (SRC)

Client: Westinghouse

Cooler inspected by/date: KBS / 11/24/2020

Lot #: VK24054

Means of receipt: <input checked="" type="checkbox"/> Pace <input type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA	
2.3 / 2.3 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)? _____
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # _____
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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.	
Sample(s) NA were received with TRC > 0.5 mg/L (If #19 is no) and were adjusted accordingly in sample receiving with sodium trisulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: NA	
SR barcode labels applied by: AJID Date: 11/24/2020	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **VL02083**

Date Completed: 12/08/2020

12/09/2020 8:33 AM

Approved and released by:

Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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# 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: VL02083**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: VL02083  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-33-13-17	Aqueous	12/01/2020 1545	12/02/2020
002	L-33-24-28	Aqueous	12/02/2020 1140	12/02/2020
003	L-32-8-12	Aqueous	12/02/2020 1508	12/02/2020
004	L-32-19-23	Aqueous	12/02/2020 1658	12/02/2020
005	TB-01-120120	Aqueous	12/01/2020 1600	12/02/2020

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(5 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: VL02083  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
(0 detections)								

Chain of Custody  
and  
Miscellaneous Documents



# PACE ANALYTICAL SERVICES, LLC



**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: KBS / 12/02/2020      Lot #: VL02083

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA      Chlorine Strip ID: NA      Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt      %Solid Snap-Cup ID: NA	
3.7 / 3.7 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles      IR Gun ID: 6      IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # NA
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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.	
Sample(s) NA were received with TRC > 0.5 mg/L (if #19 is no) and were adjusted accordingly in sample 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: KBS      Date: 12/02/2020	

Comments:

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December 08, 2020

Blair Gagne  
Pace Analytical West Columbia  
106 Vantage Point Drive  
West Columbia, SC 29172

RE: Project: VL02083 Westinghouse  
Pace Project No.: 92509356

Dear Blair Gagne:

Enclosed are the analytical results for sample(s) received by the laboratory on December 03, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Charlotte

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Sara Coble  
sara.coble@pacelabs.com  
(704)875-9092  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: VL02083 Westinghouse

Pace Project No.: 92509356

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### **Pace Analytical Services Charlotte**

9800 Kincey Ave. Ste 100, Huntersville, NC 28078

Louisiana/NELAP Certification # LA170028

North Carolina Drinking Water Certification #: 37706

North Carolina Field Services Certification #: 5342

North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001

Florida/NELAP Certification #: E87627

Kentucky UST Certification #: 84

Virginia/VELAP Certification #: 460221

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: VL02083 Westinghouse

Pace Project No.: 92509356

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92509356001	VL02083-001	Water	12/01/20 15:45	12/03/20 11:55
92509356002	VL02083-002	Water	12/02/20 11:40	12/03/20 11:55
92509356003	VL02083-003	Water	12/02/20 15:08	12/03/20 11:55
92509356004	VL02083-004	Water	12/02/20 16:58	12/03/20 11:55
92509356005	VL02083-005	Water	12/01/20 16:00	12/03/20 11:55

## REPORT OF LABORATORY ANALYSIS

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**SAMPLE ANALYTE COUNT**

Project: VL02083 Westinghouse  
Pace Project No.: 92509356

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92509356001	VL02083-001	EPA 8260D	BSH	10
92509356002	VL02083-002	EPA 8260D	BSH	10
92509356003	VL02083-003	EPA 8260D	CL	10
92509356004	VL02083-004	EPA 8260D	BSH	10
92509356005	VL02083-005	EPA 8260D	BSH	10

PASI-C = Pace Analytical Services - Charlotte

**REPORT OF LABORATORY ANALYSIS**

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## ANALYTICAL RESULTS

Project: VL02083 Westinghouse  
Pace Project No.: 92509356

Sample: VL02083-001		Lab ID: 92509356001		Collected: 12/01/20 15:45	Received: 12/03/20 11:55	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D MSV Low Level</b>		Analytical Method: EPA 8260D Pace Analytical Services - Charlotte						
1,2-Dichloroethane	ND	ug/L	1.0	1		12/07/20 15:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/07/20 15:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/07/20 15:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/07/20 15:06	156-60-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/07/20 15:06	127-18-4	
Trichloroethene	ND	ug/L	1.0	1		12/07/20 15:06	79-01-6	
Vinyl chloride	ND	ug/L	1.0	1		12/07/20 15:06	75-01-4	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	99	%	70-130	1		12/07/20 15:06	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	70-130	1		12/07/20 15:06	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		12/07/20 15:06	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: VL02083 Westinghouse

Pace Project No.: 92509356

Sample: VL02083-002	Lab ID: 92509356002	Collected: 12/02/20 11:40		Received: 12/03/20 11:55		Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D MSV Low Level</b>		Analytical Method: EPA 8260D Pace Analytical Services - Charlotte						
1,2-Dichloroethane	ND	ug/L	1.0	1		12/07/20 15:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/07/20 15:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/07/20 15:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/07/20 15:24	156-60-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/07/20 15:24	127-18-4	
Trichloroethene	ND	ug/L	1.0	1		12/07/20 15:24	79-01-6	
Vinyl chloride	ND	ug/L	1.0	1		12/07/20 15:24	75-01-4	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	79	%	70-130	1		12/07/20 15:24	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130	1		12/07/20 15:24	17060-07-0	
Toluene-d8 (S)	104	%	70-130	1		12/07/20 15:24	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: VL02083 Westinghouse  
Pace Project No.: 92509356

Sample: VL02083-003		Lab ID: 92509356003		Collected: 12/02/20 15:08	Received: 12/03/20 11:55	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D MSV Low Level</b>		Analytical Method: EPA 8260D Pace Analytical Services - Charlotte						
1,2-Dichloroethane	ND	ug/L	1.0	1		12/07/20 16:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/07/20 16:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/07/20 16:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/07/20 16:26	156-60-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/07/20 16:26	127-18-4	
Trichloroethene	ND	ug/L	1.0	1		12/07/20 16:26	79-01-6	
Vinyl chloride	ND	ug/L	1.0	1		12/07/20 16:26	75-01-4	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	100	%	70-130	1		12/07/20 16:26	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		12/07/20 16:26	17060-07-0	
Toluene-d8 (S)	101	%	70-130	1		12/07/20 16:26	2037-26-5	

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## ANALYTICAL RESULTS

Project: VL02083 Westinghouse  
Pace Project No.: 92509356

<b>Sample: VL02083-004</b>		<b>Lab ID: 92509356004</b>		Collected: 12/02/20 16:58	Received: 12/03/20 11:55	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D MSV Low Level</b>		Analytical Method: EPA 8260D Pace Analytical Services - Charlotte						
1,2-Dichloroethane	ND	ug/L	1.0	1		12/07/20 15:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/07/20 15:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/07/20 15:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/07/20 15:42	156-60-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/07/20 15:42	127-18-4	
Trichloroethene	ND	ug/L	1.0	1		12/07/20 15:42	79-01-6	
Vinyl chloride	ND	ug/L	1.0	1		12/07/20 15:42	75-01-4	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	99	%	70-130	1		12/07/20 15:42	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-130	1		12/07/20 15:42	17060-07-0	
Toluene-d8 (S)	119	%	70-130	1		12/07/20 15:42	2037-26-5	

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### ANALYTICAL RESULTS

Project: VL02083 Westinghouse  
Pace Project No.: 92509356

Sample: VL02083-005	Lab ID: 92509356005	Collected: 12/01/20 16:00	Received: 12/03/20 11:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D MSV Low Level</b>	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
1,2-Dichloroethane	ND	ug/L	1.0	1		12/07/20 16:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		12/07/20 16:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		12/07/20 16:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		12/07/20 16:00	156-60-5	
Tetrachloroethene	ND	ug/L	1.0	1		12/07/20 16:00	127-18-4	
Trichloroethene	ND	ug/L	1.0	1		12/07/20 16:00	79-01-6	
Vinyl chloride	ND	ug/L	1.0	1		12/07/20 16:00	75-01-4	
<b>Surrogates</b>								
4-Bromofluorobenzene (S)	114	%	70-130	1		12/07/20 16:00	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130	1		12/07/20 16:00	17060-07-0	
Toluene-d8 (S)	115	%	70-130	1		12/07/20 16:00	2037-26-5	

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: VL02083 Westinghouse  
Pace Project No.: 92509356

QC Batch: 584970 Analysis Method: EPA 8260D  
QC Batch Method: EPA 8260D Analysis Description: 8260D MSV Low Level  
Laboratory: Pace Analytical Services - Charlotte  
Associated Lab Samples: 92509356001, 92509356002, 92509356004, 92509356005

METHOD BLANK: 3092187 Matrix: Water  
Associated Lab Samples: 92509356001, 92509356002, 92509356004, 92509356005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	1.0	12/07/20 11:47	
1,2-Dichloroethane	ug/L	ND	1.0	12/07/20 11:47	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/07/20 11:47	
Tetrachloroethene	ug/L	ND	1.0	12/07/20 11:47	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/07/20 11:47	
Trichloroethene	ug/L	ND	1.0	12/07/20 11:47	
Vinyl chloride	ug/L	ND	1.0	12/07/20 11:47	
1,2-Dichloroethane-d4 (S)	%	105	70-130	12/07/20 11:47	
4-Bromofluorobenzene (S)	%	99	70-130	12/07/20 11:47	
Toluene-d8 (S)	%	126	70-130	12/07/20 11:47	

LABORATORY CONTROL SAMPLE: 3092188

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	52.4	105	70-132	
1,2-Dichloroethane	ug/L	50	50.1	100	70-130	
cis-1,2-Dichloroethene	ug/L	50	54.1	108	70-130	
Tetrachloroethene	ug/L	50	50.9	102	70-130	
trans-1,2-Dichloroethene	ug/L	50	52.9	106	70-130	
Trichloroethene	ug/L	50	53.0	106	70-130	
Vinyl chloride	ug/L	50	48.1	96	59-142	
1,2-Dichloroethane-d4 (S)	%			93	70-130	
4-Bromofluorobenzene (S)	%			97	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE SAMPLE: 3092190

Parameter	Units	92509501003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	ND	20	30.9	154	70-158	
1,2-Dichloroethane	ug/L	ND	20	22.9	115	67-138	
cis-1,2-Dichloroethene	ug/L	ND	20	31.7	158	67-148	M1
Tetrachloroethene	ug/L	ND	20	19.8	99	70-139	
trans-1,2-Dichloroethene	ug/L	ND	20	31.2	156	70-149	M1
Trichloroethene	ug/L	ND	20	22.2	111	70-149	
Vinyl chloride	ug/L	ND	20	25.7	128	55-172	
1,2-Dichloroethane-d4 (S)	%				107	70-130	
4-Bromofluorobenzene (S)	%				94	70-130	

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### QUALITY CONTROL DATA

Project: VL02083 Westinghouse

Pace Project No.: 92509356

MATRIX SPIKE SAMPLE: 3092190		92509501003	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Toluene-d8 (S)	%				99	70-130	

SAMPLE DUPLICATE: 3092189

Parameter	Units	92509501002	Dup	RPD	Max	
		Result	Result		RPD	Qualifiers
1,1-Dichloroethene	ug/L	ND	ND		30	
1,2-Dichloroethane	ug/L	ND	ND		30	
cis-1,2-Dichloroethene	ug/L	ND	ND		30	
Tetrachloroethene	ug/L	ND	ND		30	
trans-1,2-Dichloroethene	ug/L	ND	ND		30	
Trichloroethene	ug/L	ND	ND		30	
Vinyl chloride	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	103	106			
4-Bromofluorobenzene (S)	%	100	91			
Toluene-d8 (S)	%	89	122			

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### QUALITY CONTROL DATA

Project: VL02083 Westinghouse  
Pace Project No.: 92509356

QC Batch: 584973 Analysis Method: EPA 8260D  
QC Batch Method: EPA 8260D Analysis Description: 8260D MSV Low Level  
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92509356003

METHOD BLANK: 3092194 Matrix: Water  
Associated Lab Samples: 92509356003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	1.0	12/07/20 12:49	
1,2-Dichloroethane	ug/L	ND	1.0	12/07/20 12:49	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/07/20 12:49	
Tetrachloroethene	ug/L	ND	1.0	12/07/20 12:49	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/07/20 12:49	
Trichloroethene	ug/L	ND	1.0	12/07/20 12:49	
Vinyl chloride	ug/L	ND	1.0	12/07/20 12:49	
1,2-Dichloroethane-d4 (S)	%	104	70-130	12/07/20 12:49	
4-Bromofluorobenzene (S)	%	101	70-130	12/07/20 12:49	
Toluene-d8 (S)	%	101	70-130	12/07/20 12:49	

LABORATORY CONTROL SAMPLE: 3092195

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	53.7	107	70-132	
1,2-Dichloroethane	ug/L	50	49.2	98	70-130	
cis-1,2-Dichloroethene	ug/L	50	51.3	103	70-130	
Tetrachloroethene	ug/L	50	50.2	100	70-130	
trans-1,2-Dichloroethene	ug/L	50	53.7	107	70-130	
Trichloroethene	ug/L	50	51.4	103	70-130	
Vinyl chloride	ug/L	50	46.6	93	59-142	
1,2-Dichloroethane-d4 (S)	%			97	70-130	
4-Bromofluorobenzene (S)	%			102	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3092196 3092197

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		92509033018 Result	Spike Conc.	Spike Conc.	Result							Result
1,1-Dichloroethene	ug/L	ND	200	200	233	237	117	119	70-158	2	30	
1,2-Dichloroethane	ug/L	ND	200	200	208	214	101	104	67-138	3	30	
cis-1,2-Dichloroethene	ug/L	ND	200	200	215	215	108	107	67-148	0	30	
Tetrachloroethene	ug/L	ND	200	200	212	204	106	102	70-139	4	30	
trans-1,2-Dichloroethene	ug/L	ND	200	200	224	222	112	111	70-149	1	30	
Trichloroethene	ug/L	ND	200	200	218	217	109	109	70-149	0	30	
Vinyl chloride	ug/L	ND	200	200	202	206	101	103	55-172	2	30	
1,2-Dichloroethane-d4 (S)	%						95	98	70-130			

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### QUALITY CONTROL DATA

Project: VL02083 Westinghouse

Pace Project No.: 92509356

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3092196 3092197												
Parameter	Units	92509033018 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.								
4-Bromofluorobenzene (S)	%						101	104	70-130			
Toluene-d8 (S)	%						100	100	70-130			

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### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: VL02083 Westinghouse

Pace Project No.: 92509356

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: VL02083 Westinghouse

Pace Project No.: 92509356

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92509356001	VL02083-001	EPA 8260D	584970		
92509356002	VL02083-002	EPA 8260D	584970		
92509356003	VL02083-003	EPA 8260D	584973		
92509356004	VL02083-004	EPA 8260D	584970		
92509356005	VL02083-005	EPA 8260D	584970		

**REPORT OF LABORATORY ANALYSIS**

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Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

PACE COLUMBIA

Project #:

WO#: 92509356



Courier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: 12/3/20 LSH

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?

Thermometer:  IR Gun ID: 92T064 Type of Ice:  Wet  Blue  None

Yes  No  N/A

Cooler Temp: 2.2 Correction Factor: Add/Subtract (°C) -0.1

Temp should be above freezing to 6°C

Cooler Temp Corrected (°C): 2.1

Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  
 Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	10.
Trip Blank Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_



\*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Project #

**WO# : 92509356**

PM: SC

Due Date: 12/08/20

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHG

CLIENT: 92-PaceSheal

\*\*Bottom half of box is to list number of bottles

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFL- Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A (DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOA# (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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8	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

**pH Adjustment Log for Preserved Samples**

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.



**Pace Analytical Services, LLC.**  
 106 Vantage Point Drive  
 West Columbia, South Carolina 29172  
 Telephone No. (803) 791-9700 Fax No. (803) 791-9111  
 www.pacelabs.com

Number

72809356

Client		Report to Contact		Telephone No. / E-mail		Quote No.	
Pace Analytical - Columbia		Blaine Gagne		803-227-3150 / blaine.gagne@pacelabs.com			
Address		Sampler's Signature		Analysis (Attach list if more space is needed)		Page	
106 Vantage Point Drive						of	
City		Printed Name				Lot # Bar Code (lab use only)	
Columbia		X					
State		Zip Code					
SC		29127					
Project Name		P.O. No.		No of Containers by Preservative Type		Remarks / Cooler I.D.	
Westinghouse- CVOC							
Project Number		Collection Date(s)		Collection Time (military)		G=Grab C=Composite	
						Aqueous	
						Solid	
						Non-	
						Unpres.	
						H2SO4	
						HNO3	
						HCl	
						NaOH	
						5035 Kit	
						Field Filtered	
						CVOC	
Sample ID / Description (Containers for each sample may be combined on one line)		Collection Date(s)		Collection Time (military)		G=Grab C=Composite	
L-33-13-17		12/1/2020		1545		G X	
L-33-24-28		12/2/2020		1140		G X	
L-32-8-12		12/2/2020		1508		G X	
L-32-19-23		12/2/2020		1658		G X	
TB-01-12020		12/1/2020		1600		G X	
Turn Around Time Required (Prior lab approval required for expedited TAT)		Sample Disposal		Possible Hazard Identification (List any known hazards in the remarks)		QC Requirements	
<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush (Please Specify) 3 DAY RUSH		<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab		<input type="checkbox"/> Non-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> SDS provided <input type="checkbox"/> Unknown 1. Received by COH PACE HVL Date 12/3/20 Time 11:55 2. Received by Date Date Time Time 3. Received by Date Date Time Time 4. Laboratory/Received by Date Date Time Time		<input type="checkbox"/> Y / <input type="checkbox"/> N Receipt Temp. 20.1 °C Temp. Blank <input type="checkbox"/> Y / <input type="checkbox"/> N	
1. Relinquished by		Date		Time		Time	
2. Relinquished by		Date		Time		Time	
3. Relinquished by		Date		Time		Time	
4. Relinquished by		Date		Time		Time	

Note: All samples are retained for four weeks from receipt unless other arrangements are made



Ship to :  
 Pace Hunterville  
 9800 Kinsey Ave  
 Huntersville, NC 28078

Phone (704) 875-9092

INTER LABORATORY WORK ORDER # \_\_\_\_\_  
 (To be complete by sending lab)

Sending Project No:	CVOC
Receiving Project No:	
Check Box for Consolidated Invoice:	<input type="checkbox"/>
Date Prepared:	2-Dec
REQUESTED COMPLETION DATE:	7-Dec

Sending Region	IR77-Columbia	Sending Project Mgr.	Blaire Gagne
Receiving Region	IR77-Huntersville	External Client	Westinghouse
State of Sample Origin	South Carolina	QC Deliverable	STD Report

All questions should be addressed to sending project manager.

Requested Reportable Units: mg/L      Report Wet or Dry Weight?: wet      Cert Needed: NO

WORK REQUESTED						
Method Description	Conc. Ltr./Type	Quantity/Conc. containers	Pres. Natv.	Quantity Samples	Unit Price	Amount
CVOCs	40mL	14	HCL	5	\$160	
<b>TOTAL</b>						

Special Requirements: Westinghouse/Mactec EDD      B flags

Receiving Region Dept.	Acct. Code	Total from above	Revenue Allocation	
			Receiving Region (80%)	Client Service Dept. Sending Region (20%)
		<b>TOTAL</b>		

\* Custom Revenue Allocation

**FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO**

Chain of Custody Included:  Yes  No      Return Samples to Sending Reguion:  Yes  No

Matrix:  Soil  Water  Air  Other (identity) \_\_\_\_\_

**CONFIRMATION OF WORK COMPLETED**

Date Completed: \_\_\_\_\_      Receiving Project Manager: \_\_\_\_\_

Original sent to the receiving lab - Copy kept at the sending lab.  
 When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.



---

## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **VL04045**

Date Completed: 12/15/2020

Project Manager: **Blaire M. Gagne**

12/15/2020 4:44 PM

Approved and released by:  
Project Manager II: **Lucas Odom**



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106 Vantage Point Drive West Columbia, SC 29172  
Tel: 803-791-9700 Fax: 803-791-9111 www.pacelabs.com

# 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: VL04045**

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.

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

### VOCs by GC/MS

The analysis for VOCs have been performed by Pace Huntersville. This data is located on a separate Pace -Huntersville report.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: VL04045  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-32-31-35	Aqueous	12/03/2020 1101	12/04/2020
002	L-31-13-17	Aqueous	12/03/2020 1357	12/04/2020
003	L-31-22-26	Aqueous	12/03/2020 1552	12/04/2020
004	L-31-30-34	Aqueous	12/04/2020 0932	12/04/2020
005	L-29-13-17	Aqueous	12/04/2020 1312	12/04/2020
006	L-29-26-30	Aqueous	12/04/2020 1502	12/04/2020
007	L-36-18-22	Aqueous	12/03/2020 1045	12/04/2020
008	L-36-27.5-31.5	Aqueous	12/03/2020 1300	12/04/2020
009	L-36-27.5-31.5-Dup	Aqueous	12/03/2020 1300	12/04/2020
010	L-36-37-41	Aqueous	12/03/2020 1615	12/04/2020
011	L-35-11-15	Aqueous	12/04/2020 0843	12/04/2020
012	L-35-21-25	Aqueous	12/04/2020 0939	12/04/2020
013	L-35-26-30	Aqueous	12/04/2020 1048	12/04/2020
014	L-34-14-18	Aqueous	12/04/2020 1230	12/04/2020
015	L-34-26-30	Aqueous	12/04/2020 1326	12/04/2020
016	TB-01-120320	Aqueous	12/03/2020	12/04/2020

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(16 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: VL04045  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
007	L-36-18-22	Aqueous	Nitrate - N	353.2	0.025		mg/L	5
008	L-36-27.5-31.5	Aqueous	Nitrate - N	353.2	0.12		mg/L	6
009	L-36-27.5-31.5-Dup	Aqueous	Nitrate - N	353.2	0.12		mg/L	7
010	L-36-37-41	Aqueous	Nitrate - N	353.2	0.14		mg/L	8
011	L-35-11-15	Aqueous	Nitrate - N	353.2	0.12		mg/L	9
012	L-35-21-25	Aqueous	Nitrate - N	353.2	0.15		mg/L	10
013	L-35-26-30	Aqueous	Nitrate - N	353.2	0.080		mg/L	11

(7 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: VL04045-007
Description: L-36-18-22	Matrix: Aqueous
Date Sampled: 12/03/2020 1045	Project Name: CVOC
Date Received: 12/04/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/04/2020 2201	SRB		75607

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.025	0.020	mg/L	1

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: VL04045-008
Description: L-36-27.5-31.5	Matrix: Aqueous
Date Sampled: 12/03/2020 1300	Project Name: CVOC
Date Received: 12/04/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/04/2020 2209	SRB		75607

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.12	0.020	mg/L	1

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: VL04045-009
Description: L-36-27.5-31.5-Dup	Matrix: Aqueous
Date Sampled: 12/03/2020 1300	Project Name: CVOC
Date Received: 12/04/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/04/2020 2210	SRB		75607

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.12	0.020	mg/L	1

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: VL04045-010
Description: L-36-37-41	Matrix: Aqueous
Date Sampled: 12/03/2020 1615	Project Name: CVOC
Date Received: 12/04/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/04/2020 2212	SRB		75607

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.14	0.020	mg/L	1

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: VL04045-011
Description: L-35-11-15	Matrix: Aqueous
Date Sampled: 12/04/2020 0843	Project Name: CVOC
Date Received: 12/04/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/04/2020 2213	SRB		75607

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.12	0.020	mg/L	1

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: VL04045-012
Description: L-35-21-25	Matrix: Aqueous
Date Sampled: 12/04/2020 0939	Project Name: CVOC
Date Received: 12/04/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/04/2020 2214	SRB		75607

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.020	mg/L	1

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: VL04045-013
Description: L-35-26-30	Matrix: Aqueous
Date Sampled: 12/04/2020 1048	Project Name: CVOC
Date Received: 12/04/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/04/2020 2216	SRB		75607

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.080	0.020	mg/L	1

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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

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Chain of Custody  
and  
Miscellaneous Documents





**PACE ANALYTICAL SERVICES, LLC**

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

**Number 114529**

Client <b>Westinghouse</b>		Report to Contact <b>Diana Joyner</b>		Telephone No. / Email <b>joyner-de@westinghouse.com</b>		Client No.	
Address <b>1491 Bluff Road</b>		Sampler's Signature <i>[Signature]</i>		Analysis (Attach list if more space is needed)		Page <b>2</b> of <b>2</b>	
City <b>Hopkins</b>		Project Name <b>RI Phase II</b>		Matrix		Barcode <b>VL04045</b>	
State <b>SC</b>		Zip Code		No. of Containers by Preservation Type		LIMS	
Project No. <b>00595649</b>		P.O. No.		Collection Date (Military)		Remarks / Occas. I.D.	
Sample ID / Description (Containers for each sample may be combined on one line.)		Collection Date (Military)		Collection Time (Military)			
L-35-11-15		12/4/20		0843		X	
L-35-21-25		12/4/20		0939		X	
L-35-26-30		12/4/20		1048		X	
L-34-14-18		12/4/20		1230		X	
L-34-26-30		12/4/20		1326		X	

Turn Around Time Required (Prior full approval required for expedited MAT)		Sample Disposal:		Hazardous Identification:		QC Requirements (Specialty)	
Standard	<input checked="" type="checkbox"/> Rush (Specialty)	Return to Client	<input checked="" type="checkbox"/> Deposit by Lab	<input type="checkbox"/> Non-Hazardous	<input type="checkbox"/> Flammable	<input type="checkbox"/> SMH In Blank	<input type="checkbox"/> Poison
1. Reacquainted by	<i>[Signature]</i>	Date	Time	1. Received by			
2. Reacquainted by		Date	Time	2. Received by			
3. Reacquainted by		Date	Time	3. Received by			
4. Reacquainted by		Date	Time	4. Laboratory <i>[Signature]</i>			
Note: All samples are retained for four weeks from receipt unless other arrangements are made.		LAB USE ONLY		Received on Ice (Circle) Yes No		Faceplate Temp. °C	
		12/4/20 15:42		0.9		Temp. Blank <input type="checkbox"/> Y <input type="checkbox"/> N	

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy Document Number: ME030912-01

# PACE ANALYTICAL SERVICES, LLC



**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: KBS / 12/04/2020      Lot #: VL04045

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA      Chlorine Strip ID: NA      Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt      %Solid Snap-Cup ID: NA 0.9 / 0.9 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles      IR Gun ID: 6      IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # 22221
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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.	
Sample(s) NA were received with TRC > 0.5 mg/L. (If #19 is no) and were adjusted accordingly in sample 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: KBS      Date: 12/04/20	

Comments: EXCESS: VL04045-01/L-35-11-15, -012/L-35-21-25, -013/L-35-26-30; NO3 CONTAINER NOT LISTED ON COC;

VL04045-016/TB-01-120320: 2 VIALS NOT LISTED ON COC

VL04045-013/L-35-26-30: ID ON CONTAINERS LISTED AS L-35-30-34



---

## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **VL08063**

Date Completed: 12/09/2020

12/10/2020 1:38 PM

Approved and released by:

Project Manager I: **Blaire M. Gagne**



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# 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: VL08063**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: VL08063  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-30-12-16	Aqueous	12/08/2020 1517	12/08/2020
002	L-30-22-26	Aqueous	12/08/2020 1645	12/08/2020
003	TB-01-120720	Aqueous	12/08/2020 1525	12/08/2020

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(3 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: VL08063  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	L-30-22-26	Aqueous	cis-1,2-Dichloroethene	8260D	5.0		ug/L	6

(1 detection)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL08063-001
Description: L-30-12-16	Matrix: Aqueous
Date Sampled: 12/08/2020 1517	Project Name: CVOC
Date Received: 12/08/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/08/2020 2239	STM		75908

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		98	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		92	70-130

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

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 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL08063-002
Description: L-30-22-26	Matrix: Aqueous
Date Sampled: 12/08/2020 1645	Project Name: CVOC
Date Received: 12/08/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/08/2020 2303	STM		75908

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	5.0		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		92	70-130
Toluene-d8		91	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL08063-003
Description: TB-01-120720	Matrix: Aqueous
Date Sampled: 12/08/2020 1525	Project Name: CVOC
Date Received: 12/08/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/08/2020 2216	STM		75908

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		101	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		94	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



# PACE ANALYTICAL SERVICES, LLC



**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: AID / 12/08/2020

Lot #: VL08063

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA 5.8 / 5.8 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.2 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)</b>	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 mg/L (If #19 is no) and were adjusted accordingly in sample 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: KBS Date: 12/08/2020	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **VL09086**

Date Completed: 12/10/2020

12/10/2020 1:39 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



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# 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: VL09086**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: VL09086  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-30-29-34	Aqueous	12/09/2020 1226	12/09/2020
002	TB-01-120820	Aqueous	12/08/2020 1700	12/09/2020

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(2 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: VL09086  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	L-30-29-34	Aqueous	cis-1,2-Dichloroethene	8260D	3.5		ug/L	5
001	L-30-29-34	Aqueous	Vinyl chloride	8260D	1.8		ug/L	5

(2 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL09086-001
Description: L-30-29-34	Matrix: Aqueous
Date Sampled: 12/09/2020 1226	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/10/2020 0258	DJG		76076

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	3.5		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	1.8		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		107	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		99	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL09086-002
Description: TB-01-120820	Matrix: Aqueous
Date Sampled: 12/08/2020 1700	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/10/2020 0234	DJG		76076

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		109	70-130
1,2-Dichloroethane-d4		113	70-130
Toluene-d8		100	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



# PACE ANALYTICAL SERVICES, LLC



**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: KRS / 12/09/2020

Lot #: VL09086

Means of receipt: <input type="checkbox"/> Pace <input type="checkbox"/> Client <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA	
1.6 / 1.6 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)</b>	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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.	
Sample(s) NA were received with TRC > 0.5 mg/L (If #19 is no) and were adjusted accordingly in sample 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: KRS Date: 12/09/2020	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **VL09087**

Date Completed: 12/18/2020

12/18/2020 2:07 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



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# 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: VL09087**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: VL09087  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-41-31-35	Aqueous	12/07/2020 1426	12/09/2020
002	L-44-27-31	Aqueous	12/07/2020 1126	12/09/2020
003	L-38-17-21	Aqueous	12/08/2020 1323	12/09/2020
004	L-38-26-30	Aqueous	12/08/2020 1511	12/09/2020
005	L-37-17-21	Aqueous	12/08/2020 1628	12/09/2020
006	L-37-26-30	Aqueous	12/08/2020 1715	12/09/2020
007	L-25-21.5-25.5	Aqueous	12/08/2020 1651	12/09/2020
008	L-25-38-42	Aqueous	12/09/2020 1042	12/09/2020
009	L-26-25-29	Aqueous	12/09/2020 1337	12/09/2020
010	L-26-39-43	Aqueous	12/09/2020 1511	12/09/2020

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(10 samples)

# PACE ANALYTICAL SERVICES, LLC

Detection Summary  
Westinghouse Electric Company  
Lot Number: VL09087  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	L-41-31-35	Aqueous	Trichloroethene	8260D	2.1		ug/L	5
003	L-38-17-21	Aqueous	Nitrate - N	353.2	0.13		mg/L	7
004	L-38-26-30	Aqueous	Nitrate - N	353.2	0.14		mg/L	9
004	L-38-26-30	Aqueous	Tetrachloroethene	8260D	34		ug/L	10
005	L-37-17-21	Aqueous	Nitrate - N	353.2	0.13		mg/L	11
006	L-37-26-30	Aqueous	Nitrate - N	353.2	0.13		mg/L	13
006	L-37-26-30	Aqueous	Vinyl chloride	8260D	2.3		ug/L	14
007	L-25-21.5-25.5	Aqueous	Tetrachloroethene	8260D	2.2		ug/L	15
008	L-25-38-42	Aqueous	Tetrachloroethene	8260D	48		ug/L	16
008	L-25-38-42	Aqueous	Trichloroethene	8260D	2.0		ug/L	16
009	L-26-25-29	Aqueous	Tetrachloroethene	8260D	31		ug/L	17
009	L-26-25-29	Aqueous	Trichloroethene	8260D	2.0		ug/L	17

(12 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL09087-001
Description: L-41-31-35	Matrix: Aqueous
Date Sampled: 12/07/2020 1426	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/12/2020 1831	DJG		76365

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	2.1		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		103	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		98	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL09087-002
Description: L-44-27-31	Matrix: Aqueous
Date Sampled: 12/07/2020 1126	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/12/2020 1854	DJG		76365

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		99	70-130
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		95	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: VL09087-003
Description: L-38-17-21	Matrix: Aqueous
Date Sampled: 12/08/2020 1323	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/09/2020 2020	SRB		76081

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.13	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL09087-003
Description: L-38-17-21	Matrix: Aqueous
Date Sampled: 12/08/2020 1323	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/12/2020 1918	DJG		76365

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		98	70-130
1,2-Dichloroethane-d4		90	70-130
Toluene-d8		95	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: VL09087-004
Description: L-38-26-30	Matrix: Aqueous
Date Sampled: 12/08/2020 1511	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/09/2020 2021	SRB		76081

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.14	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL09087-004
Description: L-38-26-30	Matrix: Aqueous
Date Sampled: 12/08/2020 1511	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/12/2020 1942	DJG		76365

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	34		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		96	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		91	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: VL09087-005
Description: L-37-17-21	Matrix: Aqueous
Date Sampled: 12/08/2020 1628	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/09/2020 2028	SRB		76081

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL09087-005
Description: L-37-17-21	Matrix: Aqueous
Date Sampled: 12/08/2020 1628	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/12/2020 2006	DJG		76365

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		100	70-130
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		95	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: VL09087-006
Description: L-37-26-30	Matrix: Aqueous
Date Sampled: 12/08/2020 1715	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/09/2020 2024	SRB		76081

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL09087-006
Description: L-37-26-30	Matrix: Aqueous
Date Sampled: 12/08/2020 1715	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/17/2020 0042	DJG		76798

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	2.3		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		97	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL09087-007
Description: L-25-21.5-25.5	Matrix: Aqueous
Date Sampled: 12/08/2020 1651	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/17/2020 0105	DJG		76798

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	2.2		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		107	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		97	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL09087-008
Description: L-25-38-42	Matrix: Aqueous
Date Sampled: 12/09/2020 1042	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/17/2020 0127	DJG		76798

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	48		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	2.0		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		108	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		97	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL09087-009
Description: L-26-25-29	Matrix: Aqueous
Date Sampled: 12/09/2020 1337	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/17/2020 0150	DJG		76798

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	31		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	2.0		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		108	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		99	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL09087-010
Description: L-26-39-43	Matrix: Aqueous
Date Sampled: 12/09/2020 1511	Project Name: CVOC
Date Received: 12/09/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/17/2020 0212	DJG		76798

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		111	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		102	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



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 www.pacelabs.com

**Number 114530**

Client <b>Westinghouse</b>		Project Name <b>RI Phase II</b>		Quote No.	
Address <b>5801 Bluff Rd</b>		State <b>SC</b>		Telephone No. / E-mail <b>Joyner djo@westinghouse.com</b>	
City <b>Hopkins</b>		Zip Code <b>29061</b>		Page <b>1</b> of <b>1</b>	
Project No. <b>60595649</b>		F.O. No.		Barcode <b>VL09087</b>	
Sample ID / Description <b>L-41-31-35</b>		Collection Date(s)		BIMG <b>VL09087</b>	
Collection Time (MM:SS)		Retention Time (MM:SS)		Remarks / Cooler ID.	
12/17/20 14:26		6 X		Nitrates	
12/17/20 11:26		6 X		CLOCs	
12/18/20 13:23		6 X		X	
12/18/20 15:11		6 X		X	
12/18/20 16:28		6 X		X	
12/18/20 17:15		6 X		X	
12/18/20 16:51		6 X		X	
12/19/20 10:42		6 X		X	
12/19/20 13:37		6 X		X	
12/19/20 15:11		6 X		X	

Turn Around Time Required (Prior lab equipment required for expedited TAT)	Standard <input type="checkbox"/> Rush (Specify)	Sample Disposal <input type="checkbox"/> Return to Client <input type="checkbox"/> Dispose by Lab	Possible Hazard Identification: <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown
1. Relinquished by <i>Charles K Schubert</i>	Date 12/19/20	Time 1852	OC Requirements (Specify)
2. Relinquished by	Date	Time	
3. Relinquished by	Date	Time	
4. Relinquished by	Date	Time	

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY  
 Received on Ice (Circle) Yes  No  Pack Receipt Temp. **1.6** °C

Document Number: MED0002-01

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Clinic; Copy

# PACE ANALYTICAL SERVICES, LLC



**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: KBS / 12/09/2020 Lot #: VL09087

Means of receipt: <input type="checkbox"/> Pace <input type="checkbox"/> Client <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>NA</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>NA</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: <u>NA</u>	
<u>1.6 / 1.6</u> °C <u>NA / NA</u> °C <u>NA / NA</u> °C <u>NA / NA</u> °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: <u>6</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>2</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # _____
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) <u>NA</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>NA</u> mL of circle one: H <sub>2</sub> SO <sub>4</sub> , HNO <sub>3</sub> , HCl, NaOH using SR # <u>NA</u> .	
Time of preservation <u>NA</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) <u>NA</u> were received with bubbles >6 mm in diameter.	
Sample(s) <u>NA</u> were received with TRC > 0.5 mg/L (If #19 is <i>no</i> ) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: <u>NA</u> .	
SR barcode labels applied by: <u>KBS</u> Date: <u>12/09/2020</u>	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **VL11105**

Date Completed: 12/18/2020

12/18/2020 11:39 AM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



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# 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: VL11105**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: VL11105  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-25-14.7-19.7	Aqueous	12/11/2020 1451	12/11/2020
002	L-26-13.7-18.7	Aqueous	12/11/2020 1621	12/11/2020
003	L-27-14-19	Aqueous	12/11/2020 1735	12/11/2020
004	TB-01121120	Aqueous	12/11/2020 1500	12/11/2020

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(4 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: VL11105  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	L-25-14.7-19.7	Aqueous	Tetrachloroethene	8260D	6.1		ug/L	5
002	L-26-13.7-18.7	Aqueous	Tetrachloroethene	8260D	3.0		ug/L	6
003	L-27-14-19	Aqueous	Tetrachloroethene	8260D	5.8		ug/L	7

(3 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL11105-001
Description: L-25-14.7-19.7	Matrix: Aqueous
Date Sampled: 12/11/2020 1451	Project Name: CVOC
Date Received: 12/11/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/17/2020 1229	BWS		76893

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	6.1		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		102	70-130
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		96	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL11105-002
Description: L-26-13.7-18.7	Matrix: Aqueous
Date Sampled: 12/11/2020 1621	Project Name: CVOC
Date Received: 12/11/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/17/2020 1253	BWS		76893

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	3.0		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		102	70-130
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		95	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL11105-003
Description: L-27-14-19	Matrix: Aqueous
Date Sampled: 12/11/2020 1735	Project Name: CVOC
Date Received: 12/11/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/17/2020 1316	BWS		76893

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	5.8		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		101	70-130
1,2-Dichloroethane-d4		82	70-130
Toluene-d8		94	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL11105-004
Description: TB-01121120	Matrix: Aqueous
Date Sampled: 12/11/2020 1500	Project Name: CVOC
Date Received: 12/11/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/17/2020 1206	BWS		76893

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		81	70-130
Toluene-d8		92	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



# PACE ANALYTICAL SERVICES, LLC

Shealy Environmental Services, Inc.  
Document Number: ME0018C-L4

Page 1 of 1  
Effective Date: 8/2/2018

## Sample Receipt Checklist (SRC)

Client: WESTINGHOUSE      Cooler Inspected by/date: DJW / 12/11/20      Lot #: VL11105

Means of receipt: <input type="checkbox"/> SESI <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA      Chlorine Strip ID: NA      Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt      %Solid Snap-Cup ID: NA	
6.0 / 6.0 °C    NA / NA °C    NA / NA °C    NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles    IR Gun ID: 5    IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # NA
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H <sub>2</sub> SO <sub>4</sub> , HNO <sub>3</sub> , 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 mg/L (If #19 is NA) and were adjusted accordingly in sample 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: DJW      Date: 12/11/20	
Comments:	



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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **VL29051**

Date Completed: 12/31/2020

12/31/2020 3:43 PM  
Approved and released by:  
Project Manager I: **Blaire M. Gagne**



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# 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: VL29051**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: VL29051  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-45-29-33	Aqueous	12/28/2020 1354	12/29/2020
002	TB-01-122820	Aqueous	12/28/2020 1400	12/29/2020
003	L-46-31-35	Aqueous	12/28/2020 1712	12/29/2020
004	L-46-31-35 DUP	Aqueous	12/28/2020 1712	12/29/2020
005	L-27-23-27	Aqueous	12/29/2020 1503	12/29/2020
006	L-27-30-34	Aqueous	12/29/2020 1656	12/29/2020

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(6 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: VL29051  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	L-45-29-33	Aqueous	Tetrachloroethene	8260D	2.6		ug/L	5
001	L-45-29-33	Aqueous	Trichloroethene	8260D	11		ug/L	5
003	L-46-31-35	Aqueous	Tetrachloroethene	8260D	26		ug/L	7
003	L-46-31-35	Aqueous	Trichloroethene	8260D	8.6		ug/L	7
004	L-46-31-35 DUP	Aqueous	Tetrachloroethene	8260D	27		ug/L	8
004	L-46-31-35 DUP	Aqueous	Trichloroethene	8260D	8.9		ug/L	8
005	L-27-23-27	Aqueous	Tetrachloroethene	8260D	24		ug/L	9
005	L-27-23-27	Aqueous	Trichloroethene	8260D	3.8		ug/L	9
006	L-27-30-34	Aqueous	Tetrachloroethene	8260D	27		ug/L	10
006	L-27-30-34	Aqueous	Trichloroethene	8260D	4.1		ug/L	10

(10 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL29051-001
Description: L-45-29-33	Matrix: Aqueous
Date Sampled: 12/28/2020 1354	Project Name: CVOC
Date Received: 12/29/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/31/2020 0210	STM		78208

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	2.6		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	11		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		107	70-130
Toluene-d8		95	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL29051-002
Description: TB-01-122820	Matrix: Aqueous
Date Sampled: 12/28/2020 1400	Project Name: CVOC
Date Received: 12/29/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/31/2020 0126	STM		78208

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		100	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		95	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL29051-003
Description: L-46-31-35	Matrix: Aqueous
Date Sampled: 12/28/2020 1712	Project Name: CVOC
Date Received: 12/29/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/31/2020 0233	STM		78208

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	26		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	8.6		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		100	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		96	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL29051-004
Description: L-46-31-35 DUP	Matrix: Aqueous
Date Sampled: 12/28/2020 1712	Project Name: CVOC
Date Received: 12/29/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/31/2020 0255	STM		78208

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	27		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	8.9		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		107	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		98	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL29051-005
Description: L-27-23-27	Matrix: Aqueous
Date Sampled: 12/29/2020 1503	Project Name: CVOC
Date Received: 12/29/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/31/2020 0317	STM		78208

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	24		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	3.8		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		101	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		95	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL29051-006
Description: L-27-30-34	Matrix: Aqueous
Date Sampled: 12/29/2020 1656	Project Name: CVOC
Date Received: 12/29/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	12/31/2020 0339	STM		78208

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	27		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	4.1		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		103	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		97	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



# PACE ANALYTICAL SERVICES, LLC



Samples Receipt Checklist (SRC) (MF0018C-15)  
Issuing Authority: Pace ENV - WCCL



1/29/2020  
Page 1 of 1

## Sample Receipt Checklist (SRC)

Client: Westinghouse Cooler Inspected by/date: KBS / 1/29/20 Lot #:            DMC

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>na</u> Chlorine Strip ID: <u>na</u> Tested by: <u>na</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID:	
<u>3.8/3.8 °C na / na °C na / na °C na / na °C</u>	
Method: <input type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: <u>5</u> IR Gun Correction Factor: <u>0 °C</u>	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>4</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # <u>28321</u>
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) <u>na</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>na</u> mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # <u>na</u>	
Time of preservation <u>na</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) <u>na</u> were received with bubbles >6 mm in diameter.	
Samples(s) <u>na</u> were received with TRC > 0.5 mg/L (if #19 is no) and were adjusted accordingly in sample receiving with sodium dithiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: <u>na</u>	
SR barcode labels applied by: <u>KBS</u> Date: <u>1/29/20</u>	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **VL30053**

Date Completed: 01/07/2021

01/07/2021 9:01 AM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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# 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: VL30053**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: VL30053  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-47-25-29	Aqueous	12/30/2020 0750	12/30/2020
002	TB-01-123020	Aqueous	12/30/2020 0755	12/30/2020
003	L-27-39-43	Aqueous	12/30/2020 0946	12/30/2020
004	L-28-18-22	Aqueous	12/30/2020 1141	12/30/2020
005	L-28-27-31	Aqueous	12/30/2020 1314	12/30/2020
006	L-28-36-40	Aqueous	12/30/2020 1451	12/30/2020

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(6 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: VL30053  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
003	L-27-39-43	Aqueous	Tetrachloroethene	8260D	13		ug/L	7
004	L-28-18-22	Aqueous	Tetrachloroethene	8260D	22		ug/L	8
005	L-28-27-31	Aqueous	Tetrachloroethene	8260D	10		ug/L	9
006	L-28-36-40	Aqueous	Tetrachloroethene	8260D	22		ug/L	10

(4 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL30053-001
Description: L-47-25-29	Matrix: Aqueous
Date Sampled: 12/30/2020 0750	Project Name: CVOC
Date Received: 12/30/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	01/05/2021 2211	DJG		78557

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		107	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		103	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL30053-002
Description: TB-01-123020	Matrix: Aqueous
Date Sampled: 12/30/2020 0755	Project Name: CVOC
Date Received: 12/30/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	01/05/2021 2149	DJG		78557

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		110	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		105	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL30053-003
Description: L-27-39-43	Matrix: Aqueous
Date Sampled: 12/30/2020 0946	Project Name: CVOC
Date Received: 12/30/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	01/05/2021 2233	DJG		78557

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	13		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		105	70-130
1,2-Dichloroethane-d4		116	70-130
Toluene-d8		103	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL30053-004
Description: L-28-18-22	Matrix: Aqueous
Date Sampled: 12/30/2020 1141	Project Name: CVOC
Date Received: 12/30/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	01/05/2021 2256	DJG		78557

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	22		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		106	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		105	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL30053-005
Description: L-28-27-31	Matrix: Aqueous
Date Sampled: 12/30/2020 1314	Project Name: CVOC
Date Received: 12/30/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	01/05/2021 1603	BWS		78486

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	10		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		104	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		104	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: VL30053-006
Description: L-28-36-40	Matrix: Aqueous
Date Sampled: 12/30/2020 1451	Project Name: CVOC
Date Received: 12/30/2020	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	01/05/2021 2318	DJG		78557

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	22		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		108	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		102	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



# PACE ANALYTICAL SERVICES, LLC



**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: KBS / 12/30/2020 Lot #: VL30053

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>NA</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>KBS</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: <u>NA</u> 4.0 / 4.0 °C <u>NA</u> / <u>NA</u> °C <u>NA</u> / <u>NA</u> °C <u>NA</u> / <u>NA</u> °C	
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles IR Gun ID: <u>5</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pca-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) <u>NA</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>NA</u> mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # <u>NA</u>	
Time of preservation <u>NA</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) <u>NA</u> were received with bubbles >6 mm in diameter.	
Sample(s) <u>NA</u> were received with TRC > 0.5 mg/L (If #19 is <b>no</b> ) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: <u>NA</u>	
SR barcode labels applied by: <u>KBS</u> Date: <u>12/30/2020</u>	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: RI Phase II

Lot Number: **WB17092**

Date Completed: 02/19/2021

02/22/2021 2:32 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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# 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: WB17092**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WB17092  
Project Name: RI Phase II  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-58-40-44	Aqueous	02/16/2021 1030	02/17/2021
002	L-58-23-27	Aqueous	02/16/2021 1129	02/17/2021
003	L-58-31-35	Aqueous	02/16/2021 1244	02/17/2021
004	L-57-26-30	Aqueous	02/16/2021 1634	02/17/2021
005	L-57-42-46	Aqueous	02/17/2021 0906	02/17/2021
006	L-56-22-26	Aqueous	02/17/2021 1243	02/17/2021
007	L-56-33-37	Aqueous	02/17/2021 1344	02/17/2021
008	L-56-41-45	Aqueous	02/17/2021 1603	02/17/2021
009	Trip Blank	Aqueous	02/17/2021	02/17/2021

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(9 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WB17092  
Project Name: RI Phase II  
Project Number:

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Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
(0 detections)								

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WB17092-001
Description: L-58-40-44	Matrix: Aqueous
Date Sampled: 02/16/2021 1030	Project Name: RI Phase II
Date Received: 02/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	02/19/2021 0100	DJG		83393

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		104	70-130
1,2-Dichloroethane-d4		120	70-130
Toluene-d8		108	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WB17092-002
Description: L-58-23-27	Matrix: Aqueous
Date Sampled: 02/16/2021 1129	Project Name: RI Phase II
Date Received: 02/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	02/19/2021 0125	DJG		83393

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		103	70-130
1,2-Dichloroethane-d4		120	70-130
Toluene-d8		109	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WB17092-003
Description: L-58-31-35	Matrix: Aqueous
Date Sampled: 02/16/2021 1244	Project Name: RI Phase II
Date Received: 02/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	02/19/2021 0159	DJG		83393

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		105	70-130
1,2-Dichloroethane-d4		121	70-130
Toluene-d8		109	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WB17092-004
Description: L-57-26-30	Matrix: Aqueous
Date Sampled: 02/16/2021 1634	Project Name: RI Phase II
Date Received: 02/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	02/19/2021 0223	DJG		83393

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		104	70-130
1,2-Dichloroethane-d4		124	70-130
Toluene-d8		108	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WB17092-005
Description: L-57-42-46	Matrix: Aqueous
Date Sampled: 02/17/2021 0906	Project Name: RI Phase II
Date Received: 02/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	02/19/2021 0246	DJG		83393

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		103	70-130
1,2-Dichloroethane-d4		119	70-130
Toluene-d8		107	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WB17092-006
Description: L-56-22-26	Matrix: Aqueous
Date Sampled: 02/17/2021 1243	Project Name: RI Phase II
Date Received: 02/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	02/19/2021 0310	DJG		83393

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		103	70-130
1,2-Dichloroethane-d4		120	70-130
Toluene-d8		105	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WB17092-007
Description: L-56-33-37	Matrix: Aqueous
Date Sampled: 02/17/2021 1344	Project Name: RI Phase II
Date Received: 02/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	02/19/2021 0334	DJG		83393

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		104	70-130
1,2-Dichloroethane-d4		121	70-130
Toluene-d8		108	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WB17092-008
Description: L-56-41-45	Matrix: Aqueous
Date Sampled: 02/17/2021 1603	Project Name: RI Phase II
Date Received: 02/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	02/19/2021 0357	DJG		83393

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		103	70-130
1,2-Dichloroethane-d4		121	70-130
Toluene-d8		106	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WB17092-009
Description: Trip Blank	Matrix: Aqueous
Date Sampled: 02/17/2021	Project Name: RI Phase II
Date Received: 02/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	02/18/2021 1838	JDF		83367

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		98	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		103	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



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 Telephone No. 803-791-9700 Fax No. 803-791-9111  
 www.pacelabs.com

**Number**

**117484**

Client <b>Westinghouse</b>		Phone No. / E-mail <b>101nerde@westinghouse.com</b>		Circs No.			
Address <b>5801 Bluff Rd</b>		Analyses (Attach list if more space is needed)		Pages <b>1</b> of <b>1</b>			
City <b>Hopkins</b>		Sampler's Signature <i>Jeremy Grant</i>		WB17092			
State <b>SC</b>		Printed Name <b>Jeremy Grant</b>		EMIS			
Zip Code <b>29061</b>		Project Name <b>RI Phase II</b>		Remarks / Cooler I.D.			
Project No	Sample ID / Description (Conditions for each sample may be provided on one form.)	Collection Date(s)	Collection Time (Military)	R.O. No	Matrix	No of Containers by Preservative Type	Other
L-58-40-44		2/16/21	1030	G	X	3	X
L-58-23-27		2/16/21	1129	G	X	3	X
L-58-31-35		2/16/21	1244	G	X	3	X
L-57-26-30		2/16/21	1434	G	X	3	X
L-57-42-46		2/17/21	0906	G	X	3	X
L-56-22-26		2/17/21	1243	G	X	3	X
L-56-33-37		2/17/21	1344	G	X	3	X
L-56-41-45		2/17/21	1603	G	X	3	X

Turn Around Time Required (Prior lab approval required for expedited TAT.)		Possible Hazard Identification	
<input type="checkbox"/> Standard	<input checked="" type="checkbox"/> Rush (Specify) <b>72 hr.</b>	<input checked="" type="checkbox"/> Non-Hazard	<input type="checkbox"/> Biohazard
1. Requisitioned by <b>Jeremy Grant</b>	Date <b>2/17/21</b> Time <b>1639</b>	<input type="checkbox"/> Spill	<input type="checkbox"/> Poison
2. Requisitioned by <b>Charles K Schubert</b>	Date <b>2/17/21</b> Time <b>1756</b>	<input type="checkbox"/> Volatile	<input type="checkbox"/> Unknown
3. Requisitioned by	Date	<input type="checkbox"/> Radioactive	
4. Requisitioned by	Date	<input type="checkbox"/> Other	

Note: All samples are retained for four weeks from receipt unless other arrangements are made.		OC Requirements (Specify)	
1. Received by <b>Charles K Schubert</b>	Date <b>2/17/21</b> Time <b>1639</b>		
2. Received by	Date		
3. Received by	Date		
4. Laboratory received by <b>McIntoney</b>	Date <b>2/17/21</b> Time <b>1756</b>		
LAD USE ONLY		Temp Blank <input type="checkbox"/> Y <input type="checkbox"/> N	
Received on ice (Circs) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Receipt Temp <b>17</b> °C	

Document Number: ME030302-01

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Clean Copy



Samples Receipt Checklist (SRC) (ME0018C-15)  
Issuing Authority: Pace ENV - WCOL

7/29/2020  
Page 1 of 1

Sample Receipt Checklist (SRC)

WB17092

Client: Westinghouse Cooler Inspected by/date: KBS / 02/17/2021 Lot #

Means of receipt:  Pace  Client  UPS  FedEx  Other: \_\_\_\_\_

Yes  No 1. Were custody seals present on the cooler?

Yes  No  NA 2. If custody seals were present, were they intact and unbroken?

pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA

Original temperature upon receipt / Derived (Corrected) temperature upon receipt. %Solid Snap-Cup ID: NA  
NA/NA °C NA / NA °C NA / NA °C NA / NA °C

Method:  Temperature Blank  Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C

Method of coolant:  Wet Ice  Ice Packs  Dry Ice  None

Yes  No  NA 3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified?  
PM was Notified by: phone / email / face-to-face (circle one).

Yes  No  NA 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?

Yes  No 7. Were sample IDs listed on all sample containers?

Yes  No 8. Was collection date & time listed on the COC?

Yes  No 9. 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 ½ 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?

Yes  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  NA 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 19. Were all applicable NH<sub>3</sub>/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?

Yes  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 #

**Sample Preservation** (Must be completed for any sample(s) incorrectly preserved or with headspace.)  
 Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H<sub>2</sub>SO<sub>4</sub>, HNO<sub>3</sub>, 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 mg/L (If #19 is **no**) and were adjusted accordingly in sample 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: KBS/JRG2 Date: 02/17/2021

Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **WC12077**

Date Completed: 03/16/2021

03/16/2021 11:46 AM  
Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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# 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: WC12077

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.

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

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

The continuing calibration verification (CCV) associated with batch 85659 had Vinyl Chloride recovered below acceptance limits. There were no detections for this compound in the associated samples. A LOQ standard was analyzed and the compound was detected, demonstrating there was adequate sensitivity to identify the analyte if it were present.

The sample was analyzed at a 5x dilution due to matrix interference. The reporting limits were raised accordingly.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WC12077  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-49-15-19	Aqueous	03/11/2021 1332	03/12/2021
002	TB-01-031121	Aqueous	03/11/2021 1335	03/12/2021
003	L-49-29-33	Aqueous	03/11/2021 1617	03/12/2021
004	L-49-29-33-DUP	Aqueous	03/11/2021 1617	03/12/2021
005	L-49-37.5-41.5	Aqueous	03/11/2021 1726	03/12/2021
006	L-53-18-22	Aqueous	03/12/2021 1122	03/12/2021
007	L-53-30-34	Aqueous	03/12/2021 1217	03/12/2021
008	L-52-18-22	Aqueous	03/12/2021 1552	03/12/2021

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(8 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WC12077  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	L-49-15-19	Aqueous	Tetrachloroethene	8260D	79		ug/L	5
001	L-49-15-19	Aqueous	Trichloroethene	8260D	1.3		ug/L	5
003	L-49-29-33	Aqueous	Tetrachloroethene	8260D	210		ug/L	7
003	L-49-29-33	Aqueous	Trichloroethene	8260D	8.8		ug/L	7
004	L-49-29-33-DUP	Aqueous	Tetrachloroethene	8260D	230		ug/L	8
004	L-49-29-33-DUP	Aqueous	Trichloroethene	8260D	8.0		ug/L	8

(6 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC12077-001
Description: L-49-15-19	Matrix: Aqueous
Date Sampled: 03/11/2021 1332	Project Name: CVOC
Date Received: 03/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/13/2021 1739	DJG		85659

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	79		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	1.3		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		94	70-130
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		91	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC12077-002
Description: TB-01-031121	Matrix: Aqueous
Date Sampled: 03/11/2021 1335	Project Name: CVOC
Date Received: 03/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/13/2021 1715	DJG		85659

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		87	70-130
Toluene-d8		93	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC12077-003
Description: L-49-29-33	Matrix: Aqueous
Date Sampled: 03/11/2021 1617	Project Name: CVOC
Date Received: 03/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	5	03/13/2021 2312	DJG		85659

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	210		5.0	ug/L	1
Trichloroethene	79-01-6	8260D	8.8		5.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		92	70-130
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		91	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC12077-004
Description: L-49-29-33-DUP	Matrix: Aqueous
Date Sampled: 03/11/2021 1617	Project Name: CVOC
Date Received: 03/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	5	03/14/2021 0151	DJG		85660

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	230		5.0	ug/L	1
Trichloroethene	79-01-6	8260D	8.0		5.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		98	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC12077-005
Description: L-49-37.5-41.5	Matrix: Aqueous
Date Sampled: 03/11/2021 1726	Project Name: CVOC
Date Received: 03/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/13/2021 1803	DJG		85659

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		94	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		92	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC12077-006
Description: L-53-18-22	Matrix: Aqueous
Date Sampled: 03/12/2021 1122	Project Name: CVOC
Date Received: 03/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/13/2021 1827	DJG		85659

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		93	70-130
1,2-Dichloroethane-d4		86	70-130
Toluene-d8		91	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC12077-007
Description: L-53-30-34	Matrix: Aqueous
Date Sampled: 03/12/2021 1217	Project Name: CVOC
Date Received: 03/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/13/2021 1851	DJG		85659

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		93	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC12077-008
Description: L-52-18-22	Matrix: Aqueous
Date Sampled: 03/12/2021 1552	Project Name: CVOC
Date Received: 03/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/13/2021 1915	DJG		85659

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		94	70-130
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		91	70-130

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

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)  
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Chain of Custody  
and  
Miscellaneous Documents



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 Telephone No. 803-791-9700 Fax No. 803-791-8111  
 www.pacelabs.com

**Number**

117896

Client: <u>Westinghouse</u>		Report to Contact: <u>Vern. Joyner</u>	Telephone No. / E-mail: <u>joynerv@westinghouse.com</u>	Order No.
Address: <u>5801 Bluff Rd</u>		Sampler's Signature: <u>Charles K Sublett</u>	Analysis (Attach list if more space is needed)	Page <u>1</u> of <u>1</u>
City: <u>Hopkins</u>		Printed Name: <u>Charles Sublett</u>		
State: <u>SC</u>				
Zip Code: <u>29061</u>				
Project Name: <u>RS Phase II</u>				
Project No.	P.O. No.	Matrix	No of Containers by Preservative Type	Remarks / Order LL
Sample ID / Description (Containers for empty samples may be combined on one line.)	Collection Date	Matrix	None Other	
L-49-15-19	3/11/21	GC X	3	
TB-201-03121	3/11/21	GC X	2	
L-49-20-33	3/11/21	GC X	3	
L-49-23-33-DUP	3/11/21	GC X	3	
L-49-37.5-41.5	3/11/21	GC X	3	
L-53-18-22	3/12/21	GC X	3	
L-53-30-34	3/12/21	GC X	3	
L-52-18-22	3/12/21	GC X	3	
Turn Around Time Required (Prior lab approval required for expedited TAT)	Sample Disposal	Possible Hazard Identification	QC Requirements (Specify)	
<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush (Specify)	<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab	<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown	Date	Time
1. Relinquished by <u>Charles K Sublett</u>	Date: <u>3/12/21</u>	1. Received by		
2. Relinquished by	Date	2. Received by		
3. Relinquished by	Date	3. Received by		
4. Relinquished by	Date	4. Laboratory received by	Date: <u>3/12/21</u>	Time: <u>1711</u>
Note: All samples are retained for four weeks from receipt unless other arrangements are made.		Received on lot (Circle Yes/No)	Receipt Temp. <u>58</u> °C	Temp Blank <input type="checkbox"/> Y <input checked="" type="checkbox"/> N

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Samples; PINK-Field/Client Copy  
 Document Number: MED002-01

# PACE ANALYTICAL SERVICES, LLC



**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: MEH / 03/12/2021      Lot #: WC12077

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA      Chlorine Strip ID: NA      Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt      %Solid Snap-Cup ID: NA	
5.8 / 5.8 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles      IR Gun ID: 6      IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # NA
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 mg/L (If #19 is <i>no</i> ) and were adjusted accordingly in sample 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: MSH      Date: 03/12/2021	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: RI Phase II

Lot Number: **WC16004**

Date Completed: 03/19/2021

03/22/2021 2:35 PM  
Approved and released by:  
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: WC16004**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WC16004  
Project Name: RI Phase II  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-52-30-34	Aqueous	03/15/2021 1114	03/15/2021
002	TB-01-031521	Aqueous	03/15/2021 1118	03/15/2021
003	L-55-18-22	Aqueous	03/15/2021 1512	03/15/2021
004	L-55-31-35	Aqueous	03/15/2021 1607	03/15/2021
005	L-55-40-44	Aqueous	03/15/2021 1712	03/15/2021

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(5 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WC16004  
Project Name: RI Phase II  
Project Number:

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Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
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(0 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC16004-001
Description: L-52-30-34	Matrix: Aqueous
Date Sampled: 03/15/2021 1114	Project Name: RI Phase II
Date Received: 03/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260D	1	03/19/2021 0200	CJL2		86185

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

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		106	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		106	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC16004-002
Description: TB-01-031521	Matrix: Aqueous
Date Sampled: 03/15/2021 1118	Project Name: RI Phase II
Date Received: 03/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/17/2021 1417	TML		85988

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		99	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		97	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC16004-003
Description: L-55-18-22	Matrix: Aqueous
Date Sampled: 03/15/2021 1512	Project Name: RI Phase II
Date Received: 03/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/17/2021 1528	TML		85988

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		100	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		98	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC16004-004
Description: L-55-31-35	Matrix: Aqueous
Date Sampled: 03/15/2021 1607	Project Name: RI Phase II
Date Received: 03/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/17/2021 1552	TML		85988

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		99	70-130
1,2-Dichloroethane-d4		91	70-130
Toluene-d8		97	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC16004-005
Description: L-55-40-44	Matrix: Aqueous
Date Sampled: 03/15/2021 1712	Project Name: RI Phase II
Date Received: 03/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/17/2021 1616	TML		85988

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		99	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		96	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



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**Number 117482**

Client: <b>Westinghouse</b>		Report to Contact: <b>Diana Joyner</b>		Telephone No. / E-mail: <b>1906@westinghouse.com</b>		Circle No.	
Address: <b>5801 Bluff Rd</b>		Sampler's Signature: <i>[Signature]</i>		Analysis (Attach list if more space is needed)		Page <b>1</b> of <b>1</b>	
City: <b>Hopkins</b>		Printed Name: <b>Charles K. Sudeth</b>		Barcode: <b>WC16004</b>		BMC	
Project Name: <b>R3 Phase II</b>		P.O. No.		Remarks / Cooler I.D.			
Sample ID / Description (Containers for each sample may be combined on this line.)	Collection Date(s)	Collection Time (M:SS)	Matrix	No. of Containers by Preservative Type			
L-52-30-34	3/15/21	1114	X	ACW	ACW	ACW	ACW
L-52-30-34 MS	3/15/21	1114	X	ACW	ACW	ACW	ACW
L-52-30-34 MSD	3/15/21	1114	X	ACW	ACW	ACW	ACW
TB-01-03/521	3/15/21	1118	X	ACW	ACW	ACW	ACW
L-55-18-22	3/15/21	1512	X	ACW	ACW	ACW	ACW
L-55-31-35	3/15/21	1607	X	ACW	ACW	ACW	ACW
L-55-40-44	3/15/21	1712	X	ACW	ACW	ACW	ACW

Turn Around Time Required (Prior lab approval required for expedited MAT)		Possible Hazard Identification	
<input type="checkbox"/> Standard	<input checked="" type="checkbox"/> Rush (Specify) <b>72 hr</b>	<input checked="" type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown
1. Requisitioned by: <i>[Signature]</i>	Sample Disposed: <input checked="" type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab	1. Requisitioned by: <i>[Signature]</i>	
2. Requisitioned by:	Date: 3/15/21 Time: 1906	2. Requisitioned by:	
3. Requisitioned by:	Date: _____ Time: _____	3. Requisitioned by:	
4. Requisitioned by:	Date: _____ Time: _____	4. Laboratory received by: <i>[Signature]</i> <b>MEH 3/16/21</b>	

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY  
 Received on ice (Circle)  Yes  No Ice Pack     
 Temp Blank  Y  N  
 Priority Temp. **5.0** °C

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy  
 Document Number: MEC0302-07

# PACE ANALYTICAL SERVICES, LLC



**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: MEH / 03/16/2021

Lot #: WC16004

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap Cup ID: NA	
5.5 / 5.5 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present > "pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # NA
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA ml. 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 mg/L (if #19 is no) and were adjusted accordingly in sample 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: MEH Date: 03/15/2021	
Comments:	



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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: RI Phase II

Lot Number: **WC16083**

Date Completed: 03/18/2021

03/19/2021 3:02 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



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# 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: WC16083**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WC16083  
Project Name: RI Phase II  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-53-44.5-48.5	Aqueous	03/16/2021 1228	03/16/2021
002	TB-01-031621	Aqueous	03/16/2021 1230	03/16/2021
003	L-52-39-43	Aqueous	03/16/2021 1402	03/16/2021
004	L-54-24-28	Aqueous	03/16/2021 1532	03/16/2021

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(4 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WC16083  
Project Name: RI Phase II  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
004	L-54-24-28	Aqueous	Tetrachloroethene	8260D	69		ug/L	8
004	L-54-24-28	Aqueous	Trichloroethene	8260D	1.2		ug/L	8

(2 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC16083-001
Description: L-53-44.5-48.5	Matrix: Aqueous
Date Sampled: 03/16/2021 1228	Project Name: RI Phase II
Date Received: 03/16/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/17/2021 1640	TML		85988

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		99	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		97	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC16083-002
Description: TB-01-031621	Matrix: Aqueous
Date Sampled: 03/16/2021 1230	Project Name: RI Phase II
Date Received: 03/16/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/17/2021 1441	TML		85988

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		103	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		98	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC16083-003
Description: L-52-39-43	Matrix: Aqueous
Date Sampled: 03/16/2021 1402	Project Name: RI Phase II
Date Received: 03/16/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/17/2021 1703	TML		85988

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		100	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		97	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC16083-004
Description: L-54-24-28	Matrix: Aqueous
Date Sampled: 03/16/2021 1532	Project Name: RI Phase II
Date Received: 03/16/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/17/2021 1726	TML		85988

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	69		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	1.2		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		99	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		97	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents





**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: MEH / 03/16/2021

Lot #: WC160823

Means of receipt: <input checked="" type="checkbox"/> Pace <input type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA 2.7 / 2.7 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 0 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)</b>	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 mg/L (If #19 is no) and were adjusted accordingly in sample 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: JRG2 Date: 03/16/2021	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **WC17125**

Date Completed: 03/19/2021

03/22/2021 3:14 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



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# 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: WC17125**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WC17125  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-48-16-20	Aqueous	03/17/2021 1357	03/17/2021
002	TB-01-031721	Aqueous	03/17/2021 1400	03/17/2021
003	L-48-30-34	Aqueous	03/17/2021 1507	03/17/2021
004	L-48-40.5-44.5	Aqueous	03/17/2021 1647	03/17/2021

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(4 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WC17125  
Project Name: CVOC  
Project Number:

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Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
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(0 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC17125-001
Description: L-48-16-20	Matrix: Aqueous
Date Sampled: 03/17/2021 1357	Project Name: CVOC
Date Received: 03/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/19/2021 0335	CJL2		86185

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		106	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		107	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC17125-002
Description: TB-01-031721	Matrix: Aqueous
Date Sampled: 03/17/2021 1400	Project Name: CVOC
Date Received: 03/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/19/2021 0049	CJL2		86185

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		109	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		108	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC17125-003
Description: L-48-30-34	Matrix: Aqueous
Date Sampled: 03/17/2021 1507	Project Name: CVOC
Date Received: 03/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/19/2021 0359	CJL2		86185

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		108	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		106	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WC17125-004
Description: L-48-40.5-44.5	Matrix: Aqueous
Date Sampled: 03/17/2021 1647	Project Name: CVOC
Date Received: 03/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	03/19/2021 0423	CJL2		86185

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		108	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		106	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



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

**Number 13809**

<b>Client:</b> Wesley Hughes <b>Address:</b> 5801 Bluff Rd. <b>City:</b> Hopkins <b>State:</b> SC <b>Zip Code:</b> 29061		<b>Report to Contact:</b> Debra Taylor <b>Telephone No. / Email:</b> 803-791-9111 / dtaylor@weshyeshouse.com <b>Analysts (Attach list if more spaces is needed):</b>		<b>Order No.:</b> <b>Page:</b> 1 of 1	
<b>Sampler:</b> 3 <b>Signature:</b> Charles K. Sublett <b>Printed Name:</b> Charles K. Sublett		<b>Barcode:</b> WC17125 <b>Barcode:</b>		<b>Remarks / Codes:</b>	
<b>Project No.:</b> R-3 Phase II		<b>Matrix:</b>		<b>No. of Containers by Preservative Type:</b>	
<b>Sample ID / Description:</b> (Containers for each sample may be combined on one line.)		<b>Collection Time (M:PM):</b>		<b>Matrix:</b>	
L-48-16-20		15:57		3	
TB-01-031721		14:00		2	
L-48-30-34		15:07		3	
L-116-40.5-44.5		16:47		3	
<b>Turn Around Time Required (Prior lab approval required for expedited TAT):</b> <input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush (Specify) 72 hr		<b>Sample Disposal:</b> <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Dispose by Lab		<b>Possible Hazard Identification:</b> <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown	
<b>1. Relinquished by:</b> Charles K. Sublett		<b>Date:</b> 3/17/21		<b>QC Requirements (Specify):</b>	
<b>2. Relinquished by:</b>		<b>Date:</b>		<b>Date:</b>	
<b>3. Relinquished by:</b>		<b>Date:</b>		<b>Date:</b>	
<b>4. Relinquished by:</b>		<b>Date:</b>		<b>Date:</b>	
<b>Note:</b> All samples are retained for four weeks from receipt unless other arrangements are made.		<b>LAB USE ONLY</b> Received on Ice (Check) Yes No Ice Pack		<b>Temp Blank:</b> <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <b>Temp:</b> 5.9 °C	

Document Number: ME003129-01

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client 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: JSB / 3/17/2021

Lot #: WC17125

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA	
5.9 / 5.9 °C NA / NA °C NA / NA °C	
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 mg/L (If #19 is na) and were adjusted accordingly in sample 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: JRC Date: 3/17/2021	

**Comments:**

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: RI Phase II

Lot Number: **WE12020**

Date Completed: 05/18/2021

05/18/2021 4:46 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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# 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: WE12020

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WE12020  
Project Name: RI Phase II  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-59-16-20	Aqueous	05/10/2021 1512	05/11/2021
002	L-59-31-35	Aqueous	05/10/2021 1606	05/11/2021
003	L-59-46-50	Aqueous	05/10/2021 1715	05/11/2021
004	L-60-16-20	Aqueous	05/11/2021 1201	05/11/2021
005	L-60-26-30	Aqueous	05/11/2021 1246	05/11/2021
006	L-60-36-40	Aqueous	05/11/2021 1349	05/11/2021
007	Trip Blank	Aqueous	05/10/2021	05/11/2021

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(7 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WE12020  
Project Name: RI Phase II  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	L-59-31-35	Aqueous	Tetrachloroethene	8260D	1.2		ug/L	6

(1 detection)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE12020-001
Description: L-59-16-20	Matrix: Aqueous
Date Sampled: 05/10/2021 1512	Project Name: RI Phase II
Date Received: 05/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/18/2021 0419	CJL2		92591

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		109	70-130
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		97	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE12020-002
Description: L-59-31-35	Matrix: Aqueous
Date Sampled: 05/10/2021 1606	Project Name: RI Phase II
Date Received: 05/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/18/2021 0444	CJL2		92591

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	1.2		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		109	70-130
1,2-Dichloroethane-d4		86	70-130
Toluene-d8		94	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE12020-003
Description: L-59-46-50	Matrix: Aqueous
Date Sampled: 05/10/2021 1715	Project Name: RI Phase II
Date Received: 05/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/18/2021 0509	CJL2		92591

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		105	70-130
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		96	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE12020-004
Description: L-60-16-20	Matrix: Aqueous
Date Sampled: 05/11/2021 1201	Project Name: RI Phase II
Date Received: 05/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/18/2021 0534	CJL2		92591

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		100	70-130
1,2-Dichloroethane-d4		82	70-130
Toluene-d8		91	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE12020-005
Description: L-60-26-30	Matrix: Aqueous
Date Sampled: 05/11/2021 1246	Project Name: RI Phase II
Date Received: 05/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/18/2021 0559	CJL2		92591

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		107	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		97	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE12020-006
Description: L-60-36-40	Matrix: Aqueous
Date Sampled: 05/11/2021 1349	Project Name: RI Phase II
Date Received: 05/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/18/2021 0624	CJL2		92591

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		103	70-130
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		97	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE12020-007
Description: Trip Blank	Matrix: Aqueous
Date Sampled: 05/10/2021	Project Name: RI Phase II
Date Received: 05/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/18/2021 0240	CJL2		92591

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		114	70-130
1,2-Dichloroethane-d4		91	70-130
Toluene-d8		97	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



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**Number 120212**

Client: <b>Westinghouse</b>		Report to Contact: <b>Diana Jayner</b>		Telephone No. / E-mail: <b>379-4646 P. Westinghouse.com</b>		Quarter No.:	
Address: <b>5891 Bluff Rd</b>		Sampler's Signature: <i>[Signature]</i>		Analysis (Attach list if more space is needed)		Page <b>1</b> of <b>1</b>	
City: <b>Hopkins</b>		Printed Name: <b>Jeremy Grant</b>		Barcode:		BMG: <b>WE12020</b>	
State: <b>SC</b>		Zip Code: <b>29061</b>		Matrix: <b>CRG</b>		Remarks / Cooler I.D.:	
Project Name: <b>RI Phase II</b>		Project No.:		No. of Containers by Preservative Type			
Sample ID / Description (Containers for each sample may be combined on one line)	Collection Date	Collection Time (Military)	Agitation	Matrix	NO <sub>2</sub>	NO <sub>3</sub>	NO <sub>2+3</sub>
L-59-10-20	5/10/21	1512	G X		3		
L-59-31-35	5/10/21	1606	G X		3		
L-59-46-50	5/10/21	1715	G X		3		
L-60-10-20	5/11/21	1201	G X		3		
L-60-26-30	5/11/21	1244	G X		3		
L-60-36-40	5/11/21	1349	G X		3		
Trip blank							

Turn Around Time Required (Prior lab approval required for expedited TAT)	Sample Disposal	Possible Hazard Identification	OC Requirements (Specify)
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify)	<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab	<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown	Date Time
1. Enriched by <i>Jeremy Grant</i>	Date: <b>5/11/21</b> Time: <b>1440</b>	1. Received by	Date Time
2. Re-enriched by	Date Time	2. Received by	Date Time
3. Re-enriched by	Date Time	3. Received by	Date Time
4. Re-enriched by	Date Time	4. Laboratory received by <i>Jeremy Grant</i>	Date Time <b>1740</b>

LAB USE ONLY  
 Placed on ice (Check)  Yes  No Ice Pack  Receipt Temp. **2.5** °C

Document Number: ME003W2-01

DISTRIBUTION: WHITE & YELLOW-Return to Laboratory with Sample(s); PINK-Field/Client Copy

# PACE ANALYTICAL SERVICES, LLC



**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 / 05/12/2021

Lot #: WE12020

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derivat (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA 2.5 / 2.5 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.17608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 mg/L (If #19 is no) and were adjusted accordingly in sample 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: JRG2 Date: 05/12/2021	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: CVOC

Lot Number: **WE14005**

Date Completed: 05/25/2021

05/25/2021 4:32 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



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# 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: WE14005**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WE14005  
Project Name: CVOC  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-61-15-19	Aqueous	05/13/2021 0957	05/13/2021
002	TB-01-051321	Aqueous	05/13/2021 1000	05/13/2021
003	L-61-25-29	Aqueous	05/13/2021 1042	05/13/2021
004	L-61-35-39	Aqueous	05/13/2021 1352	05/13/2021
005	L-47-16-20	Aqueous	05/13/2021 1502	05/13/2021
006	L-61-25-29-DUP	Aqueous	05/13/2021 1042	05/13/2021

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(6 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WE14005  
Project Name: CVOC  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
(0 detections)								

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE14005-001
Description: L-61-15-19	Matrix: Aqueous
Date Sampled: 05/13/2021 0957	Project Name: CVOC
Date Received: 05/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/18/2021 1453	ECB		93314

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		93	70-130
1,2-Dichloroethane-d4		90	70-130
Toluene-d8		100	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE14005-002
Description: TB-01-051321	Matrix: Aqueous
Date Sampled: 05/13/2021 1000	Project Name: CVOC
Date Received: 05/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/18/2021 1430	ECB		93314

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		90	70-130
Toluene-d8		99	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE14005-003
Description: L-61-25-29	Matrix: Aqueous
Date Sampled: 05/13/2021 1042	Project Name: CVOC
Date Received: 05/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/18/2021 1515	ECB		93314

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		104	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		101	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE14005-004
Description: L-61-35-39	Matrix: Aqueous
Date Sampled: 05/13/2021 1352	Project Name: CVOC
Date Received: 05/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/18/2021 1537	ECB		93314

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		93	70-130
1,2-Dichloroethane-d4		91	70-130
Toluene-d8		97	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE14005-005
Description: L-47-16-20	Matrix: Aqueous
Date Sampled: 05/13/2021 1502	Project Name: CVOC
Date Received: 05/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/18/2021 1600	ECB		93314

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		101	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		102	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE14005-006
Description: L-61-25-29-DUP	Matrix: Aqueous
Date Sampled: 05/13/2021 1042	Project Name: CVOC
Date Received: 05/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/18/2021 1622	ECB		93314

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		93	70-130
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		96	70-130

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

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)  
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Chain of Custody  
and  
Miscellaneous Documents



# PACE ANALYTICAL SERVICES, LLC



**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: JSH / 05/13/2021      Lot #: WE14005

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA      Chlorine Strip ID: NA      Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt      %Solid Snap-Cup ID: NA 2.8 / 2.8 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles      IR Gun ID: 5      IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pca-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 mg/L (If #19 is no) and were adjusted accordingly in sample 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: JRG2      Date: 5/14/2021	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: RI Phase II

Lot Number: **WE14098**

Date Completed: 05/21/2021

05/24/2021 4:25 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



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

# 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: WE14098

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.

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

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

The initial/continuing calibration verification (ICV/CCV) associated with batch 92932 had Vinyl Chloride recovered above the acceptance limits. This could potentially result in a high bias on analytical results. There were no detections for this compound in the associated samples; therefore, data quality is not impacted.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WE14098  
Project Name: RI Phase II  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-62-26-30	Aqueous	05/14/2021 1127	05/14/2021
002	TB-01-051421	Aqueous	05/14/2021 1135	05/14/2021
003	L-46-14-18	Aqueous	05/14/2021 1127	05/14/2021

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(3 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WE14098  
Project Name: RI Phase II  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
003	L-46-14-18	Aqueous	Tetrachloroethene	8260D	52		ug/L	7

(1 detection)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE14098-001
Description: L-62-26-30	Matrix: Aqueous
Date Sampled: 05/14/2021 1127	Project Name: RI Phase II
Date Received: 05/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/20/2021 1215	TML		92932

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		92	70-130
1,2-Dichloroethane-d4		91	70-130
Toluene-d8		96	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE14098-002
Description: TB-01-051421	Matrix: Aqueous
Date Sampled: 05/14/2021 1135	Project Name: RI Phase II
Date Received: 05/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/20/2021 1022	TML		92932

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		93	70-130
1,2-Dichloroethane-d4		91	70-130
Toluene-d8		99	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE14098-003
Description: L-46-14-18	Matrix: Aqueous
Date Sampled: 05/14/2021 1127	Project Name: RI Phase II
Date Received: 05/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/19/2021 1855	BWS		92788

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	52		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		102	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		113	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents



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**Number 120086**

Client: <u>Westinghouse</u>		Report to Contact: <u>Diana Joyner</u>		Telephone No. / E-mail: <u>Joynerdp@westinghouse.com</u>		Quote No.
Address: <u>5801 Bluff Rd</u>		Sampler's Signature: <u>Charles K Subbath</u>		Analysis (Attach list if more space is needed)		Page <u>1</u> of <u>1</u>
City: <u>Hopkins</u>		Purified Name: <u>Chuck Subbath</u>		Barcode:		<b>WE14098</b>
State: <u>SC</u>		Zip Code: <u>29061</u>		Matrix: <u>CVCS</u>		RMG
Project Name: <u>R.I Phase II</u>		P.O. No.		No. of Containers by Matrix Type		Plumbers / Cooper I.D.
Project No.	Sample ID / Description (Containers for each sample may be combined on one line)	Collection Date (Date)	Collection Time (Time)	Matrix	Matrix	Matrix
	L-62-26-30	5/14/21	1127	GC	X	3
	TB-01-051421	5/14/21	1135	GC	X	2
	L-46-14-18	5/14/21	1427	GC	X	3
	L-46-14-18 MS	5/14/21	1427	GC	X	3
	L-46-14-18 MSD	5/14/21	1427	GC	X	3

Item Around Time Required (Filter lab approval required for expedited IAL)		Sample Disposal		Possible Hazard Identification	
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush (Specify)	<input type="checkbox"/> Return to Client	<input checked="" type="checkbox"/> Disposal by Lab	<input checked="" type="checkbox"/> Not-Hazard	<input type="checkbox"/> Flammable
1. Requisitioned by: <u>Charles K Subbath</u>	Date: <u>5/14/21</u> Time: <u>1603</u>	2. Received by:	Date:	<input type="checkbox"/> Slight Irritant	<input type="checkbox"/> Unknown
2. Requisitioned by:	Date:	3. Received by:	Date:	<input type="checkbox"/> Toxic	<input type="checkbox"/> Unknown
3. Requisitioned by:	Date:	4. Requisitioned by:	Date:	CC Requirements (Specify)	
4. Requisitioned by:	Date:	Date: <u>5/14/21</u> Time: <u>1603</u>		Date: <u>5/14/21</u> Time: <u>1603</u>	
Note: All samples are retained for four weeks from receipt unless other arrangements are made.		LAR USE ONLY		Received on ice (Circle) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy  
 Document Number: INE00202-01



**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 / 5/14/2021

Lot #: WE14098

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA	
7.2 / 7.2 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone (email) face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)</b>	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 mg/L (If #19 is no) and were adjusted accordingly in sample 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: JRG2 Date: 5/14/2021	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: RI Phase II

Lot Number: **WE17044**

Date Completed: 05/25/2021

05/25/2021 4:46 PM  
Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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# 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: WE17044**

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.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WE17044  
Project Name: RI Phase II  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	L-46-22-26	Aqueous	05/17/2021 0922	05/17/2021
002	TB-01-051721	Aqueous	05/17/2021 0926	05/17/2021
003	L-45-11-15	Aqueous	05/17/2021 1037	05/17/2021
004	L-45-20-24	Aqueous	05/17/2021 1152	05/17/2021

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(4 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WE17044  
Project Name: RI Phase II  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	L-46-22-26	Aqueous	Tetrachloroethene	8260D	66		ug/L	5
001	L-46-22-26	Aqueous	Trichloroethene	8260D	5.0		ug/L	5
004	L-45-20-24	Aqueous	Tetrachloroethene	8260D	3.2		ug/L	8

(3 detections)

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE17044-001
Description: L-46-22-26	Matrix: Aqueous
Date Sampled: 05/17/2021 0922	Project Name: RI Phase II
Date Received: 05/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/24/2021 2352	CJL2		93258

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	66		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	5.0		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		104	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		107	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE17044-002
Description: TB-01-051721	Matrix: Aqueous
Date Sampled: 05/17/2021 0926	Project Name: RI Phase II
Date Received: 05/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/24/2021 2327	CJL2		93258

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		106	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		109	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE17044-003
Description: L-45-11-15	Matrix: Aqueous
Date Sampled: 05/17/2021 1037	Project Name: RI Phase II
Date Received: 05/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/25/2021 0017	CJL2		93258

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		113	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		111	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WE17044-004
Description: L-45-20-24	Matrix: Aqueous
Date Sampled: 05/17/2021 1152	Project Name: RI Phase II
Date Received: 05/17/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	05/25/2021 0042	CJL2		93258

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	3.2		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		106	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		109	70-130

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

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Chain of Custody  
and  
Miscellaneous Documents





## 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: KSC / 05/17/2021

Lot #: WE17044

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA	
5.9 / 5.9 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified?
PM was Notified by: phone / email / face-to-face (circle one).	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly	
in sample receiving with NA ml. 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 mg/L (If #19 is no) and were	
adjusted accordingly in sample 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: KSC Date: 05/17/2021	
Comments:	



November 24, 2020

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

Re: Sediment and GW Campaign  
Work Order: 527831

Dear Ms. Teague:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on November 18, 2020. 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](http://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. 4443.

Sincerely,

Lindsay Fabra  
Project Manager

Purchase Order: PO 4500778461  
Enclosures



## GEL LABORATORIES LLC

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

### Certificate of Analysis Report for

WNUC009 Westinghouse Electric Co, LLC (4500778461)

Client SDG: 527831 GEL Work Order: 527831

**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, Lindsay Fabra.

Reviewed by \_\_\_\_\_

*Lindsay Fabra*



## Analytical Detections Summary

<b>SDG/Report#</b>	527831	<b>Client</b>	Westinghouse Electric Co, LLC (4500778461)
<b>Project ID</b>	Sediment and GW Campaign		

GEL ID	Client Sample ID	Method	CAS	Analyte	Result	Q
527831001	L-39-31-35	DOE EML HASL-300, Tc-02-RC Modified	14133-76-7	Technetium-99	10.9 pCi/L	
527831002	L-39-31-35 DISSOLVED	DOE EML HASL-300, Tc-02-RC Modified	14133-76-7	Technetium-99	9.98 pCi/L	

**NOTE:** This report only lists detections greater than the reporting level. Reporting level is the LOQ, PQL, MDC, or Client-provided limit.

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-39-31-35	Project:	WNUC01320
Sample ID:	527831001	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	16-NOV-20 15:11		
Receive Date:	18-NOV-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis													
Liquid Scint Tc99, Liquid "As Received"													
Technetium-99		10.9	+/-2.49	3.73	5.00	pCi/L		JJ3	11/24/20	0426	2064633		1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			106	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID: L-39-31-35 DISSOLVED      Project: WNUC01320  
Sample ID: 527831002      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 16-NOV-20 15:11  
Receive Date: 18-NOV-20  
Collector: Client

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99		9.98	+/-2.79	4.30	5.00	pCi/L		JJ3	11/24/20	0457	2064633	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93.9	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-40-33-37	Project:	WNUC01320
Sample ID:	527831003	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	17-NOV-20 14:24		
Receive Date:	18-NOV-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis													
Liquid Scint Tc99, Liquid "As Received"													
Technetium-99	U	-2.15	+/-2.14	3.83	5.00	pCi/L		JJ3	11/24/20	0528	2064633		1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			103	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID: L-40-33-37 DISSOLVED      Project: WNUC01320  
Sample ID: 527831004      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 17-NOV-20 14:24  
Receive Date: 18-NOV-20  
Collector: Client

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	-4.84	+/-2.50	4.60	5.00	pCi/L		JJ3	11/24/20	0600	2064633	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			87.2	(15%-125%)

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## QC Summary

Report Date: November 24, 2020

Page 1 of 2

Westinghouse Electric Company, LLC

PO Drawer R  
Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 527831

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Liquid Scintillation</b>											
Batch	2064633										
QC1204698457	LCS										
Technetium-99	116			113	pCi/L		96.7	(75%-125%)	JJ3	11/24/20	07:02
QC1204698456	LCSD										
Technetium-99	116			109	pCi/L	3.42	93.5	(0%-20%)		11/24/20	07:33
QC1204698455	MB										
Technetium-99			U	-3.10	pCi/L					11/24/20	06:31

### Notes:

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.
- NI See case narrative
- 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
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy--Uncertain identification

# GEL LABORATORIES LLC

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

## QC Summary

Workorder: 527831

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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 #: 527831**

**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:** 2064633

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
527831001	L-39-31-35
527831002	L-39-31-35 DISSOLVED
527831003	L-40-33-37
527831004	L-40-33-37 DISSOLVED
1204698455	Method Blank (MB)
1204698456	Laboratory Control Sample Duplicate (LCSD)
1204698457	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Technical Information**

**Negative > 3 sigma TPU**

Sample has activity greater than three times the absolute value of the 1-sigma TPU.

<b>Sample</b>	<b>Analyte</b>	<b>Value</b>
527831004 (L-40-33-37 DISSOLVED)	Technetium-99	Negative Result > 3 sigma value

**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.



**IF SAMPLE RECEIPT & REVIEW FORM**

Client: WNUC  
 Received By: AJA  
 SDG/AR/COC/Work Order: 527831  
 Date Received: 11/18/20  
 Carrier and Tracking Number: \_\_\_\_\_  
 Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information

Question	Yes	No	Notes
A) Shipped as a DOT Hazardous?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___
B) Did the client designate the samples are to be received as radioactive?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> CPM/mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Preservation Method: <u>Wet Ice</u> Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius <i>at -20°C return</i> <i>TEMP: 1° - Solids</i>
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>IR4-16</u> Secondary Temperature Device Serial # (If Applicable): _____
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#: _____
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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 ___
8 Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected: _____
9 Sample ID's on bottles? COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected: <u>SED-62PR-12-24 has ID SED-62PR-12-18</u>
10 Date & time on bottles? COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed): \_\_\_\_\_

PM (or PMA) review: Initials NRG Date 11/19/20 Page 1 of 1

**List of current GEL Certifications as of 24 November 2020**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
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
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
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	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-20-17
Utah NELAP	SC000122020-33
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



December 15, 2020

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

Re: Sediment and GW Campaign  
Work Order: 528770

Dear Ms. Teague:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on November 25, 2020. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

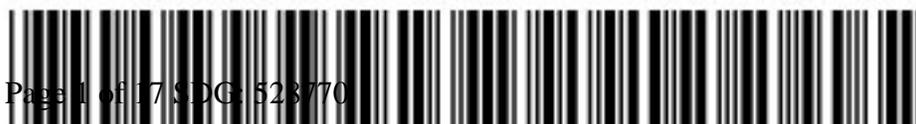
Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at [www.gel.com](http://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. 4443.

Sincerely,

Lindsay Fabra  
Project Manager

Purchase Order: PO 4500778461  
Enclosures





# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 15, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-20-28-32	Project:	WNUC01320
Sample ID:	528770001	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	23-NOV-20 12:30		
Receive Date:	25-NOV-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	1.30	+/-2.24	3.82	5.00	pCi/L		JJ3	12/13/20	0555	2067803	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 15, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID: L-20-28-32 DISSOLVED      Project: WNUC01320  
Sample ID: 528770002      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 23-NOV-20 12:30  
Receive Date: 25-NOV-20  
Collector: Client

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	1.33	+/-2.25	3.84	5.00	pCi/L		JJ3	12/13/20	0638	2067803	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			92.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 15, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-20-12-16	Project:	WNUC01320
Sample ID:	528770003	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	23-NOV-20 14:40		
Receive Date:	25-NOV-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	3.89	+/-2.56	4.17	5.00	pCi/L		JJ3	12/13/20	0720	2067803	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			90.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: December 15, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID: L-20-12-16 DISSOLVED      Project: WNUC01320  
Sample ID: 528770004      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 23-NOV-20 14:40  
Receive Date: 25-NOV-20  
Collector: Client

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	1.53	+/-2.47	4.20	5.00	pCi/L		JJ3	12/13/20	0803	2067803	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 15, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-42-24-28	Project:	WNUC01320
Sample ID:	528770005	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	24-NOV-20 11:45		
Receive Date:	25-NOV-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	1.96	+/-2.68	4.53	5.00	pCi/L		JJ3		12/13/20	1032 2067803	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			89.1	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 15, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID: L-42-24-28 DISSOLVED      Project: WNUC01320  
Sample ID: 528770006      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 24-NOV-20 11:45  
Receive Date: 25-NOV-20  
Collector: Client

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	0.343	+/-2.43	4.22	5.00	pCi/L		JJ3	12/13/20	1121	2067803	1

The following Analytical Methods were performed:

---

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

---

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

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 15, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-42-36-40	Project:	WNUC01320
Sample ID:	528770007	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	24-NOV-20 12:52		
Receive Date:	25-NOV-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	3.38	+/-5.18	8.76	5.00	pCi/L		JJ3	12/14/20	1325	2067803	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			78.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 15, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID: L-42-36-40 DISSOLVED      Project: WNUC01320  
Sample ID: 528770008      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 24-NOV-20 12:52  
Receive Date: 25-NOV-20  
Collector: Client

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	4.55	+/-3.78	6.29	5.00	pCi/L		JJ3	12/14/20	1528	2067803	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			89.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## QC Summary

Report Date: December 15, 2020

Page 1 of 2

Westinghouse Electric Company, LLC

PO Drawer R  
Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 528770

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Liquid Scintillation</b>											
Batch	2067803										
QC1204705065	LCS										
Technetium-99	116			123	pCi/L		105	(75%-125%)	JJ3	12/14/20	09:57
QC1204710080	LCSD										
Technetium-99	116			115	pCi/L	6.46	98.8	(0%-20%)		12/14/20	10:14
QC1204705063	MB										
Technetium-99			U	0.543	pCi/L					12/14/20	09:12

### Notes:

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.
- NI See case narrative
- 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
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy--Uncertain identification

# GEL LABORATORIES LLC

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

## QC Summary

Workorder: 528770

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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 #: 528770**

**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:** 2067803

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
528770001	L-20-28-32
528770002	L-20-28-32 DISSOLVED
528770003	L-20-12-16
528770004	L-20-12-16 DISSOLVED
528770005	L-42-24-28
528770006	L-42-24-28 DISSOLVED
528770007	L-42-36-40
528770008	L-42-36-40 DISSOLVED
1204705063	Method Blank (MB)
1204705065	Laboratory Control Sample (LCS)
1204710080	Laboratory Control Sample Duplicate (LCSD)

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

**Data Summary:**

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, with the following exceptions.

**Preparation Information**

**Aliquot Reduced**

528770007 (L-42-36-40) and 528770008 (L-42-36-40 DISSOLVED) aliquot volumes were reduced due to the sample matrix.

**Quality Control (QC) Information**

**RDL Met**

Samples (See Below) did not meet the detection limits due to the small sample aliquots used. The aliquots were reduced due to the matrix of the samples. The samples were counted the maximum count time in order to achieve the lowest possible MDAs.

<b>Sample</b>	<b>Analyte</b>	<b>Value</b>
528770007 (L-42-36-40)	Technetium-99	Result 3.38 < MDA 8.76 > RDL 5 pCi/L
528770008 (L-42-36-40 DISSOLVED)	Technetium-99	Result 4.55 < MDA 6.29 > RDL 5 pCi/L

### **Technical Information**

#### **Recounts**

Samples 528770007 (L-42-36-40) and 528770008 (L-42-36-40 DISSOLVED) were recounted due to high MDCs. The recounts are reported.

### **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.

Client Name: Westinghouse  
 Project/Site Name: CFFF RI Phase II  
 Address: 5801 Bluff Road Hopkins, SC 29061  
 Collecting By: Jeremy Grant Send Results To: joynerdp@westinghouse.com  
 Phone # \_\_\_\_\_ Fax # \_\_\_\_\_

Sample ID <i>*For composites - indicate start and stop date/time</i>	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (3)	Field Filtered (4)	Sample Matrix (6)	Should this sample be considered:		Total number of containers	Sample Analysis Requested (5) (Fill in the number of containers for each test)						Comments Note: extra sample is required for sample specific QC	
						Radioactive (If Yes, please supply isotopic info)	(7) Known or possible Hazards		W	E	N	I	A	Z		<- Preservative Type (6)
L-20-28-32	11/23/20	1230	N	Y/N	GW			2								Dissolved Tc-99
L-20-12-14	11/23/20	1440	N	Y/N	GW			2								Field Filtered
L-42-24-28	11/24/20	1145	N	Y/N	GW			2								w/0.45 micron filter
L-42-36-40	11/24/20	1252	N	Y/N	GW			2								

**Chain of Custody Signatures**

Relinquished By (Signed)	Date	Received by (signed)	Date	Time
<u>Jeremy Grant</u>	11/24/20 14:55	<u>Charles K. Sabelt</u>	12/24/20	1455
<u>Charles K. Sabelt</u>	11/25/20 0849	<u>DR. Cassin</u>	11/25/20	0849
<u>SP-200</u>	11/25/20 1030	<u>3 JGA</u>	11/25/20	1040

For sample shipping and delivery details, see Sample Receipt & Review form (SRK).  
 Sample Collection Time Zone: [ ] Eastern [ ] Pacific [ ] Central [ ] Mountain [ ] Other.

1) Chain of Custody Number = Client Determined  
 2) Codes: N = Non-hazardous 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=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  
 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  
 7) **KNOWN OR POSSIBLE HAZARDS**

RCRA Metals	Characteristic Hazards	Listed Waste	Other
As = Arsenic Ba = Barium Cd = Cadmium Cr = Chromium Pb = Lead	FL = Flammable/Ignitable CO = Corrosive RE = Reactive	LW = Listed Waste (F, K, P and U-listed wastes)	OT = Other / Unknown (i.e. High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)

TSCA Regulated  
 PCB = Polychlorinated biphenyls

Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

**SAMPLE RECEIPT & REVIEW FORM**

Client: WNUC SDG/AR/COC/Work Order: 528770 L.H.

Received By: Tye Date Received: 11/25/20

Carrier and Tracking Number

Circle Applicable:  
 FedEx Express    FedEx Ground    UPS    Field Services    Courier    Other

Suspected Hazard Information    Yes    No    \*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.

A) Shipped as a DOT Hazardous?            Hazard Class Shipped:    UN#:    If UN2910, Is the Radioactive Shipment Survey Compliant? Yes \_\_\_ No \_\_\_

B) Did the client designate the samples are to be received as radioactive?            COC notation or radioactive stickers on containers equal client designation.

C) Did the RSO classify the samples as radioactive?            Maximum Net Counts Observed\* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr  
 Classified as: Rad 1    Rad 2    Rad 3

D) Did the client designate samples are hazardous?            COC notation or hazard labels on containers equal client designation.

E) Did the RSO identify possible hazards?            If D or E is yes, select Hazards below.  
 PCB's    Flammable    Foreign Soil    RCRA    Asbestos    Beryllium    Other:

Sample Receipt Criteria    Yes    NA    No    Comments/Qualifiers (Required for Non-Conforming Items)

1 Shipping containers received intact and sealed?                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)?\*                Preservation Method: Wet Ice    Ice Packs    Dry ice    None    Other:    Chem-10°C  
 \*all temperatures are recorded in Celsius    TEMP: Chem-2°C

4 Daily check performed and passed on IR temperature gun?                Temperature Device Serial #: IR3-19  
 Secondary Temperature Device Serial # (If Applicable):

5 Sample containers intact and sealed?                Circle Applicable:    Seals broken    Damaged container    Leaking container    Other (describe)

6 Samples requiring chemical preservation at proper pH?                Sample ID's and Containers Affected:

7 Do any samples require Volatile Analysis?                 Preservation added. Lot#:    NA/STP  
 Are Encores or Soil Kits present for solids? Yes \_\_\_ No  NA (If yes, take to VOA Freezer)  
 Are 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: VOG containers are ziploc baggies

8 Samples received within holding time?                ID'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?                Circle Applicable:    No dates on containers    No times on containers    COC missing info    Other (describe)

11 Number of containers received match number indicated on COC?                Circle Applicable:    No container count on COC    Other (describe)

12 Are sample containers identifiable as GEL provided by use of GEL labels?                Circle Applicable:    Not relinquished    Other (describe)

13 COC form is properly signed in relinquished/received sections?                Circle Applicable:    Not relinquished    Other (describe)

Comments (Use Continuation Form if needed):

**List of current GEL Certifications as of 15 December 2020**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
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
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
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	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-20-17
Utah NELAP	SC000122020-33
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



December 22, 2020

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

Re: Sediment and GW Campaign  
Work Order: 529645

Dear Ms. Teague:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on December 09, 2020. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

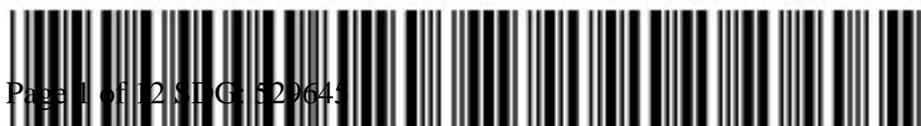
Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at [www.gel.com](http://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. 4443.

Sincerely,

Lindsay Fabra  
Project Manager

Purchase Order: PO 4500778461  
Enclosures



## GEL LABORATORIES LLC

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

### Certificate of Analysis Report for

WNUC009 Westinghouse Electric Co, LLC (4500778461)

Client SDG: 529645 GEL Work Order: 529645

**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, Lindsay Fabra.

Reviewed by \_\_\_\_\_

*Lindsay Fabra*

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 22, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-37-17-21	Project:	WNUC01320
Sample ID:	529645001	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	08-DEC-20 16:38		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	-4.43	+/-2.63	4.61	5.00	pCi/L		JJ3	12/21/20	1235	2072837	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			79.2	(15%-125%)

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 22, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-37-17-21 DISSOLVED	Project:	WNUC01320
Sample ID:	529645002	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	08-DEC-20 16:38		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	0.924	+/-2.44	4.14	5.00	pCi/L		JJ3	12/20/20	1227	2072837	1

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			84.6	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 22, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-37-26-30	Project:	WNUC01320
Sample ID:	529645003	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	08-DEC-20 17:15		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	-5.30	+/-2.57	4.53	5.00	pCi/L		JJ3		12/21/20	1409 2072837	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			75.1	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 22, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-37-26-30 DISSOLVED	Project:	WNUC01320
Sample ID:	529645004	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	08-DEC-20 17:15		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis													
Liquid Scint Tc99, Liquid "As Received"													
Technetium-99	U	-1.06	+/-2.51	4.33	5.00	pCi/L		JJ3		12/20/20	1433	2072837	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			83.4	(15%-125%)

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## QC Summary

Report Date: December 22, 2020

Page 1 of 2

Westinghouse Electric Company, LLC  
PO Drawer R  
Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 529645

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Liquid Scintillation</b>											
Batch	2072837										
QC1204715324	529646001	DUP									
Technetium-99	U	0.285	U	1.22	pCi/L	N/A		N/A	JJ3	12/21/20	01:02
QC1204715325	LCS										
Technetium-99	116			113	pCi/L	96.9	(75%-125%)			12/21/20	02:05
QC1204715323	MB										
Technetium-99			U	1.41	pCi/L					12/20/20	23:59

### Notes:

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.
- NI See case narrative
- 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
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy--Uncertain identification

# GEL LABORATORIES LLC

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

## QC Summary

Workorder: 529645

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
UJ											
UL											
X											
Y											
^											
h											

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 #: 529645**

**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:** 2072837

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
529645001	L-37-17-21
529645002	L-37-17-21 DISSOLVED
529645003	L-37-26-30
529645004	L-37-26-30 DISSOLVED
1204715323	Method Blank (MB)
1204715324	529646001(L-36-18-22) Sample Duplicate (DUP)
1204715325	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Technical Information**

**Negative > 3 sigma TPU**

Samples have activity greater than three times the absolute value of the 1-sigma TPU.

Sample	Analyte	Value
529645001 (L-37-17-21)	Technetium-99	Negative Result > 3 sigma value
529645003 (L-37-26-30)	Technetium-99	Negative Result > 3 sigma value

**Recounts**

Samples 529645001 (L-37-17-21) and 529645003 (L-37-26-30) were recounted due to high MDCs. The recounts are reported.

**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.





Laboratories LLC

IF SAMPLE RECEIPT & REVIEW FORM

Client: WNUC SDG/AR/COC/Work Order: 529645

Received By: AJA Date Received: 12/9/20

Carrier and Tracking Number  
Circle Applicable:  
FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information Yes No \*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.

A) Shipped as a DOT Hazardous? Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes No

B) Did the client designate the samples are to be received as radioactive? COC notation or radioactive stickers on containers equal client designation.

C) Did the RSO classify the samples as radioactive? Maximum Net Counts Observed\* (Observed Counts - Area Background Counts): 0 CPM / mR/Hr Classified as: Rad 1 Rad 2 Rad 3

D) Did the client designate samples are hazardous? COC notation or hazard labels on containers equal client designation.

E) Did the RSO identify possible hazards? If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

Sample Receipt Criteria Yes NA No Comments/Qualifiers (Required for Non-Conforming Items)

1 Shipping containers received intact and sealed? 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)?\* Preservation Method: Wet Ice Ice Packs Dry ice None Other: \*all temperatures are recorded in Celsius TEMP: 3°

4 Daily check performed and passed on IR temperature gun? Temperature Device Serial #: IR4-16 Secondary Temperature Device Serial # (If Applicable):

5 Sample containers intact and sealed? Circle Applicable: Seals broken Damaged container Leaking container Other (describe)

6 Samples requiring chemical preservation at proper pH? Sample ID's and Containers Affected: If Preservation added, Lot#:

7 Do any samples require Volatile Analysis? 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? ID'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? Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)

11 Number of containers received match number indicated on COC? Circle Applicable: No container count on COC Other (describe)

12 Are sample containers identifiable as GEL provided by use of GEL labels? Circle Applicable: Not relinquished Other (describe)

13 COC form is properly signed in relinquished/received sections? Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials NPL Date 12/10/20 Page 1 of 1

**List of current GEL Certifications as of 22 December 2020**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
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
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
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	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-20-17
Utah NELAP	SC000122020-33
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



December 23, 2020

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

Re: Sediment and GW Campaign  
Work Order: 529646

Dear Ms. Teague:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on December 09, 2020. 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](http://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. 4443.

Sincerely,

Lindsay Fabra  
Project Manager

Purchase Order: PO 4500778461  
Enclosures



# GEL LABORATORIES LLC

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

## Certificate of Analysis Report for

WNUC009 Westinghouse Electric Co, LLC (4500778461)

Client SDG: 529646 GEL Work Order: 529646

**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, Lindsay Fabra.

Reviewed by \_\_\_\_\_

*Lindsay Fabra*



# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 23, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID: L-36-18-22 DISSOLVED      Project: WNUC01320  
Sample ID: 529646002      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 03-DEC-20 10:45  
Receive Date: 09-DEC-20  
Collector: Client

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	-0.363	+/-2.41	4.34	5.00	pCi/L		JJ3	12/22/20	1210	2072838	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			80.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 23, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-36-27.5-31.5	Project:	WNUC01320
Sample ID:	529646003	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	03-DEC-20 13:00		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	0.145	+/-2.57	4.40	5.00	pCi/L		JJ3		12/20/20	1639 2072837	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			83.5	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 23, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID: L-36-27.5-31.5 DISSOLVED      Project: WNUC01320  
Sample ID: 529646004      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 03-DEC-20 13:00  
Receive Date: 09-DEC-20  
Collector: Client

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	-0.702	+/-2.30	3.97	5.00	pCi/L		JJ3	12/20/20	1742	2072837	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			86.1	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 23, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-36-27.5-31.5-DUP	Project:	WNUC01320
Sample ID:	529646005	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	03-DEC-20 13:00		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	0.981	+/-2.80	4.75	5.00	pCi/L		JJ3	12/20/20	1844	2072837	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			77.3	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 23, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID: L-36-27.5-31.5-DUP DISSOLVED      Project: WNUC01320  
Sample ID: 529646006      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 03-DEC-20 13:00  
Receive Date: 09-DEC-20  
Collector: Client

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	-0.0550	+/-2.39	4.10	5.00	pCi/L		JJ3	12/20/20	1947	2072837	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			86.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: December 23, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-36-37-41	Project:	WNUC01320
Sample ID:	529646007	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	03-DEC-20 16:15		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	0.511	+/-2.76	4.71	5.00	pCi/L		JJ3		12/20/20	2050 2072837	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			76	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-36-37-41 DISSOLVED	Project:	WNUC01320
Sample ID:	529646008	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	03-DEC-20 16:15		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	0.201	+/-2.37	4.04	5.00	pCi/L		JJ3	12/20/20	2153	2072837	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			86.5	(15%-125%)

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

Column headers are defined as follows:

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

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Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-35-11-15	Project:	WNUC01320
Sample ID:	529646009	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	04-DEC-20 08:43		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	0.879	+/-2.56	4.35	5.00	pCi/L		JJ3		12/20/20	2256 2072837	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			82.1	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: December 23, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID: L-35-11-15 DISSOLVED      Project: WNUC01320  
Sample ID: 529646010      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 04-DEC-20 08:43  
Receive Date: 09-DEC-20  
Collector: Client

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	-1.49	+/-2.33	4.35	5.00	pCi/L		JJ3	12/22/20	1232	2072838	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			80.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: December 23, 2020

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Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-35-30-34	Project:	WNUC01320
Sample ID:	529646011	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	04-DEC-20 10:48		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	-1.60	+/-2.27	4.25	5.00	pCi/L		JJ3	12/22/20	1255	2072838	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			82.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: December 23, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

Client Sample ID: L-35-30-34 DISSOLVED      Project: WNUC01320  
Sample ID: 529646012      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 04-DEC-20 10:48  
Receive Date: 09-DEC-20  
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	0.404	+/-2.35	4.15	5.00	pCi/L		JJ3	12/22/20	1317	2072838	1

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			84.5	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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



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## Certificate of Analysis

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Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-41-31-35 DISSOLVED	Project:	WNUC01320
Sample ID:	529646014	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	04-DEC-20 14:26		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	-1.01	+/-2.27	4.18	5.00	pCi/L		JJ3	12/22/20	1402	2072838	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			84	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: December 23, 2020

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Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

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Client Sample ID:	L-35-21-25	Project:	WNUC01320
Sample ID:	529646015	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	04-DEC-20 09:39		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	-0.723	+/-2.40	4.36	5.00	pCi/L		JJ3		12/22/20	1425 2072838	1

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			81.6	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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



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## Certificate of Analysis

Report Date: December 23, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-38-17-21	Project:	WNUC01320
Sample ID:	529646017	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	08-DEC-20 13:23		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	-0.278	+/-2.63	4.71	5.00	pCi/L		JJ3	12/22/20	1510	2072838	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			85	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: December 23, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

Client Sample ID: L-38-17-21 DISSOLVED      Project: WNUC01320  
Sample ID: 529646018      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 08-DEC-20 13:23  
Receive Date: 09-DEC-20  
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	0.00375	+/-2.55	4.55	5.00	pCi/L		JJ3	12/22/20	1532	2072838	1

The following Analytical Methods were performed:

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

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			77.3	(15%-125%)

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: December 23, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-38-26-30	Project:	WNUC01320
Sample ID:	529646019	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	08-DEC-20 15:11		
Receive Date:	09-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	0.165	+/-2.81	4.99	5.00	pCi/L		JJ3	12/22/20	1555	2072838	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			85.2	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: December 23, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID: L-38-26-30 DISSOLVED      Project: WNUC01320  
Sample ID: 529646020      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 08-DEC-20 15:11  
Receive Date: 09-DEC-20  
Collector: Client

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99	U	0.286	+/-2.67	4.73	5.00	pCi/L		JJ3	12/22/20	1618	2072838	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			76.6	(15%-125%)

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

Column headers are defined as follows:

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

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## QC Summary

Report Date: December 23, 2020

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Westinghouse Electric Company, LLC

PO Drawer R  
Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 529646

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Liquid Scintillation</b>											
Batch 2072837											
QC1204715324	529646001	DUP									
Technetium-99		U	0.285	U	1.22	pCi/L	N/A		N/A	JJ3	12/21/20 01:02
QC1204715325	LCS										
Technetium-99	116				113	pCi/L	96.9	(75%-125%)			12/21/20 02:05
QC1204715323	MB										
Technetium-99			U	1.41	pCi/L						12/20/20 23:59
Batch 2072838											
QC1204715327	529646002	DUP									
Technetium-99		U	-0.363	U	-1.38	pCi/L	N/A		N/A	JJ3	12/22/20 17:03
QC1204715328	LCS										
Technetium-99	116				105	pCi/L	90.6	(75%-125%)			12/22/20 17:25
QC1204715326	MB										
Technetium-99			U	-1.79	pCi/L						12/22/20 16:40

### Notes:

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.

# GEL LABORATORIES LLC

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## QC Summary

Workorder: 529646

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
M											
M											
N/A											
N1											
ND											
NJ											
Q											
R											
U											
UI											
UJ											
UL											
X											
Y											
^											
h											

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 #: 529646**

**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: 2072837**

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
529646001	L-36-18-22
529646003	L-36-27.5-31.5
529646004	L-36-27.5-31.5 DISSOLVED
529646005	L-36-27.5-31.5-DUP
529646006	L-36-27.5-31.5-DUP DISSOLVED
529646007	L-36-37-41
529646008	L-36-37-41 DISSOLVED
529646009	L-35-11-15
1204715323	Method Blank (MB)
1204715324	529646001(L-36-18-22) Sample Duplicate (DUP)
1204715325	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: 2072838**

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
529646002	L-36-18-22 DISSOLVED
529646010	L-35-11-15 DISSOLVED
529646011	L-35-30-34
529646012	L-35-30-34 DISSOLVED
529646013	L-41-31-35
529646014	L-41-31-35 DISSOLVED
529646015	L-35-21-25
529646016	L-35-21-25 DISSOLVED

529646017	L-38-17-21
529646018	L-38-17-21 DISSOLVED
529646019	L-38-26-30
529646020	L-38-26-30 DISSOLVED
1204715326	Method Blank (MB)
1204715327	529646002(L-36-18-22 DISSOLVED) Sample Duplicate (DUP)
1204715328	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.

**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.

**GEL Laboratories LLC**  
 Chemistry | Radiochemistry | Radiobiology | Speciality Analytics  
 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171  
 Fax: (843) 766-1178

**GEL Work Order Number: 529646**  
**GEL Project Manager:**  
 Phone # \_\_\_\_\_  
 Fax # \_\_\_\_\_

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)
L-30-18-33	12/31/20	1045	MS/MSB	N/Y	GW
L-30-27.5-31.5	12/31/20	1300	MSB	N/Y	GW
L-30-27.5-31.5-DUP	12/31/20	1300	FD	N/Y	GW
L-30-37-41	12/31/20	1615	N	N/Y	GW
L-35-11-15	12/14/20	0843	N	N/Y	GW
L-35-30-30	12/14/20	1048	N	N/Y	GW
L-41-31-35	12/14/20	1430	N	N/Y	GW
L-35-21-35	12/14/20	0939	N	N/Y	GW
L-38-17-21	12/18/20	1323	N	N/Y	GW
L-38-30-30	12/18/20	1511	N	N/Y	GW

Relinquished By (Signed)	Date	Time
Jeremy Grant	12/19/20	0950
Jeremy Grant	12/19/20	0955
Jeremy Grant	12/19/20	1545

Chain of Custody Signatures	Received by (signed)	Date	Time
1	Jeremy Grant	12/19/20	0950
2	Jeremy Grant	12/19/20	0955
3	Jeremy Grant	12/19/20	1545

For sample shipping and delivery details, see Sample Receipt & Review form (SRR).  
 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  
 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, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal  
 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  
 7) **KNOWN OR POSSIBLE HAZARDS**

RCRA Metals	Characteristic Hazards	Listed Waste	Other
As = Arsenic Ba = Barium Cd = Cadmium Cr = Chromium Pb = Lead	FL = Flammable/Ignitable CO = Corrosive RE = Reactive	LW = Listed Waste (F, K, P and U-listed wastes.) Waste code(s):	OT = Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:



**List of current GEL Certifications as of 23 December 2020**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
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
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
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	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-20-17
Utah NELAP	SC000122020-33
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



December 28, 2020

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

Re: Sediment and GW Campaign  
Work Order: 530256

Dear Ms. Teague:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on December 16, 2020. 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](http://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. 4443.

Sincerely,

Lindsay Fabra  
Project Manager

Purchase Order: PO 4500778461  
Enclosures



## GEL LABORATORIES LLC

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

### Certificate of Analysis Report for

WNUC009 Westinghouse Electric Co, LLC (4500778461)

Client SDG: 530256 GEL Work Order: 530256

**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, Lindsay Fabra.

Reviewed by \_\_\_\_\_

*Lindsay Fabra*



## Analytical Detections Summary

<b>SDG/Report#</b>	530256	<b>Client</b>	Westinghouse Electric Co, LLC (4500778461)
<b>Project ID</b>	Sediment and GW Campaign		

GEL ID	Client Sample ID	Method	CAS	Analyte	Result	Q
530256001	L-43-29.5-33.5	DOE EML HASL-300, Tc-02-RC Modified	14133-76-7	Technetium-99	39.4 pCi/L	
530256002	L-43-29.5-33.5 DISSOLVED	DOE EML HASL-300, Tc-02-RC Modified	14133-76-7	Technetium-99	31.1 pCi/L	

**NOTE:** This report only lists detections greater than the reporting level. Reporting level is the LOQ, PQL, MDC, or Client-provided limit.

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 28, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID:	L-43-29.5-33.5	Project:	WNUC01320
Sample ID:	530256001	Client ID:	WNUC009
Matrix:	Ground Water		
Collect Date:	09-DEC-20 12:56		
Receive Date:	16-DEC-20		
Collector:	Client		

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99		39.4	+/-3.74	4.44	5.00	pCi/L			TXJ1	12/27/20	0512 2073978	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			98.9	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: December 28, 2020

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Sediment and GW Campaign

---

Client Sample ID: L-43-29.5-33.5 DISSOLVED      Project: WNUC01320  
Sample ID: 530256002      Client ID: WNUC009  
Matrix: Ground Water  
Collect Date: 09-DEC-20 12:56  
Receive Date: 16-DEC-20  
Collector: Client

---

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99		31.1	+/-3.46	4.33	5.00	pCi/L			TXJ1	12/27/20	0538 2073978	1

The following Analytical Methods were performed:

---

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

---

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## QC Summary

Report Date: December 28, 2020

Page 1 of 2

Westinghouse Electric Company, LLC  
PO Drawer R  
Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 530256

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Liquid Scintillation</b>											
Batch	2073978										
QC1204717629	LCS										
Technetium-99	116			113	pCi/L		97.5	(75%-125%)	TXJ1	12/27/20	06:31
QC1204721046	LCSD										
Technetium-99	116			112	pCi/L	0.966	96.5	(0%-20%)		12/27/20	06:57
QC1204717627	MB										
Technetium-99			U	-1.98	pCi/L					12/27/20	06:04

### Notes:

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.
- NI See case narrative
- 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
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy--Uncertain identification

# GEL LABORATORIES LLC

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

## QC Summary

Workorder: 530256

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
UJ											
UL											
X											
Y											
^											
h											

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 #: 530256**

**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:** 2073978

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
530256001	L-43-29.5-33.5
530256002	L-43-29.5-33.5 DISSOLVED
1204717627	Method Blank (MB)
1204717629	Laboratory Control Sample (LCS)
1204721046	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.





**List of current GEL Certifications as of 28 December 2020**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
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
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
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	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-20-17
Utah NELAP	SC000122020-33
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-05-21</b>
Well Samples for Ammonia			Review Date 10/11/2021 2:29:44PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>80159</b>	<b>Location: W-7A-2021-Q4</b>	<b>Time Collected: 10/5/21 13:52</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-11 02:45:00 A	NONE	10/11/21 5:56	COL37492
	NH3 (env)	66.5	PPM	10/11/21 5:55	COL37492
<b>True Temperature</b>	True_Temperature	2.60	DEG-C	10/6/21 6:58	COL1815
<b>80160</b>	<b>Location: W-10-2021-Q4</b>	<b>Time Collected: 10/5/21 13:19</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-11 02:49:00 A	NONE	10/11/21 5:56	COL37492
	NH3 (env)	7.51	PPM	10/11/21 5:55	COL37492
<b>True Temperature</b>	True_Temperature	2.60	DEG-C	10/6/21 6:58	COL1815
<b>80161</b>	<b>Location: W-11-2021-Q4</b>	<b>Time Collected: 10/5/21 10:45</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-11 02:52:00 A	NONE	10/11/21 5:58	COL37492
	NH3 (env)	2.26	PPM	10/11/21 5:55	COL37492
<b>True Temperature</b>	True_Temperature	2.60	DEG-C	10/6/21 6:57	COL1815
<b>80162</b>	<b>Location: W-13R-2021-C</b>	<b>Time Collected: 10/5/21 10:51</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-11 02:55:00 A	NONE	10/11/21 5:58	COL37492
	NH3 (env)	38.9	PPM	10/11/21 5:55	COL37492
<b>True Temperature</b>	True_Temperature	2.60	DEG-C	10/6/21 6:57	COL1815
<b>80163</b>	<b>Location: W-32-2021-Q4</b>	<b>Time Collected: 11/5/21 11:53</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-11 02:55:00 A	NONE	10/11/21 5:58	COL37492
	NH3 (env)	38.9	PPM	10/11/21 5:55	COL37492
<b>True Temperature</b>	True_Temperature	2.60	DEG-C	10/6/21 6:57	COL1815
<b>80164</b>	<b>Location: W-123-2021-Q</b>	<b>Time Collected: 10/5/21 12:52</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-11 02:59:00 A	NONE	10/11/21 5:56	COL37492
	NH3 (env)	95.0	PPM	10/11/21 5:55	COL37492
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	29.3000	PPM	10/11/21 5:58	COL37492
	RPD	3.12	PCT	10/11/21 5:58	COL37492
	Spike Dup Recovery	103	PCT	10/11/21 12:29	COL35221
	Spike Meter Readout	28.4000	PPM	10/11/21 5:58	COL37492

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Stevenson Campbell

**Laboratory Approval**

Approver: Krista Ward  
10/11/2021 2:29:45PM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS_AMMONIA-10-05-21
Well Samples for Ammonia			Review Date 10/11/2021 2:29:45PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
	Spike Recovery	94	PCT	10/11/21 12:28	COL35221
<b>True Temperature</b>	True_Temperature	2.60	DEG-C	10/6/21 6:57	COL1815
<b>80983</b>	<b>Location: W-28-2021-Q4</b>	<b>Time Collected: 10/6/21 11:58</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 09:01:00 P	NONE	10/16/21 3:54	COL37492
	NH3 (env)	0.277	PPM	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:12	COL38196
<b>80984</b>	<b>Location: W-38-2021-Q4</b>	<b>Time Collected: 10/7/21 14:22</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 09:06:00 P	NONE	10/16/21 3:54	COL37492
	NH3 (env)	<0.100	PPM	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:12	COL38196
<b>80985</b>	<b>Location: W-57-2021-Q4</b>	<b>Time Collected: 10/7/21 14:39</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 09:10:00 P	NONE	10/16/21 3:54	COL37492
	NH3 (env)	<0.100	PPM	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:12	COL38196
<b>80986</b>	<b>Location: W-76-2021-Q4</b>	<b>Time Collected: 10/7/21 13:06</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 09:14:00 P	NONE	10/16/21 3:54	COL37492
	NH3 (env)	<0.100	PPM	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:12	COL38196
<b>80987</b>	<b>Location: W-77-2021-Q4</b>	<b>Time Collected: 10/6/21 10:45</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 09:19:00 P	NONE	10/16/21 3:54	COL37492
	NH3 (env)	3.66	PPM	10/16/21 3:45	COL37492
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	13.8000	PPM	10/16/21 3:43	COL37492
	RPD	0.73	PCT	10/16/21 3:43	COL37492
	Spike Dup Recovery	101	PCT	10/16/21 3:45	COL37492
	Spike Meter Readout	13.7000	PPM	10/16/21 3:43	COL37492
	Spike Recovery	100	PCT	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:12	COL38196

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
10/18/2021 11:21:25AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-07-21</b>
Well Samples for Ammonia			Review Date 10/18/2021 11:21:25AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>80988</b>	<b>Location: W-78-2021-Q4</b>	<b>Time Collected: 10/6/21 13:00</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 09:25:00 P	NONE	10/16/21 3:52	COL37492
	NH3 (env)	<0.100	PPM	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:12	COL38196
<b>80989</b>	<b>Location: W-79-2021-Q4</b>	<b>Time Collected: 10/6/21 14:12</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 09:31:00 P	NONE	10/16/21 3:52	COL37492
	NH3 (env)	<0.100	PPM	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:12	COL38196
<b>80990</b>	<b>Location: W-80-2021-Q4</b>	<b>Time Collected: 10/7/21 13:31</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 09:50:00 P	NONE	10/16/21 3:53	COL37492
	NH3 (env)	<0.100	PPM	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:12	COL38196
<b>80991</b>	<b>Location: W-81-2021-Q4</b>	<b>Time Collected: 10/7/21 11:44</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 09:53:00 P	NONE	10/16/21 3:53	COL37492
	NH3 (env)	<0.100	PPM	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:12	COL38196
<b>80992</b>	<b>Location: W-82-2021-Q4</b>	<b>Time Collected: 10/7/21 9:54</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 09:57:00 P	NONE	10/16/21 3:53	COL37492
	NH3 (env)	<0.100	PPM	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:12	COL38196
<b>80993</b>	<b>Location: W-83-2021-Q4</b>	<b>Time Collected: 10/7/21 11:09</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 11:20:00 P	NONE	10/16/21 3:55	COL37492
	NH3 (env)	<0.100	PPM	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:12	COL38196
<b>80994</b>	<b>Location: W-84-2021-Q4</b>	<b>Time Collected: 10/7/21 9:06</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 11:24:00 P	NONE	10/16/21 3:55	COL37492

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
10/18/2021 11:21:25AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS_AMMONIA-10-07-21
Well Samples for Ammonia			Review Date 10/18/2021 11:21:25AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
	NH3 (env)	<0.100	PPM	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:12	COL38196
<b>80995</b>	<b>Location: W-93-2021-Q4</b>	<b>Time Collected: 10/6/21 9:49</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 11:28:00 P	NONE	10/16/21 3:55	COL37492
	NH3 (env)	<0.100	PPM	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:12	COL38196
<b>81017</b>	<b>Location: W-81_DUP-20</b>	<b>Time Collected: 10/7/21 11:44</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-15 11:33:00 P	NONE	10/16/21 3:50	COL37492
	NH3 (env)	<0.100	PPM	10/16/21 3:45	COL37492
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	10.1000	PPM	10/16/21 3:43	COL37492
	RPD	1.40	PCT	10/16/21 3:43	COL37492
	Spike Dup Recovery	100	PCT	10/16/21 3:45	COL37492
	Spike Meter Readout	9.9600	PPM	10/16/21 3:43	COL37492
	Spike Recovery	99	PCT	10/16/21 3:45	COL37492
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:28	COL38196
<b>81420</b>	<b>Location: W-6-2021-Q4</b>	<b>Time Collected: 10/8/21 10:28</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-16 11:41:00 P	NONE	10/17/21 2:38	COL37492
	NH3 (env)	105	PPM	10/17/21 2:36	COL37492
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:20	COL38196
<b>81421</b>	<b>Location: W-18R-2021-C</b>	<b>Time Collected: 10/8/21 11:50</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-16 11:46:00 P	NONE	10/17/21 2:38	COL37492
	NH3 (env)	77.5	PPM	10/17/21 2:36	COL37492
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:20	COL38196
<b>81422</b>	<b>Location: W-22-2021-Q4</b>	<b>Time Collected: 10/8/21 9:34</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-16 11:50:00 P	NONE	10/17/21 2:38	COL37492
	NH3 (env)	45.9	PPM	10/17/21 2:36	COL37492
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:20	COL38196

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**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
10/18/2021 11:30:13AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-08-21</b>
Well Samples for Ammonia			Review Date 10/18/2021 11:30:13AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>81423</b>	<b>Location: W-29-2021-Q4</b>	<b>Time Collected: 10/8/21 9:05</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-16 11:57:00 P	NONE	10/17/21 2:38	COL37492
	NH3 (env)	11.7	PPM	10/17/21 2:36	COL37492
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:20	COL38196
<b>81424</b>	<b>Location: W-30-2021-Q4</b>	<b>Time Collected: 10/8/21 12:55</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-16 11:59:00 P	NONE	10/17/21 2:38	COL37492
	NH3 (env)	1.38	PPM	10/17/21 2:36	COL37492
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:20	COL38196
<b>81425</b>	<b>Location: W-73-2021-Q4</b>	<b>Time Collected: 10/8/21 13:30</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-17 12:08:00 A	NONE	10/17/21 2:38	COL37492
	NH3 (env)	<0.100	PPM	10/17/21 2:36	COL37492
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:20	COL38196
<b>81426</b>	<b>Location: W-102-2021-Q</b>	<b>Time Collected: 10/8/21 11:07</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-17 12:15:00 A	NONE	10/17/21 2:37	COL37492
	NH3 (env)	35.1	PPM	10/17/21 2:36	COL37492
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	44.3000	PPM	10/17/21 2:35	COL37492
	RPD	0.45	PCT	10/17/21 2:35	COL37492
	Spike Dup Recovery	92	PCT	10/17/21 2:36	COL37492
	Spike Meter Readout	44.5000	PPM	10/17/21 2:35	COL37492
	Spike Recovery	94	PCT	10/17/21 2:36	COL37492
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:20	COL38196
<b>81427</b>	<b>Location: W-29_MS-202</b>	<b>Time Collected: 10/8/21 9:05</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-17 12:50:00 A	NONE	10/17/21 2:38	COL37492
	NH3 (env)	10.9	PPM	10/17/21 2:36	COL37492
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:20	COL38196
<b>81428</b>	<b>Location: W-29_MSD-20</b>	<b>Time Collected: 10/8/21 9:05</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-17 12:55:00 A	NONE	10/17/21 2:38	COL37492

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
10/18/2021 11:30:13AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS_AMMONIA-10-08-21
Well Samples for Ammonia			Review Date 10/18/2021 11:30:13AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
	NH3 (env)	11.4	PPM	10/17/21 2:36	COL37492
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:20	COL38196
<b>81429</b>	<b>Location: BLANK-01-10</b>	<b>Time Collected: 10/8/21 10:12</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-17 01:04:00 A	NONE	10/17/21 2:38	COL37492
	NH3 (env)	<0.100	PPM	10/17/21 2:36	COL37492
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:20	COL38196
<b>82541</b>	<b>Location: W-37-2021-Q4</b>	<b>Time Collected: 10/11/21 13:07</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-18 09:20:02 P	NONE	10/19/21 2:02	COL37313
	NH3 (env)	<0.100	PPM	10/19/21 2:01	COL37313
<b>True Temperature</b>	True_Temperature	4.50	DEG-C	10/11/21 16:35	COL38196
<b>82542</b>	<b>Location: W-55-2021-Q4</b>	<b>Time Collected: 10/11/21 12:16</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-18 09:25:35 P	NONE	10/19/21 2:02	COL37313
	NH3 (env)	<0.100	PPM	10/19/21 2:01	COL37313
<b>True Temperature</b>	True_Temperature	4.50	DEG-C	10/11/21 16:35	COL38196
<b>82543</b>	<b>Location: W-56-2021-Q4</b>	<b>Time Collected: 10/11/21 14:18</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-18 09:34:51 P	NONE	10/19/21 2:03	COL37313
	NH3 (env)	<0.100	PPM	10/19/21 2:01	COL37313
<b>True Temperature</b>	True_Temperature	4.50	DEG-C	10/11/21 16:35	COL38196
<b>82544</b>	<b>Location: W-58-2021-Q4</b>	<b>Time Collected: 10/11/21 9:11</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-18 09:40:13 P	NONE	10/19/21 2:03	COL37313
	NH3 (env)	3.51	PPM	10/19/21 2:01	COL37313
<b>True Temperature</b>	True_Temperature	4.50	DEG-C	10/11/21 16:35	COL38196
<b>82545</b>	<b>Location: W-59-2021-Q4</b>	<b>Time Collected: 10/11/21 1:11</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-18 09:43:45 P	NONE	10/19/21 2:02	COL37313
	NH3 (env)	7.10	PPM	10/19/21 2:01	COL37313
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	16.8000	PPM	10/19/21 2:03	COL37313

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
10/19/2021 10:01:40AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-11-21</b>
Well Samples for Ammonia			Review Date 10/19/2021 10:01:40AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
	RPD	0.00	PCT	10/19/21 2:03	COL37313
	Spike Dup Recovery	97	PCT	10/19/21 2:03	COL37313
	Spike Meter Readout	16.8000	PPM	10/19/21 2:03	COL37313
	Spike Recovery	97	PCT	10/19/21 2:03	COL37313
<b>True Temperature</b>	True_Temperature	4.50	DEG-C	10/11/21 16:35	COL38196

<b>83026</b>	<b>Location: W-17-2021-Q4</b>	<b>Time Collected: 10/12/21 12:58</b>	<b>Preservative: H2SO4</b>			
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-19 01:33:00 P	NONE	10/19/21 14:43	COL35793	
	NH3 (env)	7.84	PPM	10/19/21 14:42	COL35793	
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:42	COL38196	
<b>83027</b>	<b>Location: W-40-2021-Q4</b>	<b>Time Collected: 10/12/21 9:20</b>	<b>Preservative: H2SO4</b>			
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-19 01:35:00 P	NONE	10/19/21 14:43	COL35793	
	NH3 (env)	0.342	PPM	10/19/21 14:42	COL35793	
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:42	COL38196	
<b>83028</b>	<b>Location: W-50-2021-Q4</b>	<b>Time Collected: 10/12/21 10:45</b>	<b>Preservative: H2SO4</b>			
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-19 01:39:00 P	NONE	10/19/21 14:43	COL35793	
	NH3 (env)	<0.100	PPM	10/19/21 14:42	COL35793	
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:42	COL38196	
<b>83029</b>	<b>Location: W-53-2021-Q4</b>	<b>Time Collected: 10/12/21 14:26</b>	<b>Preservative: H2SO4</b>			
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-19 01:49:00 P	NONE	10/19/21 14:44	COL35793	
	NH3 (env)	<0.100	PPM	10/19/21 14:42	COL35793	
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:42	COL38196	
<b>83030</b>	<b>Location: W-54-2021-Q4</b>	<b>Time Collected: 10/12/21 12:49</b>	<b>Preservative: H2SO4</b>			
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-19 01:51:00 P	NONE	10/19/21 14:44	COL35793	
	NH3 (env)	<0.100	PPM	10/19/21 14:42	COL35793	
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:42	COL38196	
<b>83031</b>	<b>Location: W-72-2021-Q4</b>	<b>Time Collected: 10/12/21 11:33</b>	<b>Preservative: H2SO4</b>			

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**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
10/20/2021 9:03:47AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-12-21</b>
Well Samples for Ammonia			Review Date 10/20/2021 9:03:47AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-19 01:55:00 P	NONE	10/19/21 14:44	COL35793
	NH3 (env)	<0.100	PPM	10/19/21 14:42	COL35793
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:42	COL38196
<b>83032</b>	<b>Location: W-74-2021-Q4</b>	<b>Time Collected: 10/12/21 9:49</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-19 02:05:00 P	NONE	10/19/21 14:45	COL35793
	NH3 (env)	<0.100	PPM	10/19/21 14:42	COL35793
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:42	COL38196
<b>83033</b>	<b>Location: W-75-2021-Q4</b>	<b>Time Collected: 10/12/21 8:51</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-19 02:07:00 P	NONE	10/19/21 14:45	COL35793
	NH3 (env)	0.258	PPM	10/19/21 14:42	COL35793
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:42	COL38196
<b>83035</b>	<b>Location: W-17_MS-202</b>	<b>Time Collected: 10/12/21 12:58</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-19 02:10:00 P	NONE	10/19/21 14:45	COL35793
	NH3 (env)	7.16	PPM	10/19/21 14:42	COL35793
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	18.0000	PPM	10/19/21 14:50	COL35793
	RPD	2.25	PCT	10/19/21 14:50	COL35793
	Spike Dup Recovery	108	PCT	10/19/21 14:50	COL35793
	Spike Meter Readout	17.6000	PPM	10/19/21 14:50	COL35793
	Spike Recovery	104	PCT	10/19/21 14:50	COL35793
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:47	COL38196
<b>83036</b>	<b>Location: W-17_MSD-20</b>	<b>Time Collected: 10/12/21 12:58</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-19 02:15:00 P	NONE	10/19/21 14:46	COL35793
	NH3 (env)	7.81	PPM	10/19/21 14:42	COL35793
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:47	COL38196
<b>83037</b>	<b>Location: W-74_DUP-20</b>	<b>Time Collected: 10/12/21 9:49</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-19 02:17:00 P	NONE	10/19/21 14:46	COL35793
	NH3 (env)	<0.100	PPM	10/19/21 14:42	COL35793
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:47	COL38196

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
10/20/2021 9:03:47AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS_AMMONIA-10-12-21
Well Samples for Ammonia			Review Date 10/20/2021 9:03:47AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>83821</b>	<b>Location: W-36-2021-Q4</b>	<b>Time Collected: 10/13/21 9:55</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 11:20:00 A	NONE	10/20/21 14:54	COL35793
	NH3 (env)	<0.100	PPM	10/20/21 14:53	COL35793
<b>True Temperature</b>	True_Temperature	2.80	DEG-C	10/14/21 7:11	COL30023
<b>83822</b>	<b>Location: W-51-2021-Q4</b>	<b>Time Collected: 10/13/21 14:50</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 11:26:00 A	NONE	10/20/21 14:56	COL35793
	NH3 (env)	0.166	PPM	10/20/21 14:55	COL35793
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	9.3900	PPM	10/20/21 14:56	COL35793
	RPD	0.00	PCT	10/20/21 14:56	COL35793
	Spike Dup Recovery	92	PCT	10/20/21 14:56	COL35793
	Spike Meter Readout	9.3900	PPM	10/20/21 14:56	COL35793
	Spike Recovery	92	PCT	10/20/21 14:56	COL35793
<b>True Temperature</b>	True_Temperature	2.80	DEG-C	10/14/21 7:11	COL30023
<b>83823</b>	<b>Location: W-52-2021-Q4</b>	<b>Time Collected: 10/13/21 13:55</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 11:32:00 A	NONE	10/20/21 14:58	COL35793
	NH3 (env)	<0.100	PPM	10/20/21 14:57	COL35793
<b>True Temperature</b>	True_Temperature	2.80	DEG-C	10/14/21 7:11	COL30023
<b>83824</b>	<b>Location: W-87-2021-Q4</b>	<b>Time Collected: 10/13/21 0:25</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 11:38:00 A	NONE	10/20/21 14:59	COL35793
	NH3 (env)	<0.100	PPM	10/20/21 14:59	COL35793
<b>True Temperature</b>	True_Temperature	2.80	DEG-C	10/14/21 7:11	COL30023
<b>83825</b>	<b>Location: W-122-2021-Q</b>	<b>Time Collected: 10/13/21 10:56</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 11:40:00 A	NONE	10/20/21 15:00	COL35793
	NH3 (env)	<0.100	PPM	10/20/21 15:00	COL35793
<b>True Temperature</b>	True_Temperature	2.80	DEG-C	10/14/21 7:11	COL30023
<b>84062</b>	<b>Location: RW-1-2021-Q</b>	<b>Time Collected: 10/14/21 9:46</b>	<b>Preservative: H2SO4</b>		

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Laurie Harvey

**Laboratory Approval**

Approver: Krista Ward  
10/21/2021 10:50:36AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-14-21</b>
Well Samples for Ammonia			Review Date 10/21/2021 10:50:36AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 05:13:06 P	NONE	10/20/21 20:14	COL37313
	NH3 (env)	<0.100	PPM	10/20/21 20:13	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84063</b>	<b>Location: W-33-2021-Q4</b>	<b>Time Collected: 10/14/21 14:51</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 05:25:16 P	NONE	10/20/21 20:14	COL37313
	NH3 (env)	<0.100	PPM	10/20/21 20:13	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84064</b>	<b>Location: W-35-2021-Q4</b>	<b>Time Collected: 10/14/21 13:23</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 05:35:28 P	NONE	10/20/21 20:14	COL37313
	NH3 (env)	<0.100	PPM	10/20/21 20:13	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84065</b>	<b>Location: W-45-2021-Q4</b>	<b>Time Collected: 10/14/21 11:11</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 05:40:41 P	NONE	10/20/21 20:13	COL37313
	NH3 (env)	0.904	PPM	10/20/21 20:13	COL37313
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	9.9200	PPM	10/20/21 20:11	COL37313
	RPD	0.40	PCT	10/20/21 20:11	COL37313
	Spike Dup Recovery	90	PCT	10/20/21 20:13	COL37313
	Spike Meter Readout	9.9600	PPM	10/20/21 20:11	COL37313
	Spike Recovery	91	PCT	10/20/21 20:13	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84066</b>	<b>Location: W-115-2021-Q</b>	<b>Time Collected: 10/14/21 10:24</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 05:52:36 P	NONE	10/20/21 20:14	COL37313
	NH3 (env)	<0.100	PPM	10/20/21 20:13	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84067</b>	<b>Location: W-116-2021-Q</b>	<b>Time Collected: 10/14/21 11:59</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 05:59:53 P	NONE	10/20/21 20:15	COL37313
	NH3 (env)	<0.100	PPM	10/20/21 20:13	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793

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**Chain of Custody**

Sampler: Randy Crews  
Released to: Laurie Harvey

**Laboratory Approval**

Approver: Krista Ward  
10/21/2021 10:50:36AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS_AMMONIA-10-14-21
Well Samples for Ammonia			Review Date 10/21/2021 10:50:36AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>84068</b>	<b>Location: W-117-2021-Q</b>	<b>Time Collected: 10/14/21 14:25</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 06:02:02 P	NONE	10/20/21 20:15	COL37313
	NH3 (env)	<0.100	PPM	10/20/21 20:13	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84069</b>	<b>Location: W-118-2021-Q</b>	<b>Time Collected: 10/14/21 13:00</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 06:17:11 P	NONE	10/20/21 20:16	COL37313
	NH3 (env)	<0.100	PPM	10/20/21 20:13	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84070</b>	<b>Location: BLANK-01-10</b>	<b>Time Collected: 10/14/21 11:39</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-20 08:30:20 P	NONE	10/20/21 20:16	COL37313
	NH3 (env)	<0.100	PPM	10/20/21 20:13	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84570</b>	<b>Location: W-60-2021-Q4</b>	<b>Time Collected: 10/15/21 11:34</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-21 02:40:00 A	NONE	10/21/21 5:45	COL37492
	NH3 (env)	<0.100	PPM	10/21/21 5:43	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84571</b>	<b>Location: W-61-2021-Q4</b>	<b>Time Collected: 10/15/21 12:40</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-21 02:45:00 A	NONE	10/21/21 5:45	COL37492
	NH3 (env)	<0.100	PPM	10/21/21 5:43	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84572</b>	<b>Location: W-99-2021-Q4</b>	<b>Time Collected: 10/15/21 13:00</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-21 02:50:00 A	NONE	10/21/21 5:45	COL37492
	NH3 (env)	3.25	PPM	10/21/21 5:43	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84573</b>	<b>Location: W-100-2021-Q</b>	<b>Time Collected: 10/15/21 12:03</b>	<b>Preservative: H2SO4</b>		

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Laurie Harvey

**Laboratory Approval**

Approver: Krista Ward  
10/21/2021 11:07:13AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-15-21</b>
Well Samples for Ammonia			Review Date 10/21/2021 11:07:13AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-21 02:55:00 A	NONE	10/21/21 5:44	COL37492
	NH3 (env)	8.27	PPM	10/21/21 5:43	COL37492
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	18.8000	PPM	10/21/21 5:43	COL37492
	RPD	4.90	PCT	10/21/21 5:43	COL37492
	Spike Dup Recovery	105	PCT	10/21/21 5:43	COL37492
	Spike Meter Readout	17.9000	PPM	10/21/21 5:42	COL37492
	Spike Recovery	96	PCT	10/21/21 5:43	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84574</b>	<b>Location: W-113-2021-Q</b>	<b>Time Collected: 10/15/21 9:12</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-21 03:06:00 A	NONE	10/21/21 5:45	COL37492
	NH3 (env)	<0.100	PPM	10/21/21 5:43	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84575</b>	<b>Location: W-114-2021-Q</b>	<b>Time Collected: 10/15/21 10:36</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-21 03:11:00 A	NONE	10/21/21 5:46	COL37492
	NH3 (env)	<0.100	PPM	10/21/21 5:43	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84576</b>	<b>Location: W-120-2021-Q</b>	<b>Time Collected: 10/15/21 9:32</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-21 03:15:00 A	NONE	10/21/21 5:46	COL37492
	NH3 (env)	<0.100	PPM	10/21/21 5:43	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84579</b>	<b>Location: W-121-2021-Q</b>	<b>Time Collected: 10/15/21 10:34</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-21 03:27:00 A	NONE	10/21/21 5:47	COL37492
	NH3 (env)	<0.100	PPM	10/21/21 5:43	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>85532</b>	<b>Location: W-14-2021-Q4</b>	<b>Time Collected: 10/18/21 13:30</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 05:40:00 P	NONE	10/22/21 19:41	COL38208
	NH3 (env)	4.17	PPM	10/22/21 19:39	COL38208

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Shannon McCoy

**Laboratory Approval**

Approver: Krista Ward  
10/25/2021 6:23:21AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-18-21</b>
Well Samples for Ammonia			Review Date 10/25/2021 6:23:21AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85533</b>	<b>Location: W-23R-2021-C</b>	<b>Time Collected: 10/18/21 10:29</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 05:43:00 P	NONE	10/22/21 19:41	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:39	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85534</b>	<b>Location: W-39-2021-Q4</b>	<b>Time Collected: 10/18/21 12:03</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 05:45:00 P	NONE	10/22/21 19:41	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:39	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85535</b>	<b>Location: W-43-2021-Q4</b>	<b>Time Collected: 10/18/21 13:02</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 05:46:00 P	NONE	10/22/21 19:41	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:39	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85536</b>	<b>Location: W-44-2021-Q4</b>	<b>Time Collected: 10/18/21 14:23</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 05:50:00 P	NONE	10/22/21 19:41	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:39	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85537</b>	<b>Location: W-65-2021-Q4</b>	<b>Time Collected: 10/18/21 9:38</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 05:53:00 P	NONE	10/22/21 19:41	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:39	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85538</b>	<b>Location: W-66-2021-Q4</b>	<b>Time Collected: 10/18/21 10:40</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 05:55:00 P	NONE	10/22/21 19:41	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:39	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85539</b>	<b>Location: W-67-2021-Q4</b>	<b>Time Collected: 10/18/21 11:24</b>	<b>Preservative:</b>	<b>H2SO4</b>	

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Shannon McCoy

**Laboratory Approval**

Approver: Krista Ward  
10/25/2021 6:23:21AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS_AMMONIA-10-18-21
Well Samples for Ammonia			Review Date 10/25/2021 6:23:21AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 06:00:00 P	NONE	10/22/21 19:41	COL38208
	NH3 (env)	1.74	PPM	10/22/21 19:39	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85540</b>	<b>Location: W-103-2021-Q</b>	<b>Time Collected: 10/18/21 12:27</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 06:02:00 P	NONE	10/22/21 19:41	COL38208
	NH3 (env)	0.387	PPM	10/22/21 19:39	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85541</b>	<b>Location: W-106-2021-Q</b>	<b>Time Collected: 10/18/21 14:33</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 06:05:00 P	NONE	10/22/21 19:41	COL38208
	NH3 (env)	1.58	PPM	10/22/21 19:39	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85542</b>	<b>Location: W-119-2021-Q</b>	<b>Time Collected: 10/18/21 8:58</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 06:08:00 P	NONE	10/22/21 19:41	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:39	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85543</b>	<b>Location: BLANK-01-10</b>	<b>Time Collected: 10/18/21 13:25</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 06:10:00 P	NONE	10/22/21 19:41	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:39	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85544</b>	<b>Location: W-66_DUP-20</b>	<b>Time Collected: 10/18/21 10:40</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 06:16:00 P	NONE	10/22/21 19:41	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:39	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85545</b>	<b>Location: W-119_MS-20</b>	<b>Time Collected: 10/18/21 8:58</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 06:19:00 P	NONE	10/22/21 19:42	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:39	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Shannon McCoy

**Laboratory Approval**

Approver: Krista Ward  
10/25/2021 6:23:21AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS_AMMONIA-10-18-21
Well Samples for Ammonia			Review Date 10/25/2021 6:23:21AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>85546</b>	<b>Location: W-119_MSD-2</b>	<b>Time Collected: 10/18/21 8:58</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 06:21:00 P	NONE	10/22/21 19:42	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:39	COL38208
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	7.9900	PPM	10/22/21 19:46	COL38208
	RPD	1.26	PCT	10/22/21 19:46	COL38208
	Spike Dup Recovery	79	PCT	10/22/21 19:46	COL38208
	Spike Meter Readout	7.8900	PPM	10/22/21 19:46	COL38208
	Spike Recovery	78	PCT	10/22/21 19:46	COL38208
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85962</b>	<b>Location: W-15-2021-Q4</b>	<b>Time Collected: 10/19/21 10:54</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 08:01:00 A	NONE	10/22/21 12:19	COL36695
	NH3 (env)	0.487	PPM	10/22/21 12:18	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85963</b>	<b>Location: W-16-2021-Q4</b>	<b>Time Collected: 10/19/21 12:18</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 08:03:00 A	NONE	10/22/21 12:21	COL36695
	NH3 (env)	15.0	PPM	10/22/21 12:20	COL36695
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	25.3000	PPM	10/22/21 12:23	COL36695
	RPD	1.18	PCT	10/22/21 12:23	COL36695
	Spike Dup Recovery	103	PCT	10/22/21 12:23	COL36695
	Spike Meter Readout	25.6000	PPM	10/22/21 12:21	COL36695
	Spike Recovery	106	PCT	10/22/21 12:21	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85964</b>	<b>Location: W-26-2021-Q4</b>	<b>Time Collected: 10/3/21 11:53</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 08:06:00 P	NONE	10/22/21 12:24	COL36695
	NH3 (env)	2.19	PPM	10/22/21 12:24	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85965</b>	<b>Location: W-47-2021-Q4</b>	<b>Time Collected: 10/19/21 9:47</b>	<b>Preservative: H2SO4</b>		

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Laurie Harvey

**Laboratory Approval**

Approver: Krista Ward  
10/22/2021 1:16:26PM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-19-21</b>
Well Samples for Ammonia			Review Date 10/22/2021 1:16:26PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 08:09:00 A	NONE	10/22/21 12:25	COL36695
	NH3 (env)	13.9	PPM	10/22/21 12:25	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85966</b>	<b>Location: W-48-2021-Q4</b>	<b>Time Collected: 10/19/21 13:35</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 08:12:00 P	NONE	10/22/21 12:26	COL36695
	NH3 (env)	<0.100	PPM	10/22/21 12:26	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85967</b>	<b>Location: W-62-2021-Q4</b>	<b>Time Collected: 10/19/21 10:24</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 08:15:00 A	NONE	10/22/21 12:28	COL36695
	NH3 (env)	<0.100	PPM	10/22/21 12:27	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85968</b>	<b>Location: W-63-2021-Q4</b>	<b>Time Collected: 10/19/21 13:23</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 08:18:00 A	NONE	10/22/21 12:29	COL36695
	NH3 (env)	<0.100	PPM	10/22/21 12:29	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85969</b>	<b>Location: W-64-2021-Q4</b>	<b>Time Collected: 10/19/21 8:54</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 08:21:00 A	NONE	10/22/21 12:30	COL36695
	NH3 (env)	12.1	PPM	10/22/21 12:30	COL36695
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	22.0000	PPM	10/22/21 12:33	COL36695
	RPD	2.25	PCT	10/22/21 12:33	COL36695
	Spike Dup Recovery	99	PCT	10/22/21 12:33	COL36695
	Spike Meter Readout	22.5000	PPM	10/22/21 12:32	COL36695
	Spike Recovery	104	PCT	10/22/21 12:32	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85970</b>	<b>Location: W-68-2021-Q4</b>	<b>Time Collected: 10/19/21 9:13</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 08:23:00 A	NONE	10/22/21 12:34	COL36695
	NH3 (env)	0.255	PPM	10/22/21 12:33	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Laurie Harvey

**Laboratory Approval**

Approver: Krista Ward  
10/22/2021 1:16:26PM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS_AMMONIA-10-19-21
Well Samples for Ammonia			Review Date 10/22/2021 1:16:26PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>85971</b>	<b>Location: W-98-2021-Q4</b>	<b>Time Collected: 10/19/21 14:51</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 08:26:00 A	NONE	10/22/21 12:34	COL36695
	NH3 (env)	0.356	PPM	10/22/21 12:34	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85972</b>	<b>Location: BLANK-01-10</b>	<b>Time Collected: 10/19/21 10:53</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 08:29:00 A	NONE	10/22/21 12:35	COL36695
	NH3 (env)	<0.100	PPM	10/22/21 12:35	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>86380</b>	<b>Location: W-19B-2021-C</b>	<b>Time Collected: 10/20/21 13:53</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 12:48:00 P	NONE	10/22/21 13:44	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 13:42	COL38208
<b>True Temperature</b>	True_Temperature	3.80	DEG-C	10/20/21 16:00	COL35793
<b>86381</b>	<b>Location: W-42-2021-Q4</b>	<b>Time Collected: 10/20/21 9:17</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 12:51:00 P	NONE	10/22/21 13:45	COL38208
	NH3 (env)	0.156	PPM	10/22/21 13:42	COL38208
<b>True Temperature</b>	True_Temperature	3.80	DEG-C	10/20/21 16:00	COL35793
<b>86382</b>	<b>Location: W-49-2021-Q4</b>	<b>Time Collected: 10/20/21 10:18</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 01:00:00 P	NONE	10/22/21 13:48	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 13:42	COL38208
<b>True Temperature</b>	True_Temperature	3.80	DEG-C	10/20/21 16:00	COL35793
<b>86383</b>	<b>Location: W-90-2021-Q4</b>	<b>Time Collected: 10/7/21 11:27</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 01:05:00 P	NONE	10/22/21 13:50	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 13:42	COL38208
<b>True Temperature</b>	True_Temperature	3.80	DEG-C	10/20/21 16:00	COL35793
<b>86384</b>	<b>Location: W-91-2021-Q4</b>	<b>Time Collected: 10/20/21 12:20</b>	<b>Preservative: H2SO4</b>		

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Laurie Harvey

**Laboratory Approval**

Approver: Krista Ward  
10/22/2021 2:01:51PM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-20-21</b>
Well Samples for Ammonia			Review Date 10/22/2021 2:01:51PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 01:10:00 P	NONE	10/22/21 13:41	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 13:40	COL38208
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	10.0000	PPM	10/22/21 13:38	COL38208
	RPD	3.92	PCT	10/22/21 13:38	COL38208
	Spike Dup Recovery	99	PCT	10/22/21 13:40	COL38208
	Spike Meter Readout	10.4000	PPM	10/22/21 13:38	COL38208
	Spike Recovery	103	PCT	10/22/21 13:40	COL38208
<b>True Temperature</b>	True_Temperature	3.80	DEG-C	10/20/21 16:00	COL35793

**86801 Location: WRW-2-2021-2 Time Collected: 10/21/21 10:03 Preservative: H2SO4**

<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 05:18:00 P	NONE	10/22/21 19:19	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:16	COL38208
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195

**86802 Location: W-24-2021-Q4 Time Collected: 10/21/21 14:15 Preservative: H2SO4**

<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 05:12:00 P	NONE	10/22/21 19:19	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:16	COL38208
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195

**86803 Location: W-41R-2021-C Time Collected: 10/21/21 9:06 Preservative: H2SO4**

<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 04:25:00 P	NONE	10/22/21 19:21	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:16	COL38208
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195

**86804 Location: W-46-2021-Q4 Time Collected: 10/21/21 9:03 Preservative: H2SO4**

<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 04:31:00 P	NONE	10/22/21 19:21	COL38208
	NH3 (env)	0.100	PPM	10/22/21 19:16	COL38208
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195

**86805 Location: W-69-2021-Q4 Time Collected: 10/21/21 12:23 Preservative: H2SO4**

<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 04:35:00 P	NONE	10/22/21 19:21	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:16	COL38208

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Shannon McCoy

**Laboratory Approval**

Approver: Krista Ward  
10/25/2021 6:18:46AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-21-21</b>
Well Samples for Ammonia			Review Date 10/25/2021 6:18:46AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86806</b>	<b>Location: W-70-2021-Q4</b>	<b>Time Collected: 10/21/21 11:27</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 04:40:00 P	NONE	10/22/21 19:21	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:16	COL38208
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86807</b>	<b>Location: W-71-2021-Q4</b>	<b>Time Collected: 10/21/21 13:24</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 04:45:00 P	NONE	10/22/21 19:21	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:16	COL38208
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86808</b>	<b>Location: W-88-2021-Q4</b>	<b>Time Collected: 10/21/21 11:12</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 05:20:00 P	NONE	10/22/21 19:21	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:16	COL38208
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86809</b>	<b>Location: W-89-2021-Q4</b>	<b>Time Collected: 10/21/21 12:08</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 05:24:00 P	NONE	10/22/21 19:21	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:16	COL38208
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86810</b>	<b>Location: BLANK-01-10</b>	<b>Time Collected: 10/21/21 12:33</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 04:48:00 P	NONE	10/22/21 19:22	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:16	COL38208
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86811</b>	<b>Location: W-41R_MS-20</b>	<b>Time Collected: 10/21/21 9:06</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 04:50:00 P	NONE	10/22/21 19:22	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:16	COL38208
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86812</b>	<b>Location: W-41R_MS-1</b>	<b>Time Collected: 10/21/21 9:06</b>	<b>Preservative: H2SO4</b>		

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Shannon McCoy

**Laboratory Approval**

Approver: Krista Ward  
10/25/2021 6:18:46AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS_AMMONIA-10-21-21
Well Samples for Ammonia			Review Date 10/25/2021 6:18:46AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 04:55:00 P	NONE	10/22/21 19:22	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:16	COL38208
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86813</b>	<b>Location: W-71_DUP-20</b>	<b>Time Collected: 10/21/21 13:24</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-22 04:58:00 P	NONE	10/22/21 19:23	COL38208
	NH3 (env)	<0.100	PPM	10/22/21 19:16	COL38208
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	10.0000	PPM	10/22/21 19:23	COL38208
	RPD	2.96	PCT	10/22/21 19:23	COL38208
	Spike Dup Recovery	99	PCT	10/22/21 19:23	COL38208
	Spike Meter Readout	10.3000	PPM	10/22/21 19:23	COL38208
	Spike Recovery	102	PCT	10/22/21 19:23	COL38208
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86909</b>	<b>Location: W-27-2021-Q4</b>	<b>Time Collected: 10/22/21 13:03</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-25 03:21:19 P	NONE	10/25/21 18:41	COL38196
	NH3 (env)	5.15	PPM	10/25/21 18:41	COL38196
<b>True Temperature</b>	True_Temperature	4.30	DEG-C	10/22/21 15:04	COL38208
<b>86910</b>	<b>Location: W-85-2021-Q4</b>	<b>Time Collected: 10/22/21 11:13</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-25 03:25:07 P	NONE	10/25/21 18:42	COL38196
	NH3 (env)	0.127	PPM	10/25/21 18:42	COL38196
<b>True Temperature</b>	True_Temperature	4.30	DEG-C	10/22/21 15:04	COL38208
<b>86911</b>	<b>Location: W-86-2021-Q4</b>	<b>Time Collected: 10/22/21 9:23</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-25 03:31:48 P	NONE	10/25/21 18:42	COL38196
	NH3 (env)	<0.100	PPM	10/25/21 18:42	COL38196
<b>True Temperature</b>	True_Temperature	4.30	DEG-C	10/22/21 15:04	COL38208
<b>86912</b>	<b>Location: W-92-2021-Q4</b>	<b>Time Collected: 10/22/21 12:01</b>	<b>Preservative:</b>	<b>H2SO4</b>	
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-10-25 03:33:41 P	NONE	10/25/21 18:43	COL38196
	NH3 (env)	4.39	PPM	10/25/21 18:43	COL38196

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Candice Singletary

**Laboratory Approval**

Approver: Krista Ward  
10/26/2021 7:07:18AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-22-21</b>
Well Samples for Ammonia			Review Date 10/26/2021 7:07:18AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	12.5000	PPM	10/25/21 18:44	COL38196
	RPD	1.59	PCT	10/25/21 18:44	COL38196
	Spike Dup Recovery	81	PCT	10/25/21 18:44	COL38196
	Spike Meter Readout	12.7000	PPM	10/25/21 18:44	COL38196
	Spike Recovery	83	PCT	10/25/21 18:44	COL38196
<b>True Temperature</b>	True_Temperature	4.30	DEG-C	10/22/21 15:04	COL38208
<hr/>					
<b>87199</b>	<b>Location: W-3A-2021-Q4</b>	<b>Time Collected: 10/25/21 9:57</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-07 01:47:00 PI	NONE	11/7/21 14:28	COL35793
	NH3 (env)	<0.100	PPM	11/7/21 14:28	COL35793
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<hr/>					
<b>87200</b>	<b>Location: W-4R-2021-Q4</b>	<b>Time Collected: 10/25/21 9:03</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-07 01:52:00 PI	NONE	11/7/21 14:29	COL35793
	NH3 (env)	<0.100	PPM	11/7/21 14:29	COL35793
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<hr/>					
<b>87201</b>	<b>Location: W-96-2021-Q4</b>	<b>Time Collected: 10/25/21 8:55</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-07 01:54:00 PI	NONE	11/7/21 14:30	COL35793
	NH3 (env)	0.241	PPM	11/7/21 14:30	COL35793
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<hr/>					
<b>87202</b>	<b>Location: W-97-2021-Q4</b>	<b>Time Collected: 10/25/21 13:50</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-07 01:56:00 PI	NONE	11/7/21 14:32	COL35793
	NH3 (env)	7.35	PPM	11/7/21 14:31	COL35793
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<hr/>					
<b>87203</b>	<b>Location: W-104-2021-Q</b>	<b>Time Collected: 10/25/21 11:46</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-07 01:58:00 PI	NONE	11/7/21 14:34	COL35793
	NH3 (env)	1.45	PPM	11/7/21 14:34	COL35793
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
11/8/2021 7:25:06AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-25-21</b>
Well Samples for Ammonia			Review Date 11/8/2021 7:25:06AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>87204</b>	<b>Location: W-105-2021-Q</b>	<b>Time Collected: 10/25/21 11:26</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-07 02:00:00 PI	NONE	11/7/21 14:34	COL35793
	NH3 (env)	0.721	PPM	11/7/21 14:34	COL35793
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87205</b>	<b>Location: W-108-2021-Q</b>	<b>Time Collected: 10/25/21 13:20</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-07 02:02:00 PI	NONE	11/7/21 14:35	COL35793
	NH3 (env)	0.158	PPM	11/7/21 14:34	COL35793
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87206</b>	<b>Location: W-124-2021-Q</b>	<b>Time Collected: 10/25/21 12:55</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-07 02:04:00 PI	NONE	11/7/21 14:35	COL35793
	NH3 (env)	0.173	PPM	11/7/21 14:34	COL35793
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87207</b>	<b>Location: W-125-2021-Q</b>	<b>Time Collected: 10/25/21 12:15</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-07 02:06:00 PI	NONE	11/7/21 14:35	COL35793
	NH3 (env)	5.42	PPM	11/7/21 14:34	COL35793
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	15.4000	PPM	11/7/21 14:37	COL35793
	RPD	0.00	PCT	11/7/21 14:37	COL35793
	Spike Dup Recovery	100	PCT	11/7/21 14:37	COL35793
	Spike Meter Readout	15.4000	PPM	11/7/21 14:37	COL35793
	Spike Recovery	100	PCT	11/7/21 14:37	COL35793
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87208</b>	<b>Location: W-126-2021-Q</b>	<b>Time Collected: 10/25/21 10:16</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-08 01:02:00 PI	NONE	11/8/21 14:13	COL36695
	NH3 (env)	2.90	PPM	11/8/21 14:12	COL36695
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	12.6000	PPM	11/8/21 14:14	COL36695
	RPD	3.89	PCT	11/8/21 14:14	COL36695
	Spike Dup Recovery	97	PCT	11/8/21 14:14	COL36695
	Spike Meter Readout	13.1000	PPM	11/8/21 14:13	COL36695

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
11/8/2021 3:34:55PM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS_AMMONIA-10-25-21
Well Samples for Ammonia			Review Date 11/8/2021 3:34:55PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
	Spike Recovery	102	PCT	11/8/21 14:13	COL36695
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87209</b>	<b>Location: W-3A_MS-202</b>	<b>Time Collected: 10/25/21 9:57</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-08 01:05:00 P	NONE	11/8/21 14:16	COL36695
	NH3 (env)	1.89	PPM	11/8/21 14:16	COL36695
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87210</b>	<b>Location: W-3A_MSD-2f</b>	<b>Time Collected: 10/25/21 9:57</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-08 01:08:05 P	NONE	11/8/21 14:18	COL36695
	NH3 (env)	0.112	PPM	11/8/21 14:18	COL36695
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87211</b>	<b>Location: W-96_MS-202</b>	<b>Time Collected: 10/25/21 8:55</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-08 01:10:47 P	NONE	11/8/21 14:19	COL36695
	NH3 (env)	0.251	PPM	11/8/21 14:18	COL36695
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87212</b>	<b>Location: W-96_MSD-20</b>	<b>Time Collected: 10/25/21 8:55</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-08 01:13:43 P	NONE	11/8/21 14:19	COL36695
	NH3 (env)	0.269	PPM	11/8/21 14:19	COL36695
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87213</b>	<b>Location: W-97_DUP-20</b>	<b>Time Collected: 10/25/21 13:15</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-08 01:16:18 P	NONE	11/8/21 14:20	COL36695
	NH3 (env)	6.65	PPM	11/8/21 14:20	COL36695
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	16.2000	PPM	11/8/21 14:20	COL36695
	RPD	3.13	PCT	11/8/21 14:20	COL36695
	Spike Dup Recovery	96	PCT	11/8/21 14:20	COL36695
	Spike Meter Readout	15.7000	PPM	11/8/21 14:20	COL36695
	Spike Recovery	91	PCT	11/8/21 14:20	COL36695
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
11/8/2021 3:34:55PM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS_AMMONIA-10-25-21
Well Samples for Ammonia			Review Date 11/8/2021 3:35:20PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>87214</b>	<b>Location: W-108_DUP-2</b>	<b>Time Collected: 10/25/21 13:20</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-08 01:19:49 P	NONE	11/8/21 14:21	COL36695
	NH3 (env)	0.148	PPM	11/8/21 14:21	COL36695
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87744</b>	<b>Location: W-20-2021-Q4</b>	<b>Time Collected: 10/26/21 11:03</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-09 02:25:00 A	NONE	11/9/21 6:46	COL37492
	NH3 (env)	<0.100	PPM	11/9/21 6:44	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87745</b>	<b>Location: W-25-2021-Q4</b>	<b>Time Collected: 10/26/21 12:09</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-09 02:54:00 A	NONE	11/9/21 6:47	COL37492
	NH3 (env)	0.249	PPM	11/9/21 6:44	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87746</b>	<b>Location: W-94-2021-Q4</b>	<b>Time Collected: 10/26/21 10:24</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-09 02:59:00 A	NONE	11/9/21 6:47	COL37492
	NH3 (env)	0.275	PPM	11/9/21 6:44	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87747</b>	<b>Location: W-95-2021-Q4</b>	<b>Time Collected: 10/26/21 11:13</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-09 03:02:00 A	NONE	11/9/21 6:47	COL37492
	NH3 (env)	0.203	PPM	11/9/21 6:44	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87748</b>	<b>Location: W-107-2021-Q</b>	<b>Time Collected: 10/26/21 12:55</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-09 03:05:00 A	NONE	11/9/21 6:47	COL37492
	NH3 (env)	0.334	PPM	11/9/21 6:44	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87749</b>	<b>Location: W-109-2021-Q</b>	<b>Time Collected: 10/26/21 9:57</b>	<b>Preservative: H2SO4</b>		

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
11/9/2021 8:58:43AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS_AMMONIA-10-26-21</b>
Well Samples for Ammonia			Review Date 11/9/2021 8:58:43AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-09 03:09:00 A	NONE	11/9/21 6:47	COL37492
	NH3 (env)	<0.100	PPM	11/9/21 6:44	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87750</b>	<b>Location: W-110-2021-Q</b>	<b>Time Collected: 10/26/21 13:23</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-09 03:13:00 A	NONE	11/9/21 6:47	COL37492
	NH3 (env)	<0.100	PPM	11/9/21 6:44	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87751</b>	<b>Location: W-111-2021-Q</b>	<b>Time Collected: 10/26/21 11:59</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-09 03:17:00 A	NONE	11/9/21 6:48	COL37492
	NH3 (env)	<0.100	PPM	11/9/21 6:44	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87752</b>	<b>Location: W-112-2021-Q</b>	<b>Time Collected: 10/26/21 9:30</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-09 03:21:00 A	NONE	11/9/21 6:46	COL37492
	NH3 (env)	0.809	PPM	11/9/21 6:44	COL37492
<b>NH3-N Spk Dup</b>	Dup Spike Meter Readout	10.1000	PPM	11/9/21 6:44	COL37492
	RPD	0.00	PCT	11/9/21 6:44	COL37492
	Spike Dup Recovery	93	PCT	11/9/21 6:44	COL37492
	Spike Meter Readout	10.1000	PPM	11/9/21 6:44	COL37492
	Spike Recovery	93	PCT	11/9/21 6:44	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87753</b>	<b>Location: BLANK-EB-01</b>	<b>Time Collected: 10/26/21 13:44</b>	<b>Preservative: H2SO4</b>		
<b>Ammonia-Nitrogen</b>	Analysis Time (environ)	2021-11-09 03:30:00 A	NONE	11/9/21 6:48	COL37492
	NH3 (env)	<0.100	PPM	11/9/21 6:44	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
11/9/2021 8:58:43AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-05-21</b>
Well Samples for Fluoride			Review Date 10/11/2021 2:27:06PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>80165</b>	<b>Location: W-7A-2021-Q4</b>	<b>Time Collected: 10/5/21 0:15</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-11 02:40:00 A	NONE	10/11/21 3:55	COL37492
	F (env)	7.180	PPM	10/11/21 3:54	COL37492
<b>True Temperature</b>	True_Temperature	2.60	DEG-C	10/6/21 6:57	COL1815
<b>80166</b>	<b>Location: W-10-2021-Q4</b>	<b>Time Collected: 10/5/21 13:19</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-11 02:45:00 A	NONE	10/11/21 3:55	COL37492
	F (env)	4.090	PPM	10/11/21 3:54	COL37492
<b>True Temperature</b>	True_Temperature	2.60	DEG-C	10/6/21 6:58	COL1815
<b>80167</b>	<b>Location: W-11-2021-Q4</b>	<b>Time Collected: 1/5/21 22:51</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-11 02:49:00 A	NONE	10/11/21 3:55	COL37492
	F (env)	<0.100	PPM	10/11/21 3:54	COL37492
<b>True Temperature</b>	True_Temperature	2.60	DEG-C	10/6/21 6:58	COL1815
<b>80168</b>	<b>Location: W-13R-2021-C</b>	<b>Time Collected: 10/5/21 10:51</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-11 02:52:00 A	NONE	10/11/21 3:55	COL37492
	F (env)	10.800	PPM	10/11/21 3:54	COL37492
<b>Fluoride Spk Dup</b>	F Spike #1	14.700	PPM	10/11/21 3:57	COL37492
	F Spike #1 Recovery	97.5	PCT	10/11/21 3:57	COL37492
	F Spike #2 Recovery	97.5	PCT	10/11/21 3:57	COL37492
	F spike #2	14.700	PPM	10/11/21 3:57	COL37492
	RPD	0	PCT	10/11/21 3:57	COL37492
<b>True Temperature</b>	True_Temperature	2.60	DEG-C	10/6/21 6:58	COL1815
<b>80169</b>	<b>Location: W-32-2021-Q4</b>	<b>Time Collected: 10/5/21 11:53</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-11 02:55:00 A	NONE	10/11/21 3:55	COL37492
	F (env)	5.010	PPM	10/11/21 3:54	COL37492
<b>True Temperature</b>	True_Temperature	2.60	DEG-C	10/6/21 6:58	COL1815
<b>80170</b>	<b>Location: W-123-2021-Q</b>	<b>Time Collected: 10/5/21 12:02</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-11 02:59:00 A	NONE	10/11/21 3:55	COL37492

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Stevenson Campbell

**Laboratory Approval**

Approver: Krista Ward  
10/11/2021 2:27:06PM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS-10-05-21
Well Samples for Fluoride			Review Date 10/11/2021 2:27:06PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
	F (env)	8.130	PPM	10/11/21 3:54	COL37492
<b>True Temperature</b>	True_Temperature	2.60	DEG-C	10/6/21 6:58	COL1815
<b>80998 Location: W-28-2021-Q4 Time Collected: 10/6/21 11:58</b>					
<b>Fluoride</b>	Analysis Time (enviro)	2021-01-15 02:00:00 A	NONE	10/15/21 7:35	COL30023
	F (env)	8.110	PPM	10/15/21 7:29	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196
<b>80999 Location: W-38-2021-Q4 Time Collected: 10/7/21 14:22</b>					
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-15 02:05:00 A	NONE	10/15/21 7:36	COL30023
	F (env)	0.501	PPM	10/15/21 7:29	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196
<b>81000 Location: W-57-2021-Q4 Time Collected: 10/7/21 14:39</b>					
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-15 02:10:53 A	NONE	10/15/21 7:35	COL30023
	F (env)	0.107	PPM	10/15/21 7:29	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196
<b>81001 Location: W-76-2021-Q4 Time Collected: 10/7/21 13:06</b>					
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-15 02:14:00 A	NONE	10/15/21 7:38	COL30023
	F (env)	2.660	PPM	10/15/21 7:29	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196
<b>81002 Location: W-77-2021-Q4 Time Collected: 10/6/21 10:45</b>					
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-15 02:19:00 A	NONE	10/15/21 7:38	COL30023
	F (env)	14.800	PPM	10/15/21 7:29	COL30023
<b>Fluoride Spk Dup</b>	F Spike #1	17.900	PPM	10/15/21 8:00	COL30023
	F Spike #1 Recovery	77.5	PCT	10/15/21 8:00	COL30023
	F Spike #2 Recovery	102.5	PCT	10/15/21 8:00	COL30023
	F spike #2	18.900	PPM	10/15/21 8:00	COL30023
	RPD	28	PCT	10/15/21 8:00	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
10/20/2021 8:32:48AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-07-21</b>
Well Samples for Fluoride			Review Date 10/20/2021 8:32:48AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>81003</b>	<b>Location: W-78-2021-Q4</b>	<b>Time Collected: 10/6/21 13:00</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-15 02:24:00 A	NONE	10/15/21 7:39	COL30023
	F (env)	13.600	PPM	10/15/21 7:29	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196
<b>81004</b>	<b>Location: W-79-2021-Q4</b>	<b>Time Collected: 10/6/21 14:12</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-15 02:30:00 A	NONE	10/15/21 7:41	COL30023
	F (env)	0.978	PPM	10/15/21 7:29	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196
<b>81005</b>	<b>Location: W-80-2021-Q4</b>	<b>Time Collected: 10/7/21 13:31</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-15 04:00:00 A	NONE	10/15/21 7:42	COL30023
	F (env)	0.282	PPM	10/15/21 7:30	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196
<b>81006</b>	<b>Location: W-81-2021-Q4</b>	<b>Time Collected: 10/7/21 11:44</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-15 04:05:00 A	NONE	10/15/21 7:42	COL30023
	F (env)	<0.100	PPM	10/15/21 7:30	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196
<b>81007</b>	<b>Location: W-82-2021-Q4</b>	<b>Time Collected: 10/7/21 9:54</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-15 04:10:00 A	NONE	10/15/21 7:45	COL30023
	F (env)	<0.100	PPM	10/15/21 7:30	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196
<b>81008</b>	<b>Location: W-83-2021-Q4</b>	<b>Time Collected: 10/7/21 11:09</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-15 04:15:00 A	NONE	10/15/21 7:56	COL30023
	F (env)	0.115	PPM	10/15/21 7:30	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196
<b>81009</b>	<b>Location: W-84-2021-Q4</b>	<b>Time Collected: 10/7/21 9:06</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-15 04:19:00 A	NONE	10/15/21 7:57	COL30023

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
10/20/2021 8:32:49AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS-10-07-21
Well Samples for Fluoride			Review Date 10/20/2021 8:32:49AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
	F (env)	<0.100	PPM	10/15/21 7:30	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196
<b>81010</b>	<b>Location: W-93-2021-Q4</b>	<b>Time Collected: 10/7/21 9:49</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-15 04:23:00 A	NONE	10/15/21 7:58	COL30023
	F (env)	<0.100	PPM	10/15/21 7:30	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196
<b>81011</b>	<b>Location: W-81_DUP-20</b>	<b>Time Collected: 10/7/21 11:44</b>	<b>Preservative: H2SO4</b>		
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-15 04:27:00 A	NONE	10/15/21 7:58	COL30023
	F (env)	<0.100	PPM	10/15/21 7:30	COL30023
<b>True Temperature</b>	True_Temperature	3.50	DEG-C	10/7/21 17:26	COL38196
<b>81432</b>	<b>Location: W-6-2021-Q4</b>	<b>Time Collected: 10/8/21 10:28</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-19 04:05:31 A	NONE	10/19/21 6:26	COL37313
	F (env)	0.233	PPM	10/19/21 6:24	COL37313
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:23	COL38196
<b>81433</b>	<b>Location: W-18R-2021-C</b>	<b>Time Collected: 10/8/21 11:50</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-19 04:10:43 A	NONE	10/19/21 6:26	COL37313
	F (env)	6.760	PPM	10/19/21 6:24	COL37313
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:23	COL38196
<b>81434</b>	<b>Location: W-22-2021-Q4</b>	<b>Time Collected: 10/8/21 9:34</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-19 04:15:02 A	NONE	10/19/21 6:27	COL37313
	F (env)	5.610	PPM	10/19/21 6:25	COL37313
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:23	COL38196
<b>81435</b>	<b>Location: W-29-2021-Q4</b>	<b>Time Collected: 10/8/21 9:05</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-19 04:15:11 A	NONE	10/19/21 6:27	COL37313
	F (env)	4.570	PPM	10/19/21 6:25	COL37313
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:23	COL38196

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
10/20/2021 8:40:05AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-08-21</b>
Well Samples for Fluoride			Review Date 10/20/2021 8:40:05AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>81436</b>	<b>Location: W-30-2021-Q4</b>	<b>Time Collected: 10/8/21 12:55</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-19 04:20:21 A	NONE	10/19/21 6:27	COL37313
	F (env)	14.300	PPM	10/19/21 6:25	COL37313
<b>Fluoride Spk Dup</b>	F Spike #1	18.800	PPM	10/19/21 6:30	COL37313
	F Spike #1 Recovery	112.5	PCT	10/19/21 6:30	COL37313
	F Spike #2 Recovery	117.5	PCT	10/19/21 6:31	COL37313
	F spike #2	19.000	PPM	10/19/21 6:31	COL37313
	RPD	4	PCT	10/19/21 6:31	COL37313
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:23	COL38196
<b>81437</b>	<b>Location: W-73-2021-Q4</b>	<b>Time Collected: 10/8/21 13:30</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-19 04:25:32 A	NONE	10/19/21 6:27	COL37313
	F (env)	<0.100	PPM	10/19/21 6:25	COL37313
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:23	COL38196
<b>81438</b>	<b>Location: W-102-2021-Q</b>	<b>Time Collected: 10/8/21 11:07</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-19 04:30:43 A	NONE	10/19/21 6:27	COL37313
	F (env)	3.740	PPM	10/19/21 6:25	COL37313
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:23	COL38196
<b>81443</b>	<b>Location: W-29_MS-202</b>	<b>Time Collected: 10/8/21 9:05</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-19 04:30:56 A	NONE	10/19/21 6:28	COL37313
	F (env)	4.650	PPM	10/19/21 6:26	COL37313
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:25	COL38196
<b>81444</b>	<b>Location: W-29_MSD-20</b>	<b>Time Collected: 10/8/21 9:05</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-19 04:34:07 A	NONE	10/19/21 6:28	COL37313
	F (env)	4.540	PPM	10/19/21 6:26	COL37313
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:25	COL38196
<b>81445</b>	<b>Location: BLANK-01-10</b>	<b>Time Collected: 10/8/21 10:12</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-19 04:40:17 A	NONE	10/19/21 6:28	COL37313

*Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.*

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
10/20/2021 8:40:05AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS-10-08-21
Well Samples for Fluoride			Review Date 10/20/2021 8:40:05AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
	F (env)	<0.100	PPM	10/19/21 6:26	COL37313
<b>True Temperature</b>	True_Temperature	5.20	DEG-C	10/8/21 15:25	COL38196
<b>82546 Location: W-37-2021-Q4 Time Collected: 10/11/21 13:07</b>					
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-18 05:30:47 P	NONE	10/18/21 18:10	COL38195
	F (env)	<0.100	PPM	10/18/21 18:21	COL38195
<b>True Temperature</b>	True_Temperature	4.50	DEG-C	10/11/21 16:35	COL38196
<b>82547 Location: W-55-2021-Q4 Time Collected: 10/11/21 12:16</b>					
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-18 05:34:10 P	NONE	10/18/21 18:10	COL38195
	F (env)	<0.100	PPM	10/18/21 18:21	COL38195
<b>True Temperature</b>	True_Temperature	4.50	DEG-C	10/11/21 16:35	COL38196
<b>82548 Location: W-56-2021-Q4 Time Collected: 10/11/21 14:18</b>					
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-18 05:37:35 P	NONE	10/18/21 18:10	COL38195
	F (env)	0.297	PPM	10/18/21 18:21	COL38195
<b>True Temperature</b>	True_Temperature	4.50	DEG-C	10/11/21 16:35	COL38196
<b>82549 Location: W-58-2021-Q4 Time Collected: 10/11/21 9:11</b>					
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-18 05:41:50 P	NONE	10/18/21 18:11	COL38195
	F (env)	<0.100	PPM	10/18/21 18:21	COL38195
<b>True Temperature</b>	True_Temperature	4.50	DEG-C	10/11/21 16:35	COL38196
<b>82550 Location: W-59-2021-Q4 Time Collected: 10/11/21 11:18</b>					
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-18 05:45:07 P	NONE	10/18/21 18:11	COL38195
	F (env)	2.900	PPM	10/18/21 18:21	COL38195
<b>Fluoride Spk Dup</b>	F Spike #1	6.970	PPM	10/18/21 18:11	COL38195
	F Spike #1 Recovery	101.8	PCT	10/18/21 18:21	COL38195
	F Spike #2 Recovery	89.0	PCT	10/18/21 18:21	COL38195
	F spike #2	6.460	PPM	10/18/21 18:18	COL38195
	RPD	13	PCT	10/18/21 18:21	COL38195
<b>True Temperature</b>	True_Temperature	4.50	DEG-C	10/11/21 16:35	COL38196

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
10/19/2021 9:39:33AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-11-21</b>
Well Samples for Fluoride			Review Date 10/19/2021 9:39:33AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>83038</b>	<b>Location: W-17-2021-Q4</b>	<b>Time Collected: 10/12/21 12:58</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 01:02:27 A	NONE	10/20/21 3:48	COL37313
	F (env)	1.900	PPM	10/20/21 3:46	COL37313
<b>Fluoride Spk Dup</b>	F Spike #1	5.390	PPM	10/20/21 3:52	COL37313
	F Spike #1 Recovery	87.3	PCT	10/20/21 3:52	COL37313
	F Spike #2 Recovery	88.3	PCT	10/20/21 3:52	COL37313
	F spike #2	5.430	PPM	10/20/21 3:52	COL37313
	RPD	1	PCT	10/20/21 3:52	COL37313
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:45	COL38196
<b>83039</b>	<b>Location: W-40-2021-Q4</b>	<b>Time Collected: 10/12/21 9:20</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 01:00:45 A	NONE	10/20/21 3:48	COL37313
	F (env)	0.141	PPM	10/20/21 3:47	COL37313
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:45	COL38196
<b>83040</b>	<b>Location: W-50-2021-Q4</b>	<b>Time Collected: 10/12/21 10:45</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 01:10:14 A	NONE	10/20/21 3:49	COL37313
	F (env)	<0.100	PPM	10/20/21 3:47	COL37313
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:45	COL38196
<b>83041</b>	<b>Location: W-53-2021-Q4</b>	<b>Time Collected: 10/12/21 14:26</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 01:12:24 A	NONE	10/20/21 3:49	COL37313
	F (env)	<0.100	PPM	10/20/21 3:47	COL37313
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:45	COL38196
<b>83042</b>	<b>Location: W-54-2021-Q4</b>	<b>Time Collected: 10/12/21 12:49</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 01:14:35 A	NONE	10/20/21 3:49	COL37313
	F (env)	0.137	PPM	10/20/21 3:47	COL37313
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:45	COL38196
<b>83043</b>	<b>Location: W-72-2021-Q4</b>	<b>Time Collected: 10/12/21 11:33</b>			

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
10/20/2021 8:58:17AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-12-21</b>
Well Samples for Fluoride			Review Date 10/20/2021 8:58:17AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 01:16:43 A	NONE	10/20/21 3:49	COL37313
	F (env)	0.406	PPM	10/20/21 3:48	COL37313
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:45	COL38196
<b>83044</b>	<b>Location: W-74-2021-Q4</b>	<b>Time Collected: 10/12/21 9:49</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 01:23:51 A	NONE	10/20/21 3:49	COL37313
	F (env)	<0.100	PPM	10/20/21 3:48	COL37313
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:45	COL38196
<b>83045</b>	<b>Location: W-75-2021-Q4</b>	<b>Time Collected: 10/12/21 8:51</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 01:25:02 A	NONE	10/20/21 3:50	COL37313
	F (env)	0.116	PPM	10/20/21 3:48	COL37313
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:45	COL38196
<b>83049</b>	<b>Location: W-17_MS-202</b>	<b>Time Collected: 10/12/21 12:58</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 01:27:14 A	NONE	10/20/21 3:50	COL37313
	F (env)	1.840	PPM	10/20/21 3:48	COL37313
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:49	COL38196
<b>83050</b>	<b>Location: W-17_MSD-20</b>	<b>Time Collected: 10/12/21 12:58</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 01:30:26 A	NONE	10/20/21 3:50	COL37313
	F (env)	1.890	PPM	10/20/21 3:48	COL37313
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:49	COL38196
<b>83051</b>	<b>Location: W-74_DUP-20</b>	<b>Time Collected: 10/12/21 9:49</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 01:35:38 A	NONE	10/20/21 3:50	COL37313
	F (env)	<0.100	PPM	10/20/21 3:48	COL37313
<b>True Temperature</b>	True_Temperature	4.00	DEG-C	10/12/21 16:49	COL38196
<b>83826</b>	<b>Location: W-36-2021-Q4</b>	<b>Time Collected: 10/13/21 9:55</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 11:27:02 A	NONE	10/20/21 15:24	COL38196
	F (env)	<0.100	PPM	10/20/21 15:23	COL38196

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Clifton Harris

**Laboratory Approval**

Approver: Krista Ward  
10/21/2021 10:15:57AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-14-21</b>
Well Samples for Fluoride			Review Date 10/21/2021 10:15:57AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>True Temperature</b>	True_Temperature	2.80	DEG-C	10/14/21 7:11	COL30023
<b>83827</b>	<b>Location: W-51-2021-Q4</b>	<b>Time Collected: 10/13/21 14:50</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 11:29:45 A	NONE	10/20/21 15:26	COL38196
	F (env)	0.224	PPM	10/20/21 15:26	COL38196
<b>True Temperature</b>	True_Temperature	2.80	DEG-C	10/14/21 7:11	COL30023
<b>83828</b>	<b>Location: W-52-2021-Q4</b>	<b>Time Collected: 10/13/21 13:55</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 11:32:50 A	NONE	10/20/21 15:27	COL38196
	F (env)	1.540	PPM	10/20/21 15:27	COL38196
<b>Fluoride Spk Dup</b>	F Spike #1	5.170	PPM	10/20/21 15:28	COL38196
	F Spike #1 Recovery	90.8	PCT	10/20/21 15:28	COL38196
	F Spike #2 Recovery	90.8	PCT	10/20/21 15:28	COL38196
	F spike #2	5.170	PPM	10/20/21 15:28	COL38196
	RPD	0	PCT	10/20/21 15:28	COL38196
<b>True Temperature</b>	True_Temperature	2.80	DEG-C	10/14/21 7:11	COL30023
<b>83829</b>	<b>Location: W-87-2021-Q4</b>	<b>Time Collected: 10/13/21 12:25</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 11:40:04 A	NONE	10/20/21 15:31	COL38196
	F (env)	0.117	PPM	10/20/21 15:30	COL38196
<b>True Temperature</b>	True_Temperature	2.80	DEG-C	10/14/21 7:11	COL30023
<b>83830</b>	<b>Location: W-122-2021-Q</b>	<b>Time Collected: 10/13/21 10:56</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 11:42:13 A	NONE	10/20/21 15:33	COL38196
	F (env)	<0.100	PPM	10/20/21 15:32	COL38196
<b>True Temperature</b>	True_Temperature	2.80	DEG-C	10/14/21 7:11	COL30023
<b>84071</b>	<b>Location: RW-1-2021-Q4</b>	<b>Time Collected: 10/14/21 9:46</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 08:37:08 P	NONE	10/20/21 22:24	COL37313
	F (env)	<0.100	PPM	10/20/21 22:23	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84072</b>	<b>Location: W-33-2021-Q4</b>	<b>Time Collected: 10/14/21 14:51</b>			

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Laurie Harvey

**Laboratory Approval**

Approver: Krista Ward  
10/21/2021 11:10:32AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS-10-14-21
Well Samples for Fluoride			Review Date 10/21/2021 11:10:32AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 08:45:20 P	NONE	10/20/21 22:24	COL37313
	F (env)	<0.100	PPM	10/20/21 22:23	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84073</b>	<b>Location: W-35-2021-Q4</b>	<b>Time Collected: 10/14/21 13:23</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 08:55:27 P	NONE	10/20/21 22:24	COL37313
	F (env)	<0.100	PPM	10/20/21 22:23	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84074</b>	<b>Location: W-45-2021-Q4</b>	<b>Time Collected: 10/14/21 11:11</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 09:00:36 P	NONE	10/20/21 22:24	COL37313
	F (env)	0.386	PPM	10/20/21 22:23	COL37313
<b>Fluoride Spk Dup</b>	F Spike #1	3.840	PPM	10/20/21 22:26	COL37313
	F Spike #1 Recovery	86.4	PCT	10/20/21 22:26	COL37313
	F Spike #2 Recovery	87.1	PCT	10/20/21 22:26	COL37313
	F spike #2	3.870	PPM	10/20/21 22:26	COL37313
	RPD	1	PCT	10/20/21 22:26	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84075</b>	<b>Location: W-115-2021-Q</b>	<b>Time Collected: 10/14/21 10:24</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 09:05:58 P	NONE	10/20/21 22:25	COL37313
	F (env)	<0.100	PPM	10/20/21 22:23	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84076</b>	<b>Location: W-116-2021-Q</b>	<b>Time Collected: 10/14/21 11:59</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 09:07:05 P	NONE	10/20/21 22:25	COL37313
	F (env)	<0.100	PPM	10/20/21 22:23	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84077</b>	<b>Location: W-117-2021-Q</b>	<b>Time Collected: 10/14/21 14:25</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 09:10:14 P	NONE	10/20/21 22:25	COL37313
	F (env)	<0.100	PPM	10/20/21 22:23	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Laurie Harvey

**Laboratory Approval**

Approver: Krista Ward  
10/21/2021 11:10:32AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS-10-14-21
Well Samples for Fluoride			Review Date 10/21/2021 11:10:32AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>84078</b>	<b>Location: W-118-2021-Q</b>	<b>Time Collected: 10/14/21 13:00</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 09:12:22 P	NONE	10/20/21 22:25	COL37313
	F (env)	<0.100	PPM	10/20/21 22:23	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84079</b>	<b>Location: BLANK-01-10</b>	<b>Time Collected: 10/14/21 11:39</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-20 09:15:32 P	NONE	10/20/21 22:25	COL37313
	F (env)	<0.100	PPM	10/20/21 22:24	COL37313
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/14/21 16:45	COL35793
<b>84580</b>	<b>Location: W-60-2021-Q4</b>	<b>Time Collected: 10/15/21 11:34</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-21 02:40:00 A	NONE	10/21/21 6:12	COL37492
	F (env)	<0.100	PPM	10/21/21 6:11	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84581</b>	<b>Location: W-61-2021-Q4</b>	<b>Time Collected: 10/15/21 12:40</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-21 02:45:00 A	NONE	10/21/21 6:12	COL37492
	F (env)	<0.100	PPM	10/21/21 6:11	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84582</b>	<b>Location: W-99-2021-Q4</b>	<b>Time Collected: 10/15/21 13:00</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-21 02:50:00 A	NONE	10/21/21 6:12	COL37492
	F (env)	2.960	PPM	10/21/21 6:11	COL37492
<b>Fluoride Spk Dup</b>	F Spike #1	6.750	PPM	10/21/21 6:14	COL37492
	F Spike #1 Recovery	94.8	PCT	10/21/21 6:14	COL37492
	F Spike #2 Recovery	94.3	PCT	10/21/21 6:14	COL37492
	F spike #2	6.730	PPM	10/21/21 6:14	COL37492
	RPD	1	PCT	10/21/21 6:14	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84583</b>	<b>Location: W-100-2021-G</b>	<b>Time Collected: 10/15/21 12:03</b>			

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Laurie Harvey

**Laboratory Approval**

Approver: Krista Ward  
10/21/2021 11:12:55AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-15-21</b>
Well Samples for Fluoride			Review Date 10/21/2021 11:12:55AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-21 02:55:00 A	NONE	10/21/21 6:12	COL37492
	F (env)	1.910	PPM	10/21/21 6:11	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84584</b>	<b>Location: W-113-2021-Q</b>	<b>Time Collected: 10/15/21 9:12</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-21 03:06:00 A	NONE	10/21/21 6:12	COL37492
	F (env)	0.181	PPM	10/21/21 6:11	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84585</b>	<b>Location: W-114-2021-Q</b>	<b>Time Collected: 10/15/21 10:36</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-21 03:11:00 A	NONE	10/21/21 6:12	COL37492
	F (env)	0.247	PPM	10/21/21 6:11	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84586</b>	<b>Location: W-120-2021-Q</b>	<b>Time Collected: 10/15/21 9:32</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-21 03:15:00 A	NONE	10/21/21 6:12	COL37492
	F (env)	<0.100	PPM	10/21/21 6:11	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>84587</b>	<b>Location: W-121-2021-Q</b>	<b>Time Collected: 10/15/21 10:34</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-21 03:27:00 A	NONE	10/21/21 6:12	COL37492
	F (env)	<0.100	PPM	10/21/21 6:11	COL37492
<b>True Temperature</b>	True_Temperature	5.30	DEG-C	10/15/21 15:18	COL35793
<b>85547</b>	<b>Location: W-14-2021-Q4</b>	<b>Time Collected: 10/18/21 13:30</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 12:18:00 P	NONE	10/22/21 14:32	COL38195
	F (env)	<0.100	PPM	10/22/21 14:29	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85548</b>	<b>Location: W-23R-2021-C</b>	<b>Time Collected: 10/18/21 10:29</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 12:21:00 P	NONE	10/22/21 14:32	COL38195
	F (env)	<0.100	PPM	10/22/21 14:29	COL38195

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Shannon McCoy

**Laboratory Approval**

Approver: Krista Ward  
10/22/2021 2:52:16PM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-18-21</b>
Well Samples for Fluoride			Review Date 10/22/2021 2:52:16PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85549</b>	<b>Location: W-39-2021-Q4</b>	<b>Time Collected: 10/18/21 12:03</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 12:25:00 P	NONE	10/22/21 14:32	COL38195
	F (env)	<0.100	PPM	10/22/21 14:29	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85550</b>	<b>Location: W-43-2021-Q4</b>	<b>Time Collected: 10/18/21 13:02</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 12:28:02 P	NONE	10/22/21 14:33	COL38195
	F (env)	<0.100	PPM	10/22/21 14:29	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85551</b>	<b>Location: W-44-2021-Q4</b>	<b>Time Collected: 10/18/21 14:23</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 12:31:17 P	NONE	10/22/21 14:33	COL38195
	F (env)	<0.100	PPM	10/22/21 14:29	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85552</b>	<b>Location: W-65-2021-Q4</b>	<b>Time Collected: 10/18/21 9:38</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 12:35:31 P	NONE	10/22/21 14:33	COL38195
	F (env)	0.138	PPM	10/22/21 14:30	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85553</b>	<b>Location: W-66-2021-Q4</b>	<b>Time Collected: 10/18/21 10:40</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 12:38:45 P	NONE	10/22/21 14:33	COL38195
	F (env)	<0.100	PPM	10/22/21 14:30	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85554</b>	<b>Location: W-67-2021-Q4</b>	<b>Time Collected: 10/18/21 11:24</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 12:41:58 P	NONE	10/22/21 14:34	COL38195
	F (env)	<0.100	PPM	10/22/21 14:30	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85555</b>	<b>Location: W-103-2021-Q</b>	<b>Time Collected: 10/18/21 12:27</b>			

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Shannon McCoy

**Laboratory Approval**

Approver: Krista Ward  
10/22/2021 2:52:16PM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS-10-18-21
Well Samples for Fluoride			Review Date 10/22/2021 2:52:16PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 12:44:12 P	NONE	10/22/21 14:34	COL38195
	F (env)	<0.100	PPM	10/22/21 14:30	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<hr/>					
<b>85556</b>	<b>Location: W-106-2021-Q</b>	<b>Time Collected: 10/18/21 14:33</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 12:47:28 P	NONE	10/22/21 14:34	COL38195
	F (env)	0.154	PPM	10/22/21 14:30	COL38195
<b>Fluoride Spk Dup</b>	F Spike #1	3.520	PPM	10/22/21 14:38	COL38195
	F Spike #1 Recovery	84.2	PCT	10/22/21 14:38	COL38195
	F Spike #2 Recovery	85.7	PCT	10/22/21 14:38	COL38195
	F spike #2	3.580	PPM	10/22/21 14:38	COL38195
	RPD	2	PCT	10/22/21 14:38	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<hr/>					
<b>85557</b>	<b>Location: W-119-2021-Q</b>	<b>Time Collected: 10/18/21 8:58</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 12:51:41 P	NONE	10/22/21 14:34	COL38195
	F (env)	<0.100	PPM	10/22/21 14:30	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<hr/>					
<b>85558</b>	<b>Location: BLANK-01-10</b>	<b>Time Collected: 10/18/21 13:25</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 12:54:52 P	NONE	10/22/21 14:35	COL38195
	F (env)	<0.100	PPM	10/22/21 14:30	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<hr/>					
<b>85559</b>	<b>Location: W-66_DUP-20</b>	<b>Time Collected: 10/18/21 10:40</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 12:25:11 P	NONE	10/22/21 14:35	COL38195
	F (env)	<0.100	PPM	10/22/21 14:30	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<hr/>					
<b>85560</b>	<b>Location: W-119_MS-20</b>	<b>Time Collected: 10/18/21 8:58</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 01:00:24 P	NONE	10/22/21 14:35	COL38195
	F (env)	<0.100	PPM	10/22/21 14:30	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195

*Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.*

**Chain of Custody**

Sampler: Randy Crews  
Released to: Shannon McCoy

**Laboratory Approval**

Approver: Krista Ward  
10/22/2021 2:52:16PM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS-10-18-21
Well Samples for Fluoride			Review Date 10/22/2021 2:52:16PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>85561</b>	<b>Location: W-119_MSD-2</b>	<b>Time Collected: 10/18/21 8:58</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 01:03:46 P	NONE	10/22/21 14:35	COL38195
	F (env)	<0.100	PPM	10/22/21 14:31	COL38195
<b>True Temperature</b>	True_Temperature	4.90	DEG-C	10/18/21 17:11	COL38195
<b>85974</b>	<b>Location: W-15-2021-Q4</b>	<b>Time Collected: 10/19/21 10:54</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 09:05:00 A	NONE	10/22/21 12:37	COL36695
	F (env)	2.120	PPM	10/22/21 12:37	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85975</b>	<b>Location: W-16-2021-Q4</b>	<b>Time Collected: 10/19/21 12:18</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 09:07:00 A	NONE	10/22/21 12:38	COL36695
	F (env)	7.350	PPM	10/22/21 12:38	COL36695
<b>Fluoride Spk Dup</b>	F Spike #1	11.400	PPM	10/22/21 12:39	COL36695
	F Spike #1 Recovery	101.3	PCT	10/22/21 12:39	COL36695
	F Spike #2 Recovery	98.8	PCT	10/22/21 12:40	COL36695
	F spike #2	11.300	PPM	10/22/21 12:40	COL36695
	RPD	2	PCT	10/22/21 12:40	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85976</b>	<b>Location: W-26-2021-Q4</b>	<b>Time Collected: 10/19/21 11:53</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 09:09:00 A	NONE	10/22/21 12:41	COL36695
	F (env)	1.440	PPM	10/22/21 12:40	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85977</b>	<b>Location: W-47-2021-Q4</b>	<b>Time Collected: 10/19/21 9:47</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 09:12:00 A	NONE	10/22/21 12:42	COL36695
	F (env)	3.970	PPM	10/22/21 12:41	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85978</b>	<b>Location: W-48-2021-Q4</b>	<b>Time Collected: 10/19/21 13:35</b>			

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Laurie Harvey

**Laboratory Approval**

Approver: Krista Ward  
10/22/2021 1:06:28PM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-19-21</b>
Well Samples for Fluoride			Review Date 10/22/2021 1:06:28PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 09:14:00 A	NONE	10/22/21 12:43	COL36695
	F (env)	0.310	PPM	10/22/21 12:42	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85979</b>	<b>Location: W-62-2021-Q4</b>	<b>Time Collected: 10/19/21 10:24</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 09:16:00 A	NONE	10/22/21 12:44	COL36695
	F (env)	<0.100	PPM	10/22/21 12:43	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85980</b>	<b>Location: W-63-2021-Q4</b>	<b>Time Collected: 10/19/21 13:23</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 09:18:00 A	NONE	10/22/21 12:46	COL36695
	F (env)	<0.100	PPM	10/22/21 12:46	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85981</b>	<b>Location: W-64-2021-Q4</b>	<b>Time Collected: 10/19/21 8:54</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 09:20:00 A	NONE	10/22/21 12:47	COL36695
	F (env)	3.640	PPM	10/22/21 12:47	COL36695
<b>Fluoride Spk Dup</b>	F Spike #1	7.380	PPM	10/22/21 12:48	COL36695
	F Spike #1 Recovery	93.5	PCT	10/22/21 12:48	COL36695
	F Spike #2 Recovery	92.0	PCT	10/22/21 12:48	COL36695
	F spike #2	7.320	PPM	10/22/21 12:48	COL36695
	RPD	2	PCT	10/22/21 12:48	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85982</b>	<b>Location: W-68-2021-Q4</b>	<b>Time Collected: 10/19/21 9:13</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 09:22:00 A	NONE	10/22/21 12:49	COL36695
	F (env)	<0.100	PPM	10/22/21 12:49	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>85983</b>	<b>Location: W-98-2021-Q4</b>	<b>Time Collected: 10/19/21 14:51</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 09:24:00 A	NONE	10/22/21 12:52	COL36695
	F (env)	<0.100	PPM	10/22/21 12:51	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Laurie Harvey

**Laboratory Approval**

Approver: Krista Ward  
10/22/2021 1:06:28PM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS-10-19-21
Well Samples for Fluoride			Review Date 10/22/2021 1:06:28PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>85984</b>	<b>Location: BLANK-01-10</b>	<b>Time Collected: 10/19/21 10:53</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 09:26:00 A	NONE	10/22/21 12:54	COL36695
	F (env)	<0.100	PPM	10/22/21 12:54	COL36695
<b>True Temperature</b>	True_Temperature	2.40	DEG-C	10/19/21 17:05	COL35793
<b>86385</b>	<b>Location: W-19B-2021-C</b>	<b>Time Collected: 10/20/21 13:53</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 01:39:00 P	NONE	10/22/21 14:16	COL38195
	F (env)	<0.100	PPM	10/22/21 14:15	COL38195
<b>True Temperature</b>	True_Temperature	3.80	DEG-C	10/20/21 16:00	COL35793
<b>86386</b>	<b>Location: W-42-2021-Q4</b>	<b>Time Collected: 10/20/21 9:17</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 01:41:00 P	NONE	10/22/21 14:16	COL38195
	F (env)	1.270	PPM	10/22/21 14:15	COL38195
<b>Fluoride Spk Dup</b>	F Spike #1	4.430	PPM	10/22/21 14:19	COL38195
	F Spike #1 Recovery	79.0	PCT	10/22/21 14:19	COL38195
	F Spike #2 Recovery	82.8	PCT	10/22/21 14:19	COL38195
	F spike #2	4.580	PPM	10/22/21 14:19	COL38195
	RPD	5	PCT	10/22/21 14:19	COL38195
<b>True Temperature</b>	True_Temperature	3.80	DEG-C	10/20/21 16:00	COL35793
<b>86387</b>	<b>Location: W-49-2021-Q4</b>	<b>Time Collected: 10/20/21 10:18</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 01:46:00 P	NONE	10/22/21 14:16	COL38195
	F (env)	<0.100	PPM	10/22/21 14:15	COL38195
<b>True Temperature</b>	True_Temperature	3.80	DEG-C	10/20/21 16:00	COL35793
<b>86388</b>	<b>Location: W-90-2021-Q4</b>	<b>Time Collected: 10/20/21 11:27</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 01:50:00 P	NONE	10/22/21 14:17	COL38195
	F (env)	<0.100	PPM	10/22/21 14:15	COL38195
<b>True Temperature</b>	True_Temperature	3.80	DEG-C	10/20/21 16:00	COL35793
<b>86389</b>	<b>Location: W-91-2021-Q4</b>	<b>Time Collected: 10/20/21 12:20</b>			

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Laurie Harvey

**Laboratory Approval**

Approver: Krista Ward  
10/22/2021 2:28:03PM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-20-21</b>
Well Samples for Fluoride			Review Date 10/22/2021 2:28:03PM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 01:53:00 P	NONE	10/22/21 14:17	COL38195
	F (env)	<0.100	PPM	10/22/21 14:15	COL38195
<b>True Temperature</b>	True_Temperature	3.80	DEG-C	10/20/21 16:00	COL35793
<hr/>					
<b>86817</b>	<b>Location: WRW-2-2021-<u>u</u></b>	<b>Time Collected: 10/21/21 10:03</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 04:16:29 P	NONE	10/22/21 17:46	COL38195
	F (env)	0.125	PPM	10/22/21 17:44	COL38195
<b>Fluoride Spk Dup</b>	F Spike #1	3.460	PPM	10/22/21 17:54	COL38195
	F Spike #1 Recovery	83.4	PCT	10/22/21 17:54	COL38195
	F Spike #2 Recovery	84.9	PCT	10/22/21 17:55	COL38195
	F spike #2	3.520	PPM	10/22/21 17:55	COL38195
	RPD	2	PCT	10/22/21 17:55	COL38195
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<hr/>					
<b>86818</b>	<b>Location: W-24-2021-Q4</b>	<b>Time Collected: 10/21/21 14:15</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 04:20:53 P	NONE	10/22/21 17:47	COL38195
	F (env)	<0.100	PPM	10/22/21 17:44	COL38195
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<hr/>					
<b>86819</b>	<b>Location: W-41R-2021-C</b>	<b>Time Collected: 10/21/21 9:06</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 04:24:05 P	NONE	10/22/21 17:47	COL38195
	F (env)	<0.100	PPM	10/22/21 17:44	COL38195
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<hr/>					
<b>86820</b>	<b>Location: W-46-2021-Q4</b>	<b>Time Collected: 10/21/21 9:03</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 04:27:20 P	NONE	10/22/21 17:47	COL38195
	F (env)	<0.100	PPM	10/22/21 17:44	COL38195
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<hr/>					
<b>86821</b>	<b>Location: W-69-2021-Q4</b>	<b>Time Collected: 10/21/21 12:23</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 04:29:39 P	NONE	10/22/21 17:47	COL38195
	F (env)	<0.100	PPM	10/22/21 17:44	COL38195

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Shannon McCoy

**Laboratory Approval**

Approver: Krista Ward  
10/25/2021 6:10:18AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-21-21</b>
Well Samples for Fluoride			Review Date 10/25/2021 6:10:18AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86822</b>	<b>Location: W-70-2021-Q4</b>	<b>Time Collected: 10/21/21 11:27</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 04:33:52 P	NONE	10/22/21 17:48	COL38195
	F (env)	<0.100	PPM	10/22/21 17:45	COL38195
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86823</b>	<b>Location: W-71-2021-Q4</b>	<b>Time Collected: 10/21/21 13:24</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 04:35:07 P	NONE	10/22/21 17:48	COL38195
	F (env)	<0.100	PPM	10/22/21 17:45	COL38195
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86824</b>	<b>Location: W-88-2021-Q4</b>	<b>Time Collected: 10/21/21 11:12</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 04:38:19 P	NONE	10/22/21 17:48	COL38195
	F (env)	<0.100	PPM	10/22/21 17:45	COL38195
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86825</b>	<b>Location: W-89-2021-Q4</b>	<b>Time Collected: 10/21/21 12:08</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 04:40:32 P	NONE	10/22/21 17:48	COL38195
	F (env)	<0.100	PPM	10/22/21 17:45	COL38195
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86826</b>	<b>Location: BLANK-01-10</b>	<b>Time Collected: 10/21/21 12:33</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 04:43:49 P	NONE	10/22/21 17:48	COL38195
	F (env)	<0.100	PPM	10/22/21 17:45	COL38195
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86827</b>	<b>Location: W-41R_MS-20</b>	<b>Time Collected: 10/21/21 9:06</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 04:48:04 P	NONE	10/22/21 17:49	COL38195
	F (env)	<0.100	PPM	10/22/21 17:45	COL38195
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86828</b>	<b>Location: W-41R_MSD-;</b>	<b>Time Collected: 10/21/21 9:06</b>			

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Shannon McCoy

**Laboratory Approval**

Approver: Krista Ward  
10/25/2021 6:10:18AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS-10-21-21
Well Samples for Fluoride			Review Date 10/25/2021 6:10:18AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 04:50:05 P	NONE	10/22/21 17:51	COL38195
	F (env)	<0.100	PPM	10/22/21 17:46	COL38195
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86829</b>	<b>Location: W-71_DUP-20</b>	<b>Time Collected: 10/21/21 13:24</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 04:53:05 P	NONE	10/22/21 17:51	COL38195
	F (env)	<0.100	PPM	10/22/21 17:46	COL38195
<b>Fluoride Spk Dup</b>	F Spike #1	3.580	PPM	10/22/21 17:54	COL38195
	F Spike #1 Recovery	87.0	PCT	10/22/21 17:54	COL38195
	F Spike #2 Recovery	85.3	PCT	10/22/21 17:55	COL38195
	F spike #2	3.510	PPM	10/22/21 17:55	COL38195
	RPD	2	PCT	10/22/21 17:55	COL38195
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/21/21 16:34	COL38195
<b>86913</b>	<b>Location: W-27-2021-Q4</b>	<b>Time Collected: 10/22/21 13:03</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 05:22:19 P	NONE	10/22/21 18:01	COL38195
	F (env)	2.520	PPM	10/22/21 18:00	COL38195
<b>Fluoride Spk Dup</b>	F Spike #1	6.130	PPM	10/22/21 18:04	COL38195
	F Spike #1 Recovery	90.3	PCT	10/22/21 18:04	COL38195
	F Spike #2 Recovery	92.8	PCT	10/22/21 18:04	COL38195
	F spike #2	6.230	PPM	10/22/21 18:04	COL38195
	RPD	3	PCT	10/22/21 18:04	COL38195
<b>True Temperature</b>	True_Temperature	4.30	DEG-C	10/22/21 15:04	COL38208
<b>86914</b>	<b>Location: W-85-2021-Q4</b>	<b>Time Collected: 10/22/21 11:13</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 05:24:38 P	NONE	10/22/21 18:01	COL38195
	F (env)	0.152	PPM	10/22/21 18:00	COL38195
<b>True Temperature</b>	True_Temperature	4.30	DEG-C	10/22/21 15:04	COL38208
<b>86915</b>	<b>Location: W-86-2021-Q4</b>	<b>Time Collected: 10/22/21 9:23</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 05:26:49 P	NONE	10/22/21 18:01	COL38195
	F (env)	0.377	PPM	10/22/21 18:01	COL38195

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Candice Singletary

**Laboratory Approval**

Approver: Krista Ward  
10/25/2021 6:12:47AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-22-21</b>
Well Samples for Fluoride			Review Date 10/25/2021 6:12:47AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>True Temperature</b>	True_Temperature	4.30	DEG-C	10/22/21 15:04	COL38208
<b>86916</b>	<b>Location: W-92-2021-Q4</b>	<b>Time Collected: 10/22/21 12:01</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-10-22 05:27:50 P	NONE	10/22/21 18:02	COL38195
	F (env)	0.120	PPM	10/22/21 18:01	COL38195
<b>True Temperature</b>	True_Temperature	4.30	DEG-C	10/22/21 15:04	COL38208
<b>87216</b>	<b>Location: W-3A-2021-Q4</b>	<b>Time Collected: 10/25/21 9:57</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 02:42:00 A	NONE	11/8/21 6:06	COL37492
	F (env)	<0.100	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87217</b>	<b>Location: W-4R-2021-Q4</b>	<b>Time Collected: 10/25/21 9:03</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 02:45:00 A	NONE	11/8/21 6:06	COL37492
	F (env)	0.154	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87218</b>	<b>Location: W-96-2021-Q4</b>	<b>Time Collected: 10/25/21 8:55</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 02:51:00 A	NONE	11/8/21 6:06	COL37492
	F (env)	<0.100	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87219</b>	<b>Location: W-97-2021-Q4</b>	<b>Time Collected: 10/25/21 13:50</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 02:55:00 A	NONE	11/8/21 6:06	COL37492
	F (env)	0.481	PPM	11/8/21 6:05	COL37492
<b>Fluoride Spk Dup</b>	F Spike #1	5.050	PPM	11/8/21 6:10	COL37492
	F Spike #1 Recovery	114.2	PCT	11/8/21 6:10	COL37492
	F Spike #2 Recovery	114.2	PCT	11/8/21 6:10	COL37492
	F spike #2	5.050	PPM	11/8/21 6:10	COL37492
	RPD	0	PCT	11/8/21 6:10	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
11/8/2021 7:29:40AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-25-21</b>
Well Samples for Fluoride			Review Date 11/8/2021 7:29:40AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>87220</b>	<b>Location: W-104-2021-Q</b>	<b>Time Collected: 10/25/21 11:46</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 02:57:00 A	NONE	11/8/21 6:06	COL37492
	F (env)	<0.100	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87221</b>	<b>Location: W-105-2021-Q</b>	<b>Time Collected: 10/25/21 11:26</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 02:59:00 A	NONE	11/8/21 6:07	COL37492
	F (env)	0.376	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87222</b>	<b>Location: W-108-2021-Q</b>	<b>Time Collected: 10/25/21 13:20</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 03:01:00 A	NONE	11/8/21 6:07	COL37492
	F (env)	<0.100	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87223</b>	<b>Location: W-124-2021-Q</b>	<b>Time Collected: 10/25/21 12:55</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 03:04:00 A	NONE	11/8/21 6:07	COL37492
	F (env)	<0.100	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87224</b>	<b>Location: W-125-2021-Q</b>	<b>Time Collected: 10/25/21 12:15</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 03:10:00 A	NONE	11/8/21 6:07	COL37492
	F (env)	0.257	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87225</b>	<b>Location: W-126-2021-Q</b>	<b>Time Collected: 10/25/21 10:16</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 03:13:00 A	NONE	11/8/21 6:07	COL37492
	F (env)	0.251	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87227</b>	<b>Location: W-3A_MS-202</b>	<b>Time Collected: 10/25/21 9:57</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 03:20:00 A	NONE	11/8/21 6:07	COL37492

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
11/8/2021 7:29:40AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS-10-25-21
Well Samples for Fluoride			Review Date 11/8/2021 7:29:40AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
	F (env)	<0.100	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87228</b>	<b>Location: W-3A_MSD-2I</b>	<b>Time Collected: 10/25/21 9:57</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 03:25:00 A	NONE	11/8/21 6:07	COL37492
	F (env)	<0.100	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87229</b>	<b>Location: W-96_MS-202</b>	<b>Time Collected: 10/25/21 8:55</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 03:28:00 A	NONE	11/8/21 6:08	COL37492
	F (env)	<0.100	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87230</b>	<b>Location: W-96_MSD-20</b>	<b>Time Collected: 10/25/21 8:55</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 03:31:00 A	NONE	11/8/21 6:08	COL37492
	F (env)	<0.100	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87231</b>	<b>Location: W-97_DUP-20</b>	<b>Time Collected: 10/25/21 13:50</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 03:33:00 A	NONE	11/8/21 6:08	COL37492
	F (env)	0.451	PPM	11/8/21 6:05	COL37492
<b>Fluoride Spk Dup</b>	F Spike #1	4.990	PPM	11/8/21 6:10	COL37492
	F Spike #1 Recovery	113.5	PCT	11/8/21 6:10	COL37492
	F Spike #2 Recovery	117.7	PCT	11/8/21 6:10	COL37492
	F spike #2	5.160	PPM	11/8/21 6:10	COL37492
	RPD	4	PCT	11/8/21 6:10	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196
<b>87232</b>	<b>Location: W-108_DUP-2</b>	<b>Time Collected: 10/25/21 13:20</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-08 03:35:00 A	NONE	11/8/21 6:08	COL37492
	F (env)	<0.100	PPM	11/8/21 6:05	COL37492
<b>True Temperature</b>	True_Temperature	4.20	DEG-C	10/25/21 16:43	COL38196

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**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
11/8/2021 7:29:40AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group <b>WELLS-10-26-21</b>
Well Samples for Fluoride			Review Date 11/9/2021 8:15:19AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
<b>87756</b>	<b>Location: W-20-2021-Q4</b>	<b>Time Collected: 10/26/21 11:03</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-09 02:50:00 A	NONE	11/9/21 6:38	COL37492
	F (env)	<0.100	PPM	11/9/21 6:37	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87757</b>	<b>Location: W-25-2021-Q4</b>	<b>Time Collected: 10/26/21 12:09</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-09 02:54:00 A	NONE	11/9/21 6:38	COL37492
	F (env)	<0.100	PPM	11/9/21 6:37	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87758</b>	<b>Location: W-94-2021-Q4</b>	<b>Time Collected: 10/26/21 10:24</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-09 02:59:00 A	NONE	11/9/21 6:38	COL37492
	F (env)	<0.100	PPM	11/9/21 6:37	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87759</b>	<b>Location: W-95-2021-Q4</b>	<b>Time Collected: 10/26/21 11:13</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-09 03:02:00 A	NONE	11/9/21 6:38	COL37492
	F (env)	0.233	PPM	11/9/21 6:37	COL37492
<b>Fluoride Spk Dup</b>	F Spike #1	4.560	PPM	11/9/21 6:40	COL37492
	F Spike #1 Recovery	108.2	PCT	11/9/21 6:40	COL37492
	F Spike #2 Recovery	107.2	PCT	11/9/21 6:40	COL37492
	F spike #2	4.520	PPM	11/9/21 6:40	COL37492
	RPD	1	PCT	11/9/21 6:40	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87760</b>	<b>Location: W-107-2021-Q</b>	<b>Time Collected: 10/26/21 12:55</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-09 03:05:00 A	NONE	11/9/21 6:38	COL37492
	F (env)	<0.100	PPM	11/9/21 6:37	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87761</b>	<b>Location: W-109-2021-Q</b>	<b>Time Collected: 10/26/21 9:57</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-09 03:09:00 A	NONE	11/9/21 6:38	COL37492

Methods used to perform these analyses are from Environmental Protection Agency and/or American Public Health Association publications. In some cases, slight modifications are made as warranted.

**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
11/9/2021 8:15:19AM

### Regulatory Compliance Samples

Responsible Engineer Cynthia Teague	Phone	Location Columbia	Sampling Group WELLS-10-26-21
Well Samples for Fluoride			Review Date 11/9/2021 8:15:19AM

Remarks:

<u>Analysis</u>	<u>Parameters</u>	<u>Results</u>	<u>Units</u>	<u>Date Entry@</u>	<u>Analyst</u>
	F (env)	<0.100	PPM	11/9/21 6:37	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87762</b>	<b>Location: W-110-2021-Q</b>	<b>Time Collected: 10/26/21 13:23</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-09 03:13:00 A	NONE	11/9/21 6:38	COL37492
	F (env)	<0.100	PPM	11/9/21 6:37	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87763</b>	<b>Location: W-111-2021-Q</b>	<b>Time Collected: 10/26/21 11:59</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-09 03:17:00 A	NONE	11/9/21 6:39	COL37492
	F (env)	<0.100	PPM	11/9/21 6:37	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87764</b>	<b>Location: W-112-2021-Q</b>	<b>Time Collected: 10/26/21 9:30</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-09 03:21:00 A	NONE	11/9/21 6:39	COL37492
	F (env)	<0.100	PPM	11/9/21 6:37	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196
<b>87766</b>	<b>Location: BLANK-EB-01</b>	<b>Time Collected:</b>			
<b>Fluoride</b>	Analysis Time (enviro)	2021-11-09 03:30:00 A	NONE	11/9/21 6:39	COL37492
	F (env)	<0.100	PPM	11/9/21 6:37	COL37492
<b>True Temperature</b>	True_Temperature	3.70	DEG-C	10/26/21 15:24	COL38196

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**Chain of Custody**

Sampler: Randy Crews  
Released to: Ebonee Lunceford

**Laboratory Approval**

Approver: Krista Ward  
11/9/2021 8:15:19AM



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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Q4 2021 Sampling Event

Lot Number: **WJ05054**

Date Completed: 10/18/2021

10/18/2021 4:33 PM

Approved and released by:

Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)  
106 Vantage Point Drive West Columbia, SC 29172  
Tel: 803-791-9700 Fax: 803-791-9111 www.pacelabs.com

# 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: WJ05054

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

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

The continuing calibration verification (CCV) associated with batch 18710 had Bromomethane, Chloroethane, 1,1-Dichloroethene, 1,1,1-Trichloroethane, Carbon Tetrachloride and Bromoform recovered below acceptance limits. There were no detections for this compound in the associated samples. A LOQ standard was analyzed and the compound was detected, demonstrating there was adequate sensitivity to identify the analyte if it were present.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ05054  
Project Name: Q4 2021 Sampling Event  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-13R-2021-Q4	Aqueous	10/05/2021 1051	10/05/2021
002	W-123-2021-Q4	Aqueous	10/05/2021 1202	10/05/2021
003	W-10-2021-Q4	Aqueous	10/05/2021 1319	10/05/2021
004	W-11-2021-Q4	Aqueous	10/05/2021 1045	10/05/2021
005	W-32-2021-Q4	Aqueous	10/05/2021 1153	10/05/2021
006	W-7A-2021-Q4	Aqueous	10/05/2021 1352	10/05/2021
007	TB-01-100521	Aqueous	10/05/2021	10/05/2021

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(7 samples)

# PACE ANALYTICAL SERVICES, LLC

Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ05054  
Project Name: Q4 2021 Sampling Event  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-13R-2021-Q4	Aqueous	Nitrate - N	353.2	18		mg/L	5
001	W-13R-2021-Q4	Aqueous	Tetrachloroethene	8260D	27		ug/L	6
001	W-13R-2021-Q4	Aqueous	Trichloroethene	8260D	2.5		ug/L	7
002	W-123-2021-Q4	Aqueous	Nitrate - N	353.2	120		mg/L	8
002	W-123-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	1.9		ug/L	9
002	W-123-2021-Q4	Aqueous	Tetrachloroethene	8260D	23		ug/L	9
002	W-123-2021-Q4	Aqueous	Trichloroethene	8260D	7.7		ug/L	10
003	W-10-2021-Q4	Aqueous	Nitrate - N	353.2	22		mg/L	11
004	W-11-2021-Q4	Aqueous	Nitrate - N	353.2	23		mg/L	14
004	W-11-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	2.1		ug/L	15
004	W-11-2021-Q4	Aqueous	Tetrachloroethene	8260D	15		ug/L	15
004	W-11-2021-Q4	Aqueous	Trichloroethene	8260D	2.4		ug/L	16
005	W-32-2021-Q4	Aqueous	Nitrate - N	353.2	94		mg/L	17
006	W-7A-2021-Q4	Aqueous	Nitrate - N	353.2	320		mg/L	20
006	W-7A-2021-Q4	Aqueous	Tetrachloroethene	8260D	1.3		ug/L	21

(15 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-001
Description: W-13R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1051	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	25	10/06/2021 1533	ATH		18059

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	18	0.50	mg/L	1

---

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

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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

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-001
Description: W-13R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1051	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0654	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	27		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-001
Description: W-13R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1051	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0654	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	2.5		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		102	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-002
Description: W-123-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1202	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	200	10/06/2021 1540	ATH		18059

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	120	4.0	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-002
Description: W-123-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1202	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0717	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	1.9		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	23		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-002
Description: W-123-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1202	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0717	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	7.7		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		103	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-003
Description: W-10-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1319	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	25	10/06/2021 1541	ATH		18059

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	22	0.50	mg/L	1

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-003
Description: W-10-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1319	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 1158	BWS		18783

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-003
Description: W-10-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1319	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 1158	BWS		18783

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		108	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		102	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-004
Description: W-11-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1045	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	25	10/06/2021 1543	ATH		18059

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	23	0.50	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-004
Description: W-11-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1045	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 1223	BWS		18783

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	2.1		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	15		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-004
Description: W-11-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1045	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 1223	BWS		18783

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	2.4		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		108	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		104	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-005
Description: W-32-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1153	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	200	10/06/2021 1545	ATH		18059

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	94	4.0	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-005
Description: W-32-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1153	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 1248	BWS		18783

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-005
Description: W-32-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1153	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 1248	BWS		18783

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		99	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-006
Description: W-7A-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1352	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	200	10/06/2021 1546	ATH		18059

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	320	4.0	mg/L	1

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-006
Description: W-7A-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1352	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 1515	CAW		18824

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,1,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	1.3		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-006
Description: W-7A-2021-Q4	Matrix: Aqueous
Date Sampled: 10/05/2021 1352	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 1515	CAW		18824

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		106	70-130

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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-007
Description: TB-01-100521	Matrix: Aqueous
Date Sampled: 10/05/2021	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 1427	CAW		18824

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ05054-007
Description: TB-01-100521	Matrix: Aqueous
Date Sampled: 10/05/2021	Project Name: Q4 2021 Sampling Event
Date Received: 10/05/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 1427	CAW		18824

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		106	70-130

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

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

# Inorganic non-metals - MB

Sample ID: WQ18059-001

Matrix: Aqueous

Batch: 18059

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/06/2021 1520

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ18059-002

Matrix: Aqueous

Batch: 18059

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.41		1	102	90-110	10/06/2021 1521

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18710-001

Matrix: Aqueous

Batch: 18710

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/13/2021 2307
Benzene	ND		1	1.0	ug/L	10/13/2021 2307
Bromodichloromethane	ND		1	1.0	ug/L	10/13/2021 2307
Bromoform	ND		1	1.0	ug/L	10/13/2021 2307
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/13/2021 2307
2-Butanone (MEK)	ND		1	10	ug/L	10/13/2021 2307
Carbon disulfide	ND		1	1.0	ug/L	10/13/2021 2307
Carbon tetrachloride	ND		1	1.0	ug/L	10/13/2021 2307
Chlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
Chloroethane	ND		1	2.0	ug/L	10/13/2021 2307
Chloroform	ND		1	1.0	ug/L	10/13/2021 2307
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/13/2021 2307
Cyclohexane	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/13/2021 2307
Dibromochloromethane	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/13/2021 2307
1,1-Dichloroethane	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dichloroethane	ND		1	1.0	ug/L	10/13/2021 2307
1,1-Dichloroethene	ND		1	1.0	ug/L	10/13/2021 2307
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/13/2021 2307
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dichloropropane	ND		1	1.0	ug/L	10/13/2021 2307
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/13/2021 2307
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/13/2021 2307
Ethylbenzene	ND		1	1.0	ug/L	10/13/2021 2307
2-Hexanone	ND		1	10	ug/L	10/13/2021 2307
Isopropylbenzene	ND		1	1.0	ug/L	10/13/2021 2307
Methyl acetate	ND		1	1.0	ug/L	10/13/2021 2307
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/13/2021 2307
4-Methyl-2-pentanone	ND		1	10	ug/L	10/13/2021 2307
Methylcyclohexane	ND		1	5.0	ug/L	10/13/2021 2307
Methylene chloride	ND		1	1.0	ug/L	10/13/2021 2307
Styrene	ND		1	1.0	ug/L	10/13/2021 2307
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/13/2021 2307
Tetrachloroethene	ND		1	1.0	ug/L	10/13/2021 2307
Toluene	ND		1	1.0	ug/L	10/13/2021 2307
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/13/2021 2307
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/13/2021 2307
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/13/2021 2307

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18710-001

Matrix: Aqueous

Batch: 18710

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/13/2021 2307
Trichlorofluoromethane	ND		1	1.0	ug/L	10/13/2021 2307
Vinyl chloride	ND		1	1.0	ug/L	10/13/2021 2307
Xylenes (total)	ND		1	1.0	ug/L	10/13/2021 2307
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		97	70-130			
1,2-Dichloroethane-d4		93	70-130			
Toluene-d8		101	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18710-002

Matrix: Aqueous

Batch: 18710

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	89		1	89	60-140	10/13/2021 2156
Benzene	50	47		1	95	70-130	10/13/2021 2156
Bromodichloromethane	50	41		1	82	70-130	10/13/2021 2156
Bromoform	50	40		1	79	70-130	10/13/2021 2156
Bromomethane (Methyl bromide)	50	38		1	75	70-130	10/13/2021 2156
2-Butanone (MEK)	100	98		1	98	70-130	10/13/2021 2156
Carbon disulfide	50	46		1	93	70-130	10/13/2021 2156
Carbon tetrachloride	50	39		1	77	70-130	10/13/2021 2156
Chlorobenzene	50	44		1	87	70-130	10/13/2021 2156
Chloroethane	50	39		1	79	70-130	10/13/2021 2156
Chloroform	50	41		1	83	70-130	10/13/2021 2156
Chloromethane (Methyl chloride)	50	44		1	87	60-140	10/13/2021 2156
Cyclohexane	50	47		1	93	70-130	10/13/2021 2156
1,2-Dibromo-3-chloropropane (DBCP)	50	44		1	87	70-130	10/13/2021 2156
Dibromochloromethane	50	46		1	92	70-130	10/13/2021 2156
1,2-Dibromoethane (EDB)	50	44		1	89	70-130	10/13/2021 2156
1,2-Dichlorobenzene	50	45		1	90	70-130	10/13/2021 2156
1,3-Dichlorobenzene	50	45		1	89	70-130	10/13/2021 2156
1,4-Dichlorobenzene	50	43		1	87	70-130	10/13/2021 2156
Dichlorodifluoromethane	50	44		1	88	60-140	10/13/2021 2156
1,1-Dichloroethane	50	43		1	86	70-130	10/13/2021 2156
1,2-Dichloroethane	50	42		1	84	70-130	10/13/2021 2156
1,1-Dichloroethene	50	39		1	78	70-130	10/13/2021 2156
cis-1,2-Dichloroethene	50	43		1	86	70-130	10/13/2021 2156
trans-1,2-Dichloroethene	50	42		1	84	70-130	10/13/2021 2156
1,2-Dichloropropane	50	45		1	89	70-130	10/13/2021 2156
cis-1,3-Dichloropropene	50	46		1	91	70-130	10/13/2021 2156
trans-1,3-Dichloropropene	50	45		1	90	70-130	10/13/2021 2156
Ethylbenzene	50	43		1	85	70-130	10/13/2021 2156
2-Hexanone	100	100		1	102	70-130	10/13/2021 2156
Isopropylbenzene	50	45		1	91	70-130	10/13/2021 2156
Methyl acetate	50	52		1	105	70-130	10/13/2021 2156
Methyl tertiary butyl ether (MTBE)	50	43		1	86	70-130	10/13/2021 2156
4-Methyl-2-pentanone	100	97		1	97	70-130	10/13/2021 2156
Methylcyclohexane	50	45		1	89	70-130	10/13/2021 2156
Methylene chloride	50	42		1	83	70-130	10/13/2021 2156
Styrene	50	46		1	91	70-130	10/13/2021 2156
1,1,2,2-Tetrachloroethane	50	45		1	90	70-130	10/13/2021 2156
Tetrachloroethene	50	41		1	83	70-130	10/13/2021 2156
Toluene	50	45		1	89	70-130	10/13/2021 2156
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	40		1	80	70-130	10/13/2021 2156
1,2,4-Trichlorobenzene	50	44		1	88	70-130	10/13/2021 2156
1,1,1-Trichloroethane	50	38		1	76	70-130	10/13/2021 2156
1,1,2-Trichloroethane	50	42		1	85	70-130	10/13/2021 2156

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18710-002

Matrix: Aqueous

Batch: 18710

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	43		1	86	70-130	10/13/2021 2156
Trichlorofluoromethane	50	41		1	81	70-130	10/13/2021 2156
Vinyl chloride	50	43		1	87	70-130	10/13/2021 2156
Xylenes (total)	100	87		1	87	70-130	10/13/2021 2156
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		92			70-130		
1,2-Dichloroethane-d4		80			70-130		
Toluene-d8		87			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18783-001

Matrix: Aqueous

Batch: 18783

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/14/2021 0946
Benzene	ND		1	1.0	ug/L	10/14/2021 0946
Bromodichloromethane	ND		1	1.0	ug/L	10/14/2021 0946
Bromoform	ND		1	1.0	ug/L	10/14/2021 0946
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/14/2021 0946
2-Butanone (MEK)	ND		1	10	ug/L	10/14/2021 0946
Carbon disulfide	ND		1	1.0	ug/L	10/14/2021 0946
Carbon tetrachloride	ND		1	1.0	ug/L	10/14/2021 0946
Chlorobenzene	ND		1	1.0	ug/L	10/14/2021 0946
Chloroethane	ND		1	2.0	ug/L	10/14/2021 0946
Chloroform	ND		1	1.0	ug/L	10/14/2021 0946
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/14/2021 0946
Cyclohexane	ND		1	1.0	ug/L	10/14/2021 0946
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/14/2021 0946
Dibromochloromethane	ND		1	1.0	ug/L	10/14/2021 0946
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/14/2021 0946
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/14/2021 0946
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/14/2021 0946
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/14/2021 0946
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/14/2021 0946
1,1-Dichloroethane	ND		1	1.0	ug/L	10/14/2021 0946
1,2-Dichloroethane	ND		1	1.0	ug/L	10/14/2021 0946
1,1-Dichloroethene	ND		1	1.0	ug/L	10/14/2021 0946
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/14/2021 0946
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/14/2021 0946
1,2-Dichloropropane	ND		1	1.0	ug/L	10/14/2021 0946
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/14/2021 0946
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/14/2021 0946
Ethylbenzene	ND		1	1.0	ug/L	10/14/2021 0946
2-Hexanone	ND		1	10	ug/L	10/14/2021 0946
Isopropylbenzene	ND		1	1.0	ug/L	10/14/2021 0946
Methyl acetate	ND		1	1.0	ug/L	10/14/2021 0946
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/14/2021 0946
4-Methyl-2-pentanone	ND		1	10	ug/L	10/14/2021 0946
Methylcyclohexane	ND		1	5.0	ug/L	10/14/2021 0946
Methylene chloride	ND		1	1.0	ug/L	10/14/2021 0946
Styrene	ND		1	1.0	ug/L	10/14/2021 0946
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/14/2021 0946
Tetrachloroethene	ND		1	1.0	ug/L	10/14/2021 0946
Toluene	ND		1	1.0	ug/L	10/14/2021 0946
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/14/2021 0946
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/14/2021 0946
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/14/2021 0946
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/14/2021 0946

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18783-001

Matrix: Aqueous

Batch: 18783

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/14/2021 0946
Trichlorofluoromethane	ND		1	1.0	ug/L	10/14/2021 0946
Vinyl chloride	ND		1	1.0	ug/L	10/14/2021 0946
Xylenes (total)	ND		1	1.0	ug/L	10/14/2021 0946
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		107	70-130			
1,2-Dichloroethane-d4		106	70-130			
Toluene-d8		102	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18783-002

Matrix: Aqueous

Batch: 18783

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	100		1	101	60-140	10/14/2021 0847
Benzene	50	51		1	102	70-130	10/14/2021 0847
Bromodichloromethane	50	50		1	101	70-130	10/14/2021 0847
Bromoform	50	48		1	95	70-130	10/14/2021 0847
Bromomethane (Methyl bromide)	50	54		1	107	70-130	10/14/2021 0847
2-Butanone (MEK)	100	94		1	94	70-130	10/14/2021 0847
Carbon disulfide	50	53		1	106	70-130	10/14/2021 0847
Carbon tetrachloride	50	51		1	103	70-130	10/14/2021 0847
Chlorobenzene	50	49		1	98	70-130	10/14/2021 0847
Chloroethane	50	53		1	107	70-130	10/14/2021 0847
Chloroform	50	52		1	104	70-130	10/14/2021 0847
Chloromethane (Methyl chloride)	50	55		1	111	60-140	10/14/2021 0847
Cyclohexane	50	62		1	124	70-130	10/14/2021 0847
1,2-Dibromo-3-chloropropane (DBCP)	50	47		1	94	70-130	10/14/2021 0847
Dibromochloromethane	50	48		1	96	70-130	10/14/2021 0847
1,2-Dibromoethane (EDB)	50	48		1	96	70-130	10/14/2021 0847
1,2-Dichlorobenzene	50	51		1	101	70-130	10/14/2021 0847
1,3-Dichlorobenzene	50	50		1	101	70-130	10/14/2021 0847
1,4-Dichlorobenzene	50	50		1	100	70-130	10/14/2021 0847
Dichlorodifluoromethane	50	58		1	116	60-140	10/14/2021 0847
1,1-Dichloroethane	50	52		1	103	70-130	10/14/2021 0847
1,2-Dichloroethane	50	53		1	105	70-130	10/14/2021 0847
1,1-Dichloroethene	50	51		1	102	70-130	10/14/2021 0847
cis-1,2-Dichloroethene	50	51		1	101	70-130	10/14/2021 0847
trans-1,2-Dichloroethene	50	52		1	104	70-130	10/14/2021 0847
1,2-Dichloropropane	50	49		1	98	70-130	10/14/2021 0847
cis-1,3-Dichloropropene	50	49		1	98	70-130	10/14/2021 0847
trans-1,3-Dichloropropene	50	49		1	99	70-130	10/14/2021 0847
Ethylbenzene	50	50		1	100	70-130	10/14/2021 0847
2-Hexanone	100	100		1	102	70-130	10/14/2021 0847
Isopropylbenzene	50	52		1	103	70-130	10/14/2021 0847
Methyl acetate	50	54		1	108	70-130	10/14/2021 0847
Methyl tertiary butyl ether (MTBE)	50	50		1	100	70-130	10/14/2021 0847
4-Methyl-2-pentanone	100	100		1	101	70-130	10/14/2021 0847
Methylcyclohexane	50	52		1	104	70-130	10/14/2021 0847
Methylene chloride	50	56		1	111	70-130	10/14/2021 0847
Styrene	50	50		1	99	70-130	10/14/2021 0847
1,1,2,2-Tetrachloroethane	50	52		1	104	70-130	10/14/2021 0847
Tetrachloroethene	50	49		1	98	70-130	10/14/2021 0847
Toluene	50	54		1	108	70-130	10/14/2021 0847
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	52		1	104	70-130	10/14/2021 0847
1,2,4-Trichlorobenzene	50	46		1	91	70-130	10/14/2021 0847
1,1,1-Trichloroethane	50	52		1	105	70-130	10/14/2021 0847
1,1,2-Trichloroethane	50	50		1	100	70-130	10/14/2021 0847

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18783-002

Matrix: Aqueous

Batch: 18783

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	49		1	99	70-130	10/14/2021 0847
Trichlorofluoromethane	50	56		1	111	70-130	10/14/2021 0847
Vinyl chloride	50	55		1	110	70-130	10/14/2021 0847
Xylenes (total)	100	99		1	99	70-130	10/14/2021 0847
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		99			70-130		
1,2-Dichloroethane-d4		101			70-130		
Toluene-d8		99			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18824-001

Matrix: Aqueous

Batch: 18824

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/14/2021 1100
Benzene	ND		1	1.0	ug/L	10/14/2021 1100
Bromodichloromethane	ND		1	1.0	ug/L	10/14/2021 1100
Bromoform	ND		1	1.0	ug/L	10/14/2021 1100
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/14/2021 1100
2-Butanone (MEK)	ND		1	10	ug/L	10/14/2021 1100
Carbon disulfide	ND		1	1.0	ug/L	10/14/2021 1100
Carbon tetrachloride	ND		1	1.0	ug/L	10/14/2021 1100
Chlorobenzene	ND		1	1.0	ug/L	10/14/2021 1100
Chloroethane	ND		1	2.0	ug/L	10/14/2021 1100
Chloroform	ND		1	1.0	ug/L	10/14/2021 1100
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/14/2021 1100
Cyclohexane	ND		1	1.0	ug/L	10/14/2021 1100
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/14/2021 1100
Dibromochloromethane	ND		1	1.0	ug/L	10/14/2021 1100
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/14/2021 1100
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/14/2021 1100
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/14/2021 1100
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/14/2021 1100
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/14/2021 1100
1,1-Dichloroethane	ND		1	1.0	ug/L	10/14/2021 1100
1,2-Dichloroethane	ND		1	1.0	ug/L	10/14/2021 1100
1,1-Dichloroethene	ND		1	1.0	ug/L	10/14/2021 1100
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/14/2021 1100
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/14/2021 1100
1,2-Dichloropropane	ND		1	1.0	ug/L	10/14/2021 1100
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/14/2021 1100
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/14/2021 1100
Ethylbenzene	ND		1	1.0	ug/L	10/14/2021 1100
2-Hexanone	ND		1	10	ug/L	10/14/2021 1100
Isopropylbenzene	ND		1	1.0	ug/L	10/14/2021 1100
Methyl acetate	ND		1	1.0	ug/L	10/14/2021 1100
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/14/2021 1100
4-Methyl-2-pentanone	ND		1	10	ug/L	10/14/2021 1100
Methylcyclohexane	ND		1	5.0	ug/L	10/14/2021 1100
Methylene chloride	ND		1	1.0	ug/L	10/14/2021 1100
Styrene	ND		1	1.0	ug/L	10/14/2021 1100
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/14/2021 1100
Tetrachloroethene	ND		1	1.0	ug/L	10/14/2021 1100
Toluene	ND		1	1.0	ug/L	10/14/2021 1100
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/14/2021 1100
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/14/2021 1100
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/14/2021 1100
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/14/2021 1100

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18824-001

Matrix: Aqueous

Batch: 18824

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/14/2021 1100
Trichlorofluoromethane	ND		1	1.0	ug/L	10/14/2021 1100
Vinyl chloride	ND		1	1.0	ug/L	10/14/2021 1100
Xylenes (total)	ND		1	1.0	ug/L	10/14/2021 1100
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		104	70-130			
1,2-Dichloroethane-d4		103	70-130			
Toluene-d8		105	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18824-002

Matrix: Aqueous

Batch: 18824

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	95		1	95	60-140	10/14/2021 0953
Benzene	50	46		1	92	70-130	10/14/2021 0953
Bromodichloromethane	50	45		1	90	70-130	10/14/2021 0953
Bromoform	50	46		1	91	70-130	10/14/2021 0953
Bromomethane (Methyl bromide)	50	49		1	99	70-130	10/14/2021 0953
2-Butanone (MEK)	100	100		1	105	70-130	10/14/2021 0953
Carbon disulfide	50	46		1	92	70-130	10/14/2021 0953
Carbon tetrachloride	50	48		1	95	70-130	10/14/2021 0953
Chlorobenzene	50	44		1	88	70-130	10/14/2021 0953
Chloroethane	50	41		1	82	70-130	10/14/2021 0953
Chloroform	50	41		1	83	70-130	10/14/2021 0953
Chloromethane (Methyl chloride)	50	53		1	106	60-140	10/14/2021 0953
Cyclohexane	50	43		1	85	70-130	10/14/2021 0953
1,2-Dibromo-3-chloropropane (DBCP)	50	44		1	88	70-130	10/14/2021 0953
Dibromochloromethane	50	52		1	103	70-130	10/14/2021 0953
1,2-Dibromoethane (EDB)	50	46		1	93	70-130	10/14/2021 0953
1,2-Dichlorobenzene	50	46		1	93	70-130	10/14/2021 0953
1,3-Dichlorobenzene	50	47		1	95	70-130	10/14/2021 0953
1,4-Dichlorobenzene	50	45		1	90	70-130	10/14/2021 0953
Dichlorodifluoromethane	50	43		1	87	60-140	10/14/2021 0953
1,1-Dichloroethane	50	41		1	83	70-130	10/14/2021 0953
1,2-Dichloroethane	50	45		1	90	70-130	10/14/2021 0953
1,1-Dichloroethene	50	41		1	83	70-130	10/14/2021 0953
cis-1,2-Dichloroethene	50	43		1	85	70-130	10/14/2021 0953
trans-1,2-Dichloroethene	50	44		1	87	70-130	10/14/2021 0953
1,2-Dichloropropane	50	43		1	86	70-130	10/14/2021 0953
cis-1,3-Dichloropropene	50	48		1	96	70-130	10/14/2021 0953
trans-1,3-Dichloropropene	50	50		1	100	70-130	10/14/2021 0953
Ethylbenzene	50	47		1	94	70-130	10/14/2021 0953
2-Hexanone	100	110		1	107	70-130	10/14/2021 0953
Isopropylbenzene	50	47		1	94	70-130	10/14/2021 0953
Methyl acetate	50	47		1	94	70-130	10/14/2021 0953
Methyl tertiary butyl ether (MTBE)	50	48		1	97	70-130	10/14/2021 0953
4-Methyl-2-pentanone	100	99		1	99	70-130	10/14/2021 0953
Methylcyclohexane	50	49		1	98	70-130	10/14/2021 0953
Methylene chloride	50	41		1	82	70-130	10/14/2021 0953
Styrene	50	48		1	95	70-130	10/14/2021 0953
1,1,2,2-Tetrachloroethane	50	42		1	83	70-130	10/14/2021 0953
Tetrachloroethene	50	44		1	87	70-130	10/14/2021 0953
Toluene	50	48		1	95	70-130	10/14/2021 0953
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	43		1	86	70-130	10/14/2021 0953
1,2,4-Trichlorobenzene	50	52		1	105	70-130	10/14/2021 0953
1,1,1-Trichloroethane	50	43		1	87	70-130	10/14/2021 0953
1,1,2-Trichloroethane	50	44		1	87	70-130	10/14/2021 0953

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18824-002

Matrix: Aqueous

Batch: 18824

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	45		1	90	70-130	10/14/2021 0953
Trichlorofluoromethane	50	45		1	91	70-130	10/14/2021 0953
Vinyl chloride	50	53		1	107	70-130	10/14/2021 0953
Xylenes (total)	100	91		1	91	70-130	10/14/2021 0953
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		105			70-130		
1,2-Dichloroethane-d4		97			70-130		
Toluene-d8		102			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCSD

Sample ID: WQ18824-003

Matrix: Aqueous

Batch: 18824

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Acetone	100	100		1	100	5.3	60-140	20	10/14/2021 1148
Benzene	50	48		1	95	3.6	70-130	20	10/14/2021 1148
Bromodichloromethane	50	46		1	92	2.8	70-130	20	10/14/2021 1148
Bromoform	50	46		1	92	1.2	70-130	20	10/14/2021 1148
Bromomethane (Methyl bromide)	50	49		1	99	0.23	70-130	20	10/14/2021 1148
2-Butanone (MEK)	100	110		1	107	2.4	70-130	20	10/14/2021 1148
Carbon disulfide	50	45		1	91	2.0	70-130	20	10/14/2021 1148
Carbon tetrachloride	50	50		1	99	4.0	70-130	20	10/14/2021 1148
Chlorobenzene	50	46		1	91	3.1	70-130	20	10/14/2021 1148
Chloroethane	50	41		1	81	0.99	70-130	20	10/14/2021 1148
Chloroform	50	42		1	84	1.2	70-130	20	10/14/2021 1148
Chloromethane (Methyl chloride)	50	51		1	102	3.9	60-140	20	10/14/2021 1148
Cyclohexane	50	44		1	88	3.0	70-130	20	10/14/2021 1148
1,2-Dibromo-3-chloropropane (DBCP)	50	44		1	87	0.34	70-130	20	10/14/2021 1148
Dibromochloromethane	50	52		1	104	1.1	70-130	20	10/14/2021 1148
1,2-Dibromoethane (EDB)	50	46		1	93	0.32	70-130	20	10/14/2021 1148
1,2-Dichlorobenzene	50	46		1	93	0.27	70-130	20	10/14/2021 1148
1,3-Dichlorobenzene	50	47		1	94	1.0	70-130	20	10/14/2021 1148
1,4-Dichlorobenzene	50	46		1	91	0.92	70-130	20	10/14/2021 1148
Dichlorodifluoromethane	50	44		1	87	0.84	60-140	20	10/14/2021 1148
1,1-Dichloroethane	50	41		1	82	0.65	70-130	20	10/14/2021 1148
1,2-Dichloroethane	50	46		1	92	2.5	70-130	20	10/14/2021 1148
1,1-Dichloroethene	50	42		1	84	0.78	70-130	20	10/14/2021 1148
cis-1,2-Dichloroethene	50	44		1	87	2.3	70-130	20	10/14/2021 1148
trans-1,2-Dichloroethene	50	44		1	87	0.15	70-130	20	10/14/2021 1148
1,2-Dichloropropane	50	44		1	89	3.0	70-130	20	10/14/2021 1148
cis-1,3-Dichloropropene	50	49		1	98	1.6	70-130	20	10/14/2021 1148
trans-1,3-Dichloropropene	50	50		1	100	0.34	70-130	20	10/14/2021 1148
Ethylbenzene	50	48		1	96	2.9	70-130	20	10/14/2021 1148
2-Hexanone	100	110		1	110	3.0	70-130	20	10/14/2021 1148
Isopropylbenzene	50	49		1	98	3.8	70-130	20	10/14/2021 1148
Methyl acetate	50	46		1	91	3.0	70-130	20	10/14/2021 1148
Methyl tertiary butyl ether (MTBE)	50	48		1	96	0.62	70-130	20	10/14/2021 1148
4-Methyl-2-pentanone	100	100		1	101	2.2	70-130	20	10/14/2021 1148
Methylcyclohexane	50	51		1	102	4.2	70-130	20	10/14/2021 1148
Methylene chloride	50	41		1	81	1.5	70-130	20	10/14/2021 1148
Styrene	50	49		1	99	3.7	70-130	20	10/14/2021 1148
1,1,2,2-Tetrachloroethane	50	42		1	84	1.1	70-130	20	10/14/2021 1148
Tetrachloroethene	50	45		1	91	4.3	70-130	20	10/14/2021 1148
Toluene	50	48		1	97	1.5	70-130	20	10/14/2021 1148
1,1,2-Trichloro-1,1,2-Trifluoroethane	50	43		1	87	1.7	70-130	20	10/14/2021 1148
1,2,4-Trichlorobenzene	50	49		1	98	6.7	70-130	20	10/14/2021 1148
1,1,1-Trichloroethane	50	45		1	90	3.5	70-130	20	10/14/2021 1148
1,1,2-Trichloroethane	50	44		1	89	1.9	70-130	20	10/14/2021 1148

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCSD

Sample ID: WQ18824-003

Matrix: Aqueous

Batch: 18824

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	46		1	91	1.7	70-130	20	10/14/2021 1148
Trichlorofluoromethane	50	46		1	93	1.8	70-130	20	10/14/2021 1148
Vinyl chloride	50	54		1	108	1.1	70-130	20	10/14/2021 1148
Xylenes (total)	100	92		1	92	1.5	70-130	20	10/14/2021 1148
Surrogate	Q	% Rec	Acceptance Limit						
Bromofluorobenzene		104	70-130						
1,2-Dichloroethane-d4		100	70-130						
Toluene-d8		102	70-130						

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents



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

**Number 126250**

Client: <u>Lockhart House</u>		Request to Collect: <u>Diana Jumper</u>		Telephone No. / E-mail: <u>Jumper@LockhartHouse.com</u>	Quote No.:
Address: <u>5801 Buff RD</u>		Sender's Signature: <u>[Signature]</u>		Analysis (Attach list if more space is needed)	
City: <u>Hopkins</u>		Printer Name: <u>Andy Cecil James Leaphart</u>		Page <u>1</u> of <u>1</u>	
Project Name: <u>Q4 2021 Sampling - Exterior</u>		P.O. No.:		Barcode: <u>WJ05054</u>	
Project No: <u>6039649.14</u>		Sample ID / Description:		RMB	
(Conditions for each sample may be conducted on one site.)		Collection Date (MM/DD/YY)		Remains / Cooler I.D.	
<u>W-13R-2021-Q4</u>	<u>10-5-21</u>	<u>10-5-21</u>	<u>10-5-21</u>	<u>X</u>	
<u>W-123-2021-Q4</u>	<u>12-2-21</u>	<u>12-2-21</u>	<u>12-2-21</u>	<u>X</u>	
<u>W-10-2021-Q4</u>	<u>13-9-21</u>	<u>13-9-21</u>	<u>13-9-21</u>	<u>X</u>	
<u>W-11-2021-Q4</u>	<u>10-4-21</u>	<u>10-4-21</u>	<u>10-4-21</u>	<u>X</u>	
<u>W-32-2021-Q4</u>	<u>11-5-21</u>	<u>11-5-21</u>	<u>11-5-21</u>	<u>X</u>	
<u>W-7A-2021-Q4</u>	<u>13-5-21</u>	<u>13-5-21</u>	<u>13-5-21</u>	<u>X</u>	
<u>TB-01-100521</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>X</u>	<u>Tap Rack</u>

Turn Around Time Required (Prior lab approval required for expedited MAT.)	Standard	Flush (Specify)	1. Retrievable by	2. Retrievable by	3. Retrievable by	4. Retrievable by
Date	<u>10-5-21</u>	<u>1310</u>	Date	Date	Date	Date
Time			Time	Time	Time	Time
GC Requirements (Specify)						
Date			Date	Date	Date	Date
Time			Time	Time	Time	Time
Temp Blank	<input type="checkbox"/>	<input type="checkbox"/>	Temp Blank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

LAB USE ONLY  
 Received on line (Circle) Yes No  Ice Pack  Recept Temp 3.9 C

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

Document Number: MED0302-01

DISTRIBUTION: WHITE & YELLOW: Return to laboratory with Sample(s); PINK: Field/Client Copy

# PACE ANALYTICAL SERVICES, LLC



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

Issuing Authority: Pace ENV - WCCL

Revised: 9/29/2020

Page 1 of 1

## Sample Receipt Checklist (SRC)

Client: Westinghouse

Cooler Inspected by/date: JRG2 / 10/05/2021

Lot #: WJ05054

Means of receipt: <input checked="" type="checkbox"/> Pace <input type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>NA</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>NA</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: <u>NA</u> <u>3.9 / 3.9</u> °C <u>NA / NA</u> °C <u>NA / NA</u> °C <u>NA / NA</u> °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: <u>6</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) <u>NA</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>NA</u> mL of circle one: H <sub>2</sub> SO <sub>4</sub> , HNO <sub>3</sub> , HCl, NaOH using SR # <u>NA</u> . Time of preservation <u>NA</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) <u>NA</u> were received with bubbles >6 mm in diameter.	
Sample(s) <u>NA</u> were received with TRC > 0.5 mg/L (if #19 is <i>no</i> ) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: <u>NA</u> .	
SR barcode labels applied by: <u>JRG2</u> Date: <u>10/05/2021</u>	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Q4 2021 Sampling Event

Lot Number: **WJ06071**

Date Completed: 10/14/2021

10/15/2021 2:51 PM

Approved and released by:  
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: WJ06071

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

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

The continuing calibration verification (CCV) associated with batch 18710 had Bromomethane, Chloroethane, 1,1-Dichloroethene, Trichloroethane, Carbon Tetrachloride, Bromoform, recovered below acceptance limits. There were no detections for this compound in the associated samples. A LOQ standard was analyzed and the compound was detected, demonstrating there was adequate sensitivity to identify the analyte if it were present.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ06071  
Project Name: Q4 2021 Sampling Event  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-93-2021-Q4	Aqueous	10/06/2021 0949	10/06/2021
002	W-77-2021-Q4	Aqueous	10/06/2021 1045	10/06/2021
003	W-28-2021-Q4	Aqueous	10/06/2021 1158	10/06/2021
004	W-78-2021-Q4	Aqueous	10/06/2021 1300	10/06/2021
005	W-79-2021-Q4	Aqueous	10/06/2021 1412	10/06/2021
006	TB-01-100621	Aqueous	10/06/2021	10/06/2021

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(6 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ06071  
Project Name: Q4 2021 Sampling Event  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-93-2021-Q4	Aqueous	Nitrate - N	353.2	4.9		mg/L	5
001	W-93-2021-Q4	Aqueous	Tetrachloroethene	8260D	32		ug/L	6
001	W-93-2021-Q4	Aqueous	Trichloroethene	8260D	4.0		ug/L	7
002	W-77-2021-Q4	Aqueous	Nitrate - N	353.2	4.9		mg/L	8
002	W-77-2021-Q4	Aqueous	Chloroform	8260D	4.1		ug/L	9
003	W-28-2021-Q4	Aqueous	Nitrate - N	353.2	5.9		mg/L	11
004	W-78-2021-Q4	Aqueous	Nitrate - N	353.2	3.8		mg/L	14
005	W-79-2021-Q4	Aqueous	Nitrate - N	353.2	3.9		mg/L	17

(8 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-001
Description: W-93-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 0949	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/07/2021 1101	AAB		18048

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	4.9	0.20	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-001
Description: W-93-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 0949	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0131	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	32		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-001
Description: W-93-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 0949	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0131	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	4.0		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		101	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-002
Description: W-77-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 1045	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/07/2021 1103	AAB		18048

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	4.9	0.20	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-002
Description: W-77-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 1045	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0154	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	4.1		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-002
Description: W-77-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 1045	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0154	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		102	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-003
Description: W-28-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 1158	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/07/2021 1104	AAB		18048

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	5.9	0.10	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-003
Description: W-28-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 1158	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0217	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-003
Description: W-28-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 1158	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0217	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		103	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-004
Description: W-78-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 1300	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/07/2021 1106	AAB		18048

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	3.8	0.040	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-004
Description: W-78-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 1300	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0240	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-004
Description: W-78-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 1300	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0240	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		103	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-005
Description: W-79-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 1412	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/07/2021 1108	AAB		18048

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	3.9	0.10	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-005
Description: W-79-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 1412	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0303	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-005
Description: W-79-2021-Q4	Matrix: Aqueous
Date Sampled: 10/06/2021 1412	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0303	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		101	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-006
Description: TB-01-100621	Matrix: Aqueous
Date Sampled: 10/06/2021	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0022	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ06071-006
Description: TB-01-100621	Matrix: Aqueous
Date Sampled: 10/06/2021	Project Name: Q4 2021 Sampling Event
Date Received: 10/06/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0022	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		103	70-130

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

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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ18048-001

Matrix: Aqueous

Batch: 18048

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/07/2021 1036

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ18048-002

Matrix: Aqueous

Batch: 18048

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.42		1	106	90-110	10/07/2021 1038

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18710-001

Matrix: Aqueous

Batch: 18710

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/13/2021 2307
Benzene	ND		1	1.0	ug/L	10/13/2021 2307
Bromodichloromethane	ND		1	1.0	ug/L	10/13/2021 2307
Bromoform	ND		1	1.0	ug/L	10/13/2021 2307
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/13/2021 2307
2-Butanone (MEK)	ND		1	10	ug/L	10/13/2021 2307
Carbon disulfide	ND		1	1.0	ug/L	10/13/2021 2307
Carbon tetrachloride	ND		1	1.0	ug/L	10/13/2021 2307
Chlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
Chloroethane	ND		1	2.0	ug/L	10/13/2021 2307
Chloroform	ND		1	1.0	ug/L	10/13/2021 2307
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/13/2021 2307
Cyclohexane	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/13/2021 2307
Dibromochloromethane	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/13/2021 2307
1,1-Dichloroethane	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dichloroethane	ND		1	1.0	ug/L	10/13/2021 2307
1,1-Dichloroethene	ND		1	1.0	ug/L	10/13/2021 2307
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/13/2021 2307
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dichloropropane	ND		1	1.0	ug/L	10/13/2021 2307
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/13/2021 2307
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/13/2021 2307
Ethylbenzene	ND		1	1.0	ug/L	10/13/2021 2307
2-Hexanone	ND		1	10	ug/L	10/13/2021 2307
Isopropylbenzene	ND		1	1.0	ug/L	10/13/2021 2307
Methyl acetate	ND		1	1.0	ug/L	10/13/2021 2307
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/13/2021 2307
4-Methyl-2-pentanone	ND		1	10	ug/L	10/13/2021 2307
Methylcyclohexane	ND		1	5.0	ug/L	10/13/2021 2307
Methylene chloride	ND		1	1.0	ug/L	10/13/2021 2307
Styrene	ND		1	1.0	ug/L	10/13/2021 2307
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/13/2021 2307
Tetrachloroethene	ND		1	1.0	ug/L	10/13/2021 2307
Toluene	ND		1	1.0	ug/L	10/13/2021 2307
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/13/2021 2307
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/13/2021 2307
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/13/2021 2307

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18710-001

Matrix: Aqueous

Batch: 18710

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/13/2021 2307
Trichlorofluoromethane	ND		1	1.0	ug/L	10/13/2021 2307
Vinyl chloride	ND		1	1.0	ug/L	10/13/2021 2307
Xylenes (total)	ND		1	1.0	ug/L	10/13/2021 2307
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		97	70-130			
1,2-Dichloroethane-d4		93	70-130			
Toluene-d8		101	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18710-002

Matrix: Aqueous

Batch: 18710

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	89		1	89	60-140	10/13/2021 2156
Benzene	50	47		1	95	70-130	10/13/2021 2156
Bromodichloromethane	50	41		1	82	70-130	10/13/2021 2156
Bromoform	50	40		1	79	70-130	10/13/2021 2156
Bromomethane (Methyl bromide)	50	38		1	75	70-130	10/13/2021 2156
2-Butanone (MEK)	100	98		1	98	70-130	10/13/2021 2156
Carbon disulfide	50	46		1	93	70-130	10/13/2021 2156
Carbon tetrachloride	50	39		1	77	70-130	10/13/2021 2156
Chlorobenzene	50	44		1	87	70-130	10/13/2021 2156
Chloroethane	50	39		1	79	70-130	10/13/2021 2156
Chloroform	50	41		1	83	70-130	10/13/2021 2156
Chloromethane (Methyl chloride)	50	44		1	87	60-140	10/13/2021 2156
Cyclohexane	50	47		1	93	70-130	10/13/2021 2156
1,2-Dibromo-3-chloropropane (DBCP)	50	44		1	87	70-130	10/13/2021 2156
Dibromochloromethane	50	46		1	92	70-130	10/13/2021 2156
1,2-Dibromoethane (EDB)	50	44		1	89	70-130	10/13/2021 2156
1,2-Dichlorobenzene	50	45		1	90	70-130	10/13/2021 2156
1,3-Dichlorobenzene	50	45		1	89	70-130	10/13/2021 2156
1,4-Dichlorobenzene	50	43		1	87	70-130	10/13/2021 2156
Dichlorodifluoromethane	50	44		1	88	60-140	10/13/2021 2156
1,1-Dichloroethane	50	43		1	86	70-130	10/13/2021 2156
1,2-Dichloroethane	50	42		1	84	70-130	10/13/2021 2156
1,1-Dichloroethene	50	39		1	78	70-130	10/13/2021 2156
cis-1,2-Dichloroethene	50	43		1	86	70-130	10/13/2021 2156
trans-1,2-Dichloroethene	50	42		1	84	70-130	10/13/2021 2156
1,2-Dichloropropane	50	45		1	89	70-130	10/13/2021 2156
cis-1,3-Dichloropropene	50	46		1	91	70-130	10/13/2021 2156
trans-1,3-Dichloropropene	50	45		1	90	70-130	10/13/2021 2156
Ethylbenzene	50	43		1	85	70-130	10/13/2021 2156
2-Hexanone	100	100		1	102	70-130	10/13/2021 2156
Isopropylbenzene	50	45		1	91	70-130	10/13/2021 2156
Methyl acetate	50	52		1	105	70-130	10/13/2021 2156
Methyl tertiary butyl ether (MTBE)	50	43		1	86	70-130	10/13/2021 2156
4-Methyl-2-pentanone	100	97		1	97	70-130	10/13/2021 2156
Methylcyclohexane	50	45		1	89	70-130	10/13/2021 2156
Methylene chloride	50	42		1	83	70-130	10/13/2021 2156
Styrene	50	46		1	91	70-130	10/13/2021 2156
1,1,2,2-Tetrachloroethane	50	45		1	90	70-130	10/13/2021 2156
Tetrachloroethene	50	41		1	83	70-130	10/13/2021 2156
Toluene	50	45		1	89	70-130	10/13/2021 2156
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	40		1	80	70-130	10/13/2021 2156
1,2,4-Trichlorobenzene	50	44		1	88	70-130	10/13/2021 2156
1,1,1-Trichloroethane	50	38		1	76	70-130	10/13/2021 2156
1,1,2-Trichloroethane	50	42		1	85	70-130	10/13/2021 2156

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18710-002

Matrix: Aqueous

Batch: 18710

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	43		1	86	70-130	10/13/2021 2156
Trichlorofluoromethane	50	41		1	81	70-130	10/13/2021 2156
Vinyl chloride	50	43		1	87	70-130	10/13/2021 2156
Xylenes (total)	100	87		1	87	70-130	10/13/2021 2156
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		92			70-130		
1,2-Dichloroethane-d4		80			70-130		
Toluene-d8		87			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents





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: JSH / 10/06/2021

Lot #: WJ06071

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA	Chlorine Strip ID: NA
Original temperature upon receipt / Derived (Corrected) temperature upon receipt	
3.1 / 3.1 °C NA / NA °C NA / NA °C NA / NA °C	%Solid Snap-Cup ID: NA
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present > "pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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.	
Sample(s) NA were received with TRC > 0.5 mg/L (If #19 is no) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Sheaty ID: NA	
SR barcode labels applied by: KDRW Date: 10/06/2021	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Q4 2021 Sampling Event

Lot Number: **WJ07119**

Date Completed: 10/21/2021

10/22/2021 4:18 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)  
106 Vantage Point Drive West Columbia, SC 29172  
Tel: 803-791-9700 Fax: 803-791-9111 www.pacelabs.com

# 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: WJ07119

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

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

The continuing calibration verification (CCV) associated with batch 18710 had Bromomethane, Chloroethane, 1,1-Dichloroethene, 1,1,1-Trichloroethane, Carbon Tetrachloride and Bromoform recovered below acceptance limits. There were no detections for this compound in the associated samples. A LOQ standard was analyzed and the compound was detected, demonstrating there was adequate sensitivity to identify the analyte if it were present.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ07119  
Project Name: Q4 2021 Sampling Event  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-82-2021-Q4	Aqueous	10/07/2021 0945	10/07/2021
002	W-81-2021-Q4	Aqueous	10/07/2021 1144	10/07/2021
003	W-81-2021-Q4-DUP	Aqueous	10/07/2021 1144	10/07/2021
004	W-80-2021-Q4	Aqueous	10/07/2021 1331	10/07/2021
005	W-57-2021-Q4	Aqueous	10/07/2021 1439	10/07/2021
006	W-38-2021-Q4	Aqueous	10/07/2021 1422	10/07/2021
007	W-76-2021-Q4	Aqueous	10/07/2021 1306	10/07/2021
008	W-83-2021-Q4	Aqueous	10/07/2021 1109	10/07/2021
009	W-84-2021-Q4	Aqueous	10/07/2021 0906	10/07/2021
010	TB-01-100721	Aqueous	10/07/2021	10/07/2021

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(10 samples)

# PACE ANALYTICAL SERVICES, LLC

Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ07119  
Project Name: Q4 2021 Sampling Event  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-82-2021-Q4	Aqueous	Nitrate - N	353.2	1.8		mg/L	6
002	W-81-2021-Q4	Aqueous	Nitrate - N	353.2	3.8		mg/L	9
002	W-81-2021-Q4	Aqueous	Bromoform	8260D	6.2		ug/L	10
002	W-81-2021-Q4	Aqueous	Chloroform	8260D	2.7		ug/L	10
002	W-81-2021-Q4	Aqueous	Dibromochloromethane	8260D	1.5		ug/L	10
003	W-81-2021-Q4-DUP	Aqueous	Nitrate - N	353.2	4.1		mg/L	12
003	W-81-2021-Q4-DUP	Aqueous	Bromoform	8260D	6.3		ug/L	13
003	W-81-2021-Q4-DUP	Aqueous	Chloroform	8260D	2.6		ug/L	13
003	W-81-2021-Q4-DUP	Aqueous	Dibromochloromethane	8260D	1.5		ug/L	13
004	W-80-2021-Q4	Aqueous	Nitrate - N	353.2	9.2		mg/L	15
004	W-80-2021-Q4	Aqueous	Bromodichloromethane	8260D	1.4		ug/L	16
004	W-80-2021-Q4	Aqueous	Bromoform	8260D	58		ug/L	16
004	W-80-2021-Q4	Aqueous	Chloroform	8260D	4.6		ug/L	16
004	W-80-2021-Q4	Aqueous	Dibromochloromethane	8260D	4.1		ug/L	16
005	W-57-2021-Q4	Aqueous	Nitrate - N	353.2	2.5		mg/L	18
006	W-38-2021-Q4	Aqueous	Nitrate - N	353.2	2.6		mg/L	21
006	W-38-2021-Q4	Aqueous	Trichloroethene	8260D	4.0		ug/L	23
007	W-76-2021-Q4	Aqueous	Nitrate - N	353.2	13		mg/L	24
007	W-76-2021-Q4	Aqueous	Trichloroethene	8260D	26		ug/L	26
008	W-83-2021-Q4	Aqueous	Nitrate - N	353.2	0.85		mg/L	27
009	W-84-2021-Q4	Aqueous	Nitrate - N	353.2	0.091	S	mg/L	30

(21 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-001
Description: W-82-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 0945	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/08/2021 1101	AAB		18173

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	1.8	0.10	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-001
Description: W-82-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 0945	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0326	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-001
Description: W-82-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 0945	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0326	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		98	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-002
Description: W-81-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1144	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/08/2021 1108	AAB		18173

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.10	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-002
Description: W-81-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1144	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0349	JWO		18710
2	5030B	8260D	1	10/21/2021 0636	JWO		19599

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	6.2		1.0	ug/L	2
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	2.7		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	1.5		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-002
Description: W-81-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1144	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0349	JWO		18710
2	5030B	8260D	1	10/21/2021 0636	JWO		19599

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130		100	70-130
1,2-Dichloroethane-d4		94	70-130		93	70-130
Toluene-d8		100	70-130		99	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-003
Description: W-81-2021-Q4-DUP	Matrix: Aqueous
Date Sampled: 10/07/2021 1144	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/08/2021 1110	AAB		18173

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	4.1	0.10	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-003
Description: W-81-2021-Q4-DUP	Matrix: Aqueous
Date Sampled: 10/07/2021 1144	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0412	JWO		18710
2	5030B	8260D	1	10/21/2021 0659	JWO		19599

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	6.3		1.0	ug/L	2
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	2.6		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	1.5		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-003
Description: W-81-2021-Q4-DUP	Matrix: Aqueous
Date Sampled: 10/07/2021 1144	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0412	JWO		18710
2	5030B	8260D	1	10/21/2021 0659	JWO		19599

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		105	70-130		99	70-130
1,2-Dichloroethane-d4		95	70-130		93	70-130
Toluene-d8		104	70-130		98	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-004
Description: W-80-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1331	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	20	10/08/2021 1111	AAB		18173

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	9.2	0.40	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-004
Description: W-80-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1331	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0435	JWO		18710
2	5030B	8260D	1	10/21/2021 0722	JWO		19599

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	1.4		1.0	ug/L	1
Bromoform	75-25-2	8260D	58		1.0	ug/L	2
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	4.6		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	4.1		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-004
Description: W-80-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1331	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0435	JWO		18710
2	5030B	8260D	1	10/21/2021 0722	JWO		19599

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130		103	70-130
1,2-Dichloroethane-d4		94	70-130		95	70-130
Toluene-d8		102	70-130		102	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-005
Description: W-57-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1439	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/08/2021 1113	AAB		18173

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	2.5	0.10	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-005
Description: W-57-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1439	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0458	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-005
Description: W-57-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1439	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0458	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		104	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-006
Description: W-38-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1422	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/08/2021 1115	AAB		18173

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	2.6	0.10	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-006
Description: W-38-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1422	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0522	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-006
Description: W-38-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1422	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0522	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	4.0		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		99	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-007
Description: W-76-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1306	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/08/2021 1116	AAB		18173

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	13	0.20	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-007
Description: W-76-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1306	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0545	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-007
Description: W-76-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1306	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0545	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	26		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		105	70-130
1,2-Dichloroethane-d4		96	70-130
Toluene-d8		104	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-008
Description: W-83-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1109	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/08/2021 1118	AAB		18173

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.85	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-008
Description: W-83-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1109	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0608	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-008
Description: W-83-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 1109	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0608	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		101	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-009
Description: W-84-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 0906	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/08/2021 1120	AAB		18173

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.091	S	0.020	mg/L 1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-009
Description: W-84-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 0906	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0631	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-009
Description: W-84-2021-Q4	Matrix: Aqueous
Date Sampled: 10/07/2021 0906	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0631	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		104	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-010
Description: TB-01-100721	Matrix: Aqueous
Date Sampled: 10/07/2021	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0108	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ07119-010
Description: TB-01-100721	Matrix: Aqueous
Date Sampled: 10/07/2021	Project Name: Q4 2021 Sampling Event
Date Received: 10/07/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/14/2021 0108	JWO		18710

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		102	70-130

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

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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ18173-001

Matrix: Aqueous

Batch: 18173

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/08/2021 1031

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ18173-002

Matrix: Aqueous

Batch: 18173

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.39		1	98	90-110	10/08/2021 1033

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MS

Sample ID: WJ07119-009MS

Matrix: Aqueous

Batch: 18173

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.091	0.40	0.35	N	1	65	90-110	10/08/2021 1121

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MSD

Sample ID: WJ07119-009MD

Matrix: Aqueous

Batch: 18173

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	0.091	0.40	0.36	N	1	66	1.2	90-110	20	10/08/2021 1128

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18710-001

Matrix: Aqueous

Batch: 18710

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/13/2021 2307
Benzene	ND		1	1.0	ug/L	10/13/2021 2307
Bromodichloromethane	ND		1	1.0	ug/L	10/13/2021 2307
Bromoform	ND		1	1.0	ug/L	10/13/2021 2307
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/13/2021 2307
2-Butanone (MEK)	ND		1	10	ug/L	10/13/2021 2307
Carbon disulfide	ND		1	1.0	ug/L	10/13/2021 2307
Carbon tetrachloride	ND		1	1.0	ug/L	10/13/2021 2307
Chlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
Chloroethane	ND		1	2.0	ug/L	10/13/2021 2307
Chloroform	ND		1	1.0	ug/L	10/13/2021 2307
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/13/2021 2307
Cyclohexane	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/13/2021 2307
Dibromochloromethane	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/13/2021 2307
1,1-Dichloroethane	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dichloroethane	ND		1	1.0	ug/L	10/13/2021 2307
1,1-Dichloroethene	ND		1	1.0	ug/L	10/13/2021 2307
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/13/2021 2307
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/13/2021 2307
1,2-Dichloropropane	ND		1	1.0	ug/L	10/13/2021 2307
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/13/2021 2307
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/13/2021 2307
Ethylbenzene	ND		1	1.0	ug/L	10/13/2021 2307
2-Hexanone	ND		1	10	ug/L	10/13/2021 2307
Isopropylbenzene	ND		1	1.0	ug/L	10/13/2021 2307
Methyl acetate	ND		1	1.0	ug/L	10/13/2021 2307
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/13/2021 2307
4-Methyl-2-pentanone	ND		1	10	ug/L	10/13/2021 2307
Methylcyclohexane	ND		1	5.0	ug/L	10/13/2021 2307
Methylene chloride	ND		1	1.0	ug/L	10/13/2021 2307
Styrene	ND		1	1.0	ug/L	10/13/2021 2307
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/13/2021 2307
Tetrachloroethene	ND		1	1.0	ug/L	10/13/2021 2307
Toluene	ND		1	1.0	ug/L	10/13/2021 2307
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/13/2021 2307
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/13/2021 2307
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/13/2021 2307
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/13/2021 2307

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18710-001

Matrix: Aqueous

Batch: 18710

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/13/2021 2307
Trichlorofluoromethane	ND		1	1.0	ug/L	10/13/2021 2307
Vinyl chloride	ND		1	1.0	ug/L	10/13/2021 2307
Xylenes (total)	ND		1	1.0	ug/L	10/13/2021 2307
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		97	70-130			
1,2-Dichloroethane-d4		93	70-130			
Toluene-d8		101	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18710-002

Matrix: Aqueous

Batch: 18710

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	89		1	89	60-140	10/13/2021 2156
Benzene	50	47		1	95	70-130	10/13/2021 2156
Bromodichloromethane	50	41		1	82	70-130	10/13/2021 2156
Bromoform	50	40		1	79	70-130	10/13/2021 2156
Bromomethane (Methyl bromide)	50	38		1	75	70-130	10/13/2021 2156
2-Butanone (MEK)	100	98		1	98	70-130	10/13/2021 2156
Carbon disulfide	50	46		1	93	70-130	10/13/2021 2156
Carbon tetrachloride	50	39		1	77	70-130	10/13/2021 2156
Chlorobenzene	50	44		1	87	70-130	10/13/2021 2156
Chloroethane	50	39		1	79	70-130	10/13/2021 2156
Chloroform	50	41		1	83	70-130	10/13/2021 2156
Chloromethane (Methyl chloride)	50	44		1	87	60-140	10/13/2021 2156
Cyclohexane	50	47		1	93	70-130	10/13/2021 2156
1,2-Dibromo-3-chloropropane (DBCP)	50	44		1	87	70-130	10/13/2021 2156
Dibromochloromethane	50	46		1	92	70-130	10/13/2021 2156
1,2-Dibromoethane (EDB)	50	44		1	89	70-130	10/13/2021 2156
1,2-Dichlorobenzene	50	45		1	90	70-130	10/13/2021 2156
1,3-Dichlorobenzene	50	45		1	89	70-130	10/13/2021 2156
1,4-Dichlorobenzene	50	43		1	87	70-130	10/13/2021 2156
Dichlorodifluoromethane	50	44		1	88	60-140	10/13/2021 2156
1,1-Dichloroethane	50	43		1	86	70-130	10/13/2021 2156
1,2-Dichloroethane	50	42		1	84	70-130	10/13/2021 2156
1,1-Dichloroethene	50	39		1	78	70-130	10/13/2021 2156
cis-1,2-Dichloroethene	50	43		1	86	70-130	10/13/2021 2156
trans-1,2-Dichloroethene	50	42		1	84	70-130	10/13/2021 2156
1,2-Dichloropropane	50	45		1	89	70-130	10/13/2021 2156
cis-1,3-Dichloropropene	50	46		1	91	70-130	10/13/2021 2156
trans-1,3-Dichloropropene	50	45		1	90	70-130	10/13/2021 2156
Ethylbenzene	50	43		1	85	70-130	10/13/2021 2156
2-Hexanone	100	100		1	102	70-130	10/13/2021 2156
Isopropylbenzene	50	45		1	91	70-130	10/13/2021 2156
Methyl acetate	50	52		1	105	70-130	10/13/2021 2156
Methyl tertiary butyl ether (MTBE)	50	43		1	86	70-130	10/13/2021 2156
4-Methyl-2-pentanone	100	97		1	97	70-130	10/13/2021 2156
Methylcyclohexane	50	45		1	89	70-130	10/13/2021 2156
Methylene chloride	50	42		1	83	70-130	10/13/2021 2156
Styrene	50	46		1	91	70-130	10/13/2021 2156
1,1,2,2-Tetrachloroethane	50	45		1	90	70-130	10/13/2021 2156
Tetrachloroethene	50	41		1	83	70-130	10/13/2021 2156
Toluene	50	45		1	89	70-130	10/13/2021 2156
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	40		1	80	70-130	10/13/2021 2156
1,2,4-Trichlorobenzene	50	44		1	88	70-130	10/13/2021 2156
1,1,1-Trichloroethane	50	38		1	76	70-130	10/13/2021 2156
1,1,2-Trichloroethane	50	42		1	85	70-130	10/13/2021 2156

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18710-002

Matrix: Aqueous

Batch: 18710

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	43		1	86	70-130	10/13/2021 2156
Trichlorofluoromethane	50	41		1	81	70-130	10/13/2021 2156
Vinyl chloride	50	43		1	87	70-130	10/13/2021 2156
Xylenes (total)	100	87		1	87	70-130	10/13/2021 2156
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		92			70-130		
1,2-Dichloroethane-d4		80			70-130		
Toluene-d8		87			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ19599-001

Matrix: Aqueous

Batch: 19599

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Bromoform	ND		1	1.0	ug/L	10/21/2021 0045
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		96	70-130			
1,2-Dichloroethane-d4		94	70-130			
Toluene-d8		98	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ19599-002

Matrix: Aqueous

Batch: 19599

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Bromoform	50	40		1	80	70-130	10/20/2021 2235
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		97			70-130		
1,2-Dichloroethane-d4		70			70-130		
Toluene-d8		78			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents



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

**Number 126252**

Client: <u>Westin House E</u>		Report to Contact: <u>Diana Jovari</u>		Telephone No. / Email: <u>Jovari@PACELABS.COM</u>		Cruise No.	
Address: <u>5801 Bluff Rd</u>		Sampler's Signature: <u>[Signature]</u>		Analysis (Attach list if more space is needed)		Page <u>1</u> of <u>1</u>	
City: <u>Holkins</u>		Printed Name: <u>James Leaphart</u>		Barcode: <u>WJ07119</u>		Remarks / Cooler I.D.	
State: <u>SC</u>		Project Name: <u>Sample Event</u>		BIN: <u>WJ07119</u>			
Project No: <u>654549.14</u>		RO No.		No. of Containers by Preservative Type			
Sample ID / Description		Collection Time (MM/DD/YY)		MSM#			
(Conditions for each sample may be combined on one line.)		Correction (Outliers)		1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.			
<u>W-82-2021-Q4</u>	<u>10-7-21</u>	<u>0945</u>	<u>G X</u>	<u>1</u>	<u>3</u>	<u>X</u>	<u>X</u>
<u>W-81-2021-Q4</u>		<u>1144</u>	<u>G X</u>	<u>1</u>	<u>3</u>	<u>X</u>	<u>X</u>
<u>W-81-2021-Q4-DUP</u>		<u>1144</u>	<u>G X</u>	<u>1</u>	<u>3</u>	<u>X</u>	<u>X</u>
<u>W-80-2021-Q4</u>		<u>1331</u>	<u>G X</u>	<u>1</u>	<u>3</u>	<u>X</u>	<u>X</u>
<u>W-57-2021-Q4</u>		<u>1439</u>	<u>G X</u>	<u>1</u>	<u>3</u>	<u>X</u>	<u>X</u>
<u>W-38-2021-Q4</u>		<u>1422</u>	<u>G X</u>	<u>1</u>	<u>3</u>	<u>X</u>	<u>X</u>
<u>W-70-2021-Q4</u>		<u>1306</u>	<u>G X</u>	<u>1</u>	<u>3</u>	<u>X</u>	<u>X</u>
<u>W-83-2021-Q4</u>		<u>1109</u>	<u>G X</u>	<u>1</u>	<u>3</u>	<u>X</u>	<u>X</u>
<u>W-84-2021-Q4</u>		<u>0906</u>	<u>G X</u>	<u>1</u>	<u>3</u>	<u>X</u>	<u>X</u>
<u>TR-01-100721</u>			<u>X</u>		<u>2</u>	<u>X</u>	<u>X</u>

Document Number: MFC0305-01

# PACE ANALYTICAL SERVICES, LLC



**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: JSB / 10/07/2021      Lot #: WJ07119

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?	
pH Strip ID: NA      Chlorine Strip ID: NA      Tested by: NA		
Original temperature upon receipt / Derived (Corrected) temperature upon receipt		%Solid Snap-Cup ID: NA
2.5 / 2.5 °C NA / NA °C NA / NA °C NA / NA °C		
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles      IR Gun ID: 5      IR Gun Correction Factor: 0 °C		
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None		
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #	
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)		
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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.		
Sample(s) NA were received with TRC > 0.5 mg/L (if #19 is no) and were adjusted accordingly in sample 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: KDRW		Date: 10/07/2021

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Q4 Sampling Event

Lot Number: **WJ08051**

Date Completed: 10/18/2021

10/18/2021 4:48 PM

Approved and released by:  
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: WJ08051

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ08051  
Project Name: Q4 Sampling Event  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-22-2021-Q4	Aqueous	10/08/2021 0934	10/08/2021
002	W-6-2021-Q4	Aqueous	10/08/2021 0934	10/08/2021
003	W-18R-2021-Q4	Aqueous	10/08/2021 0934	10/08/2021
004	W-73-2021-Q4	Aqueous	10/08/2021 0934	10/08/2021
005	W-29-2021-Q4	Aqueous	10/08/2021 0934	10/08/2021
006	W-102-2021-Q4	Aqueous	10/08/2021 0934	10/08/2021
007	W-30-2021-Q4	Aqueous	10/08/2021 0934	10/08/2021
008	EB-01-100821	Aqueous	10/08/2021 0934	10/08/2021
009	TB-01-100821	Aqueous	10/08/2021 0934	10/08/2021

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(9 samples)

# PACE ANALYTICAL SERVICES, LLC

Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ08051  
Project Name: Q4 Sampling Event  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-22-2021-Q4	Aqueous	Nitrate - N	353.2	72		mg/L	5
002	W-6-2021-Q4	Aqueous	Nitrate - N	353.2	210		mg/L	8
002	W-6-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	3.0		ug/L	9
002	W-6-2021-Q4	Aqueous	Tetrachloroethene	8260D	18		ug/L	9
002	W-6-2021-Q4	Aqueous	Trichloroethene	8260D	2.8		ug/L	10
003	W-18R-2021-Q4	Aqueous	Nitrate - N	353.2	550		mg/L	11
003	W-18R-2021-Q4	Aqueous	Tetrachloroethene	8260D	1.9		ug/L	12
004	W-73-2021-Q4	Aqueous	Nitrate - N	353.2	1.3		mg/L	14
005	W-29-2021-Q4	Aqueous	Nitrate - N	353.2	10	S	mg/L	17
006	W-102-2021-Q4	Aqueous	Nitrate - N	353.2	95		mg/L	20
006	W-102-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	5.1		ug/L	21
006	W-102-2021-Q4	Aqueous	Tetrachloroethene	8260D	48		ug/L	21
006	W-102-2021-Q4	Aqueous	Trichloroethene	8260D	6.4		ug/L	22
007	W-30-2021-Q4	Aqueous	Nitrate - N	353.2	57		mg/L	23
007	W-30-2021-Q4	Aqueous	Tetrachloroethene	8260D	1.8		ug/L	24
007	W-30-2021-Q4	Aqueous	Trichloroethene	8260D	1.5		ug/L	25
008	EB-01-100821	Aqueous	Nitrate - N	353.2	0.039		mg/L	26
008	EB-01-100821	Aqueous	Bromodichloromethane	8260D	1.4		ug/L	27
008	EB-01-100821	Aqueous	Chloroform	8260D	11		ug/L	27

(19 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-001
Description: W-22-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	60	10/09/2021 1057	AAB		18248

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	72	1.2	mg/L	1

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

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

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-001
Description: W-22-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 0349	JWO		18897

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-001
Description: W-22-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 0349	JWO		18897

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		106	70-130
1,2-Dichloroethane-d4		112	70-130
Toluene-d8		101	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-002
Description: W-6-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	200	10/09/2021 1059	AAB		18248

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	210	4.0	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-002
Description: W-6-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 1406	BWS		18971

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	3.0		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	18		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-002
Description: W-6-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 1406	BWS		18971

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	2.8		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		109	70-130
1,2-Dichloroethane-d4		114	70-130
Toluene-d8		103	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-003
Description: W-18R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	500	10/09/2021 1101	AAB		18248

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	550	10	mg/L	1

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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-003
Description: W-18R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 0413	JWO		18897

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,1,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	1.9		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-003
Description: W-18R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 0413	JWO		18897

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		105	70-130
1,2-Dichloroethane-d4		112	70-130
Toluene-d8		100	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-004
Description: W-73-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/09/2021 1102	AAB		18248

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	1.3	0.040	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-004
Description: W-73-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 0438	JWO		18897

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-004
Description: W-73-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 0438	JWO		18897

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		108	70-130
1,2-Dichloroethane-d4		114	70-130
Toluene-d8		102	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-005
Description: W-29-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	15	10/09/2021 1104	AAB		18248

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	10	S	0.30	mg/L 1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-005
Description: W-29-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 1431	BWS		18971

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND	S	1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-005
Description: W-29-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 1431	BWS		18971

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND	S	1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		110	70-130
1,2-Dichloroethane-d4		119	70-130
Toluene-d8		105	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-006
Description: W-102-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	50	10/09/2021 1114	AAB		18248

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	95	1.0	mg/L	1

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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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-006
Description: W-102-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 1456	BWS		18971

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	5.1		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	48		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-006
Description: W-102-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 1456	BWS		18971

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	6.4		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		105	70-130
1,2-Dichloroethane-d4		116	70-130
Toluene-d8		102	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-007
Description: W-30-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	100	10/09/2021 1116	AAB		18248

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	57	2.0	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-007
Description: W-30-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 1521	BWS		18971

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	1.8		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-007
Description: W-30-2021-Q4	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 1521	BWS		18971

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	1.5		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		105	70-130
1,2-Dichloroethane-d4		111	70-130
Toluene-d8		102	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-008
Description: EB-01-100821	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/09/2021 1117	AAB		18248

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.039	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-008
Description: EB-01-100821	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 1114	BWS		18971

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	1.4		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	11		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-008
Description: EB-01-100821	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 1114	BWS		18971

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		112	70-130
Toluene-d8		99	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-009
Description: TB-01-100821	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 1139	BWS		18971

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ08051-009
Description: TB-01-100821	Matrix: Aqueous
Date Sampled: 10/08/2021 0934	Project Name: Q4 Sampling Event
Date Received: 10/08/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/15/2021 1139	BWS		18971

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		106	70-130
1,2-Dichloroethane-d4		112	70-130
Toluene-d8		102	70-130

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

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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ18248-001

Matrix: Aqueous

Batch: 18248

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/09/2021 1036

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ18248-002

Matrix: Aqueous

Batch: 18248

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.39		1	98	90-110	10/09/2021 1037

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MS

Sample ID: WJ08051-005MS

Matrix: Aqueous

Batch: 18248

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	10	0.40	11	N	15	143	90-110	10/09/2021 1106

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MSD

Sample ID: WJ08051-005MD

Matrix: Aqueous

Batch: 18248

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	10	0.40	10	N	15	16	4.9	90-110	20	10/09/2021 1112

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18897-001

Matrix: Aqueous

Batch: 18897

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/14/2021 2206
Benzene	ND		1	1.0	ug/L	10/14/2021 2206
Bromodichloromethane	ND		1	1.0	ug/L	10/14/2021 2206
Bromoform	ND		1	1.0	ug/L	10/14/2021 2206
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/14/2021 2206
2-Butanone (MEK)	ND		1	10	ug/L	10/14/2021 2206
Carbon disulfide	ND		1	1.0	ug/L	10/14/2021 2206
Carbon tetrachloride	ND		1	1.0	ug/L	10/14/2021 2206
Chlorobenzene	ND		1	1.0	ug/L	10/14/2021 2206
Chloroethane	ND		1	2.0	ug/L	10/14/2021 2206
Chloroform	ND		1	1.0	ug/L	10/14/2021 2206
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/14/2021 2206
Cyclohexane	ND		1	1.0	ug/L	10/14/2021 2206
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/14/2021 2206
Dibromochloromethane	ND		1	1.0	ug/L	10/14/2021 2206
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/14/2021 2206
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/14/2021 2206
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/14/2021 2206
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/14/2021 2206
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/14/2021 2206
1,1-Dichloroethane	ND		1	1.0	ug/L	10/14/2021 2206
1,2-Dichloroethane	ND		1	1.0	ug/L	10/14/2021 2206
1,1-Dichloroethene	ND		1	1.0	ug/L	10/14/2021 2206
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/14/2021 2206
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/14/2021 2206
1,2-Dichloropropane	ND		1	1.0	ug/L	10/14/2021 2206
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/14/2021 2206
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/14/2021 2206
Ethylbenzene	ND		1	1.0	ug/L	10/14/2021 2206
2-Hexanone	ND		1	10	ug/L	10/14/2021 2206
Isopropylbenzene	ND		1	1.0	ug/L	10/14/2021 2206
Methyl acetate	ND		1	1.0	ug/L	10/14/2021 2206
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/14/2021 2206
4-Methyl-2-pentanone	ND		1	10	ug/L	10/14/2021 2206
Methylcyclohexane	ND		1	5.0	ug/L	10/14/2021 2206
Methylene chloride	ND		1	1.0	ug/L	10/14/2021 2206
Styrene	ND		1	1.0	ug/L	10/14/2021 2206
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/14/2021 2206
Tetrachloroethene	ND		1	1.0	ug/L	10/14/2021 2206
Toluene	ND		1	1.0	ug/L	10/14/2021 2206
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/14/2021 2206
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/14/2021 2206
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/14/2021 2206
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/14/2021 2206

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18897-001

Matrix: Aqueous

Batch: 18897

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/14/2021 2206
Trichlorofluoromethane	ND		1	1.0	ug/L	10/14/2021 2206
Vinyl chloride	ND		1	1.0	ug/L	10/14/2021 2206
Xylenes (total)	ND		1	1.0	ug/L	10/14/2021 2206
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		104	70-130			
1,2-Dichloroethane-d4		111	70-130			
Toluene-d8		100	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18897-002

Matrix: Aqueous

Batch: 18897

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	120		1	116	60-140	10/14/2021 2107
Benzene	50	48		1	96	70-130	10/14/2021 2107
Bromodichloromethane	50	47		1	94	70-130	10/14/2021 2107
Bromoform	50	41		1	82	70-130	10/14/2021 2107
Bromomethane (Methyl bromide)	50	54		1	107	70-130	10/14/2021 2107
2-Butanone (MEK)	100	95		1	95	70-130	10/14/2021 2107
Carbon disulfide	50	49		1	98	70-130	10/14/2021 2107
Carbon tetrachloride	50	47		1	95	70-130	10/14/2021 2107
Chlorobenzene	50	45		1	90	70-130	10/14/2021 2107
Chloroethane	50	58		1	117	70-130	10/14/2021 2107
Chloroform	50	48		1	97	70-130	10/14/2021 2107
Chloromethane (Methyl chloride)	50	56		1	112	60-140	10/14/2021 2107
Cyclohexane	50	61		1	121	70-130	10/14/2021 2107
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	97	70-130	10/14/2021 2107
Dibromochloromethane	50	43		1	86	70-130	10/14/2021 2107
1,2-Dibromoethane (EDB)	50	44		1	89	70-130	10/14/2021 2107
1,2-Dichlorobenzene	50	47		1	94	70-130	10/14/2021 2107
1,3-Dichlorobenzene	50	46		1	92	70-130	10/14/2021 2107
1,4-Dichlorobenzene	50	45		1	91	70-130	10/14/2021 2107
Dichlorodifluoromethane	50	59		1	118	60-140	10/14/2021 2107
1,1-Dichloroethane	50	48		1	97	70-130	10/14/2021 2107
1,2-Dichloroethane	50	51		1	102	70-130	10/14/2021 2107
1,1-Dichloroethene	50	47		1	94	70-130	10/14/2021 2107
cis-1,2-Dichloroethene	50	47		1	94	70-130	10/14/2021 2107
trans-1,2-Dichloroethene	50	47		1	94	70-130	10/14/2021 2107
1,2-Dichloropropane	50	47		1	93	70-130	10/14/2021 2107
cis-1,3-Dichloropropene	50	46		1	91	70-130	10/14/2021 2107
trans-1,3-Dichloropropene	50	45		1	89	70-130	10/14/2021 2107
Ethylbenzene	50	46		1	92	70-130	10/14/2021 2107
2-Hexanone	100	96		1	96	70-130	10/14/2021 2107
Isopropylbenzene	50	49		1	98	70-130	10/14/2021 2107
Methyl acetate	50	56		1	111	70-130	10/14/2021 2107
Methyl tertiary butyl ether (MTBE)	50	48		1	95	70-130	10/14/2021 2107
4-Methyl-2-pentanone	100	100		1	105	70-130	10/14/2021 2107
Methylcyclohexane	50	49		1	99	70-130	10/14/2021 2107
Methylene chloride	50	52		1	104	70-130	10/14/2021 2107
Styrene	50	45		1	90	70-130	10/14/2021 2107
1,1,2,2-Tetrachloroethane	50	50		1	99	70-130	10/14/2021 2107
Tetrachloroethene	50	44		1	87	70-130	10/14/2021 2107
Toluene	50	49		1	98	70-130	10/14/2021 2107
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	48		1	96	70-130	10/14/2021 2107
1,2,4-Trichlorobenzene	50	47		1	95	70-130	10/14/2021 2107
1,1,1-Trichloroethane	50	49		1	97	70-130	10/14/2021 2107
1,1,2-Trichloroethane	50	46		1	92	70-130	10/14/2021 2107

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18897-002

Matrix: Aqueous

Batch: 18897

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	45		1	90	70-130	10/14/2021 2107
Trichlorofluoromethane	50	55		1	110	70-130	10/14/2021 2107
Vinyl chloride	50	55		1	111	70-130	10/14/2021 2107
Xylenes (total)	100	92		1	92	70-130	10/14/2021 2107
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		93			70-130		
1,2-Dichloroethane-d4		99			70-130		
Toluene-d8		90			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18971-001

Matrix: Aqueous

Batch: 18971

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/15/2021 1015
Benzene	ND		1	1.0	ug/L	10/15/2021 1015
Bromodichloromethane	ND		1	1.0	ug/L	10/15/2021 1015
Bromoform	ND		1	1.0	ug/L	10/15/2021 1015
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/15/2021 1015
2-Butanone (MEK)	ND		1	10	ug/L	10/15/2021 1015
Carbon disulfide	ND		1	1.0	ug/L	10/15/2021 1015
Carbon tetrachloride	ND		1	1.0	ug/L	10/15/2021 1015
Chlorobenzene	ND		1	1.0	ug/L	10/15/2021 1015
Chloroethane	ND		1	2.0	ug/L	10/15/2021 1015
Chloroform	ND		1	1.0	ug/L	10/15/2021 1015
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/15/2021 1015
Cyclohexane	ND		1	1.0	ug/L	10/15/2021 1015
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/15/2021 1015
Dibromochloromethane	ND		1	1.0	ug/L	10/15/2021 1015
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/15/2021 1015
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/15/2021 1015
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/15/2021 1015
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/15/2021 1015
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/15/2021 1015
1,1-Dichloroethane	ND		1	1.0	ug/L	10/15/2021 1015
1,2-Dichloroethane	ND		1	1.0	ug/L	10/15/2021 1015
1,1-Dichloroethene	ND		1	1.0	ug/L	10/15/2021 1015
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/15/2021 1015
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/15/2021 1015
1,2-Dichloropropane	ND		1	1.0	ug/L	10/15/2021 1015
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/15/2021 1015
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/15/2021 1015
Ethylbenzene	ND		1	1.0	ug/L	10/15/2021 1015
2-Hexanone	ND		1	10	ug/L	10/15/2021 1015
Isopropylbenzene	ND		1	1.0	ug/L	10/15/2021 1015
Methyl acetate	ND		1	1.0	ug/L	10/15/2021 1015
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/15/2021 1015
4-Methyl-2-pentanone	ND		1	10	ug/L	10/15/2021 1015
Methylcyclohexane	ND		1	5.0	ug/L	10/15/2021 1015
Methylene chloride	ND		1	1.0	ug/L	10/15/2021 1015
Styrene	ND		1	1.0	ug/L	10/15/2021 1015
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/15/2021 1015
Tetrachloroethene	ND		1	1.0	ug/L	10/15/2021 1015
Toluene	ND		1	1.0	ug/L	10/15/2021 1015
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/15/2021 1015
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/15/2021 1015
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/15/2021 1015
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/15/2021 1015

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ18971-001

Matrix: Aqueous

Batch: 18971

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/15/2021 1015
Trichlorofluoromethane	ND		1	1.0	ug/L	10/15/2021 1015
Vinyl chloride	ND		1	1.0	ug/L	10/15/2021 1015
Xylenes (total)	ND		1	1.0	ug/L	10/15/2021 1015
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		102	70-130			
1,2-Dichloroethane-d4		107	70-130			
Toluene-d8		98	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18971-002

Matrix: Aqueous

Batch: 18971

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	110		1	106	60-140	10/15/2021 0901
Benzene	50	51		1	103	70-130	10/15/2021 0901
Bromodichloromethane	50	51		1	103	70-130	10/15/2021 0901
Bromoform	50	47		1	93	70-130	10/15/2021 0901
Bromomethane (Methyl bromide)	50	50		1	100	70-130	10/15/2021 0901
2-Butanone (MEK)	100	100		1	105	70-130	10/15/2021 0901
Carbon disulfide	50	49		1	98	70-130	10/15/2021 0901
Carbon tetrachloride	50	50		1	100	70-130	10/15/2021 0901
Chlorobenzene	50	50		1	100	70-130	10/15/2021 0901
Chloroethane	50	52		1	104	70-130	10/15/2021 0901
Chloroform	50	51		1	103	70-130	10/15/2021 0901
Chloromethane (Methyl chloride)	50	57		1	115	60-140	10/15/2021 0901
Cyclohexane	50	65		1	130	70-130	10/15/2021 0901
1,2-Dibromo-3-chloropropane (DBCP)	50	51		1	103	70-130	10/15/2021 0901
Dibromochloromethane	50	47		1	95	70-130	10/15/2021 0901
1,2-Dibromoethane (EDB)	50	50		1	100	70-130	10/15/2021 0901
1,2-Dichlorobenzene	50	50		1	101	70-130	10/15/2021 0901
1,3-Dichlorobenzene	50	51		1	102	70-130	10/15/2021 0901
1,4-Dichlorobenzene	50	51		1	102	70-130	10/15/2021 0901
Dichlorodifluoromethane	50	52		1	104	60-140	10/15/2021 0901
1,1-Dichloroethane	50	52		1	103	70-130	10/15/2021 0901
1,2-Dichloroethane	50	55		1	110	70-130	10/15/2021 0901
1,1-Dichloroethene	50	47		1	94	70-130	10/15/2021 0901
cis-1,2-Dichloroethene	50	48		1	97	70-130	10/15/2021 0901
trans-1,2-Dichloroethene	50	50		1	99	70-130	10/15/2021 0901
1,2-Dichloropropane	50	52		1	104	70-130	10/15/2021 0901
cis-1,3-Dichloropropene	50	52		1	105	70-130	10/15/2021 0901
trans-1,3-Dichloropropene	50	53		1	105	70-130	10/15/2021 0901
Ethylbenzene	50	51		1	101	70-130	10/15/2021 0901
2-Hexanone	100	120		1	122	70-130	10/15/2021 0901
Isopropylbenzene	50	50		1	101	70-130	10/15/2021 0901
Methyl acetate	50	59		1	118	70-130	10/15/2021 0901
Methyl tertiary butyl ether (MTBE)	50	47		1	95	70-130	10/15/2021 0901
4-Methyl-2-pentanone	100	120		1	119	70-130	10/15/2021 0901
Methylcyclohexane	50	50		1	100	70-130	10/15/2021 0901
Methylene chloride	50	52		1	104	70-130	10/15/2021 0901
Styrene	50	50		1	101	70-130	10/15/2021 0901
1,1,2,2-Tetrachloroethane	50	56		1	112	70-130	10/15/2021 0901
Tetrachloroethene	50	47		1	94	70-130	10/15/2021 0901
Toluene	50	54		1	109	70-130	10/15/2021 0901
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	50		1	99	70-130	10/15/2021 0901
1,2,4-Trichlorobenzene	50	44		1	88	70-130	10/15/2021 0901
1,1,1-Trichloroethane	50	51		1	103	70-130	10/15/2021 0901
1,1,2-Trichloroethane	50	52		1	105	70-130	10/15/2021 0901

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ18971-002

Matrix: Aqueous

Batch: 18971

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	47		1	95	70-130	10/15/2021 0901
Trichlorofluoromethane	50	52		1	103	70-130	10/15/2021 0901
Vinyl chloride	50	55		1	109	70-130	10/15/2021 0901
Xylenes (total)	100	98		1	98	70-130	10/15/2021 0901
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		104			70-130		
1,2-Dichloroethane-d4		106			70-130		
Toluene-d8		101			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ08051-005MS

Matrix: Aqueous

Batch: 18971

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	ND	100	100		1	101	60-140	10/15/2021 1725
Benzene	ND	50	52		1	105	70-130	10/15/2021 1725
Bromodichloromethane	ND	50	51		1	102	70-130	10/15/2021 1725
Bromoform	ND	50	42		1	84	70-130	10/15/2021 1725
Bromomethane (Methyl bromide)	ND	50	54		1	107	70-130	10/15/2021 1725
2-Butanone (MEK)	ND	100	97		1	97	70-130	10/15/2021 1725
Carbon disulfide	ND	50	48		1	97	70-130	10/15/2021 1725
Carbon tetrachloride	ND	50	53		1	106	70-130	10/15/2021 1725
Chlorobenzene	ND	50	49		1	99	70-130	10/15/2021 1725
Chloroethane	ND	50	57		1	114	70-130	10/15/2021 1725
Chloroform	ND	50	54		1	109	70-130	10/15/2021 1725
Chloromethane (Methyl chloride)	ND	50	64		1	127	60-140	10/15/2021 1725
Cyclohexane	ND	50	72	N	1	145	70-130	10/15/2021 1725
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	46		1	92	70-130	10/15/2021 1725
Dibromochloromethane	ND	50	45		1	90	70-130	10/15/2021 1725
1,2-Dibromoethane (EDB)	ND	50	48		1	96	70-130	10/15/2021 1725
1,2-Dichlorobenzene	ND	50	48		1	97	70-130	10/15/2021 1725
1,3-Dichlorobenzene	ND	50	49		1	98	70-130	10/15/2021 1725
1,4-Dichlorobenzene	ND	50	49		1	98	70-130	10/15/2021 1725
Dichlorodifluoromethane	ND	50	62		1	123	60-140	10/15/2021 1725
1,1-Dichloroethane	ND	50	55		1	110	70-130	10/15/2021 1725
1,2-Dichloroethane	ND	50	57		1	113	70-130	10/15/2021 1725
1,1-Dichloroethene	ND	50	48		1	97	70-130	10/15/2021 1725
cis-1,2-Dichloroethene	ND	50	51		1	101	70-130	10/15/2021 1725
trans-1,2-Dichloroethene	ND	50	51		1	103	70-130	10/15/2021 1725
1,2-Dichloropropane	ND	50	53		1	106	70-130	10/15/2021 1725
cis-1,3-Dichloropropene	ND	50	49		1	99	70-130	10/15/2021 1725
trans-1,3-Dichloropropene	ND	50	49		1	99	70-130	10/15/2021 1725
Ethylbenzene	ND	50	51		1	101	70-130	10/15/2021 1725
2-Hexanone	ND	100	120		1	116	70-130	10/15/2021 1725
Isopropylbenzene	ND	50	51		1	101	70-130	10/15/2021 1725
Methyl acetate	ND	50	50		1	99	70-130	10/15/2021 1725
Methyl tertiary butyl ether (MTBE)	ND	50	46		1	91	70-130	10/15/2021 1725
4-Methyl-2-pentanone	ND	100	120		1	115	70-130	10/15/2021 1725
Methylcyclohexane	ND	50	53		1	105	70-130	10/15/2021 1725
Methylene chloride	ND	50	53		1	105	70-130	10/15/2021 1725
Styrene	ND	50	50		1	100	70-130	10/15/2021 1725
1,1,2,2-Tetrachloroethane	ND	50	55		1	110	70-130	10/15/2021 1725
Tetrachloroethene	ND	50	49		1	97	70-130	10/15/2021 1725
Toluene	ND	50	54		1	109	70-130	10/15/2021 1725
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	51		1	101	70-130	10/15/2021 1725
1,2,4-Trichlorobenzene	ND	50	39		1	78	70-130	10/15/2021 1725
1,1,1-Trichloroethane	ND	50	54		1	108	70-130	10/15/2021 1725
1,1,2-Trichloroethane	ND	50	50		1	101	70-130	10/15/2021 1725

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ08051-005MS

Matrix: Aqueous

Batch: 18971

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	ND	50	48		1	96	70-130	10/15/2021 1725
Trichlorofluoromethane	ND	50	59		1	119	70-130	10/15/2021 1725
Vinyl chloride	ND	50	63		1	126	70-130	10/15/2021 1725
Xylenes (total)	ND	100	97		1	97	70-130	10/15/2021 1725
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene		110	70-130					
1,2-Dichloroethane-d4		116	70-130					
Toluene-d8		109	70-130					

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ08051-005MD

Matrix: Aqueous

Batch: 18971

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	100	100		1	104	3.3	60-140	20	10/15/2021 1750
Benzene	ND	50	54		1	107	2.4	70-130	20	10/15/2021 1750
Bromodichloromethane	ND	50	51		1	103	0.59	70-130	20	10/15/2021 1750
Bromoform	ND	50	42		1	85	1.1	70-130	20	10/15/2021 1750
Bromomethane (Methyl bromide)	ND	50	56		1	112	4.4	70-130	20	10/15/2021 1750
2-Butanone (MEK)	ND	100	94		1	94	3.4	70-130	20	10/15/2021 1750
Carbon disulfide	ND	50	50		1	99	2.8	70-130	20	10/15/2021 1750
Carbon tetrachloride	ND	50	55		1	109	3.0	70-130	20	10/15/2021 1750
Chlorobenzene	ND	50	49		1	98	0.78	70-130	20	10/15/2021 1750
Chloroethane	ND	50	60		1	120	5.1	70-130	20	10/15/2021 1750
Chloroform	ND	50	56		1	112	2.9	70-130	20	10/15/2021 1750
Chloromethane (Methyl chloride)	ND	50	67		1	134	5.1	60-140	20	10/15/2021 1750
Cyclohexane	ND	50	74	N	1	147	1.6	70-130	20	10/15/2021 1750
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	49		1	98	6.3	70-130	20	10/15/2021 1750
Dibromochloromethane	ND	50	46		1	92	1.4	70-130	20	10/15/2021 1750
1,2-Dibromoethane (EDB)	ND	50	48		1	95	1.0	70-130	20	10/15/2021 1750
1,2-Dichlorobenzene	ND	50	50		1	100	3.7	70-130	20	10/15/2021 1750
1,3-Dichlorobenzene	ND	50	49		1	99	0.29	70-130	20	10/15/2021 1750
1,4-Dichlorobenzene	ND	50	49		1	99	0.68	70-130	20	10/15/2021 1750
Dichlorodifluoromethane	ND	50	65		1	130	5.1	60-140	20	10/15/2021 1750
1,1-Dichloroethane	ND	50	56		1	113	2.8	70-130	20	10/15/2021 1750
1,2-Dichloroethane	ND	50	58		1	115	1.9	70-130	20	10/15/2021 1750
1,1-Dichloroethene	ND	50	50		1	100	3.0	70-130	20	10/15/2021 1750
cis-1,2-Dichloroethene	ND	50	52		1	103	1.7	70-130	20	10/15/2021 1750
trans-1,2-Dichloroethene	ND	50	53		1	105	2.4	70-130	20	10/15/2021 1750
1,2-Dichloropropane	ND	50	53		1	106	0.38	70-130	20	10/15/2021 1750
cis-1,3-Dichloropropene	ND	50	49		1	97	1.6	70-130	20	10/15/2021 1750
trans-1,3-Dichloropropene	ND	50	49		1	97	1.8	70-130	20	10/15/2021 1750
Ethylbenzene	ND	50	50		1	101	0.23	70-130	20	10/15/2021 1750
2-Hexanone	ND	100	110		1	108	7.3	70-130	20	10/15/2021 1750
Isopropylbenzene	ND	50	52		1	104	2.9	70-130	20	10/15/2021 1750
Methyl acetate	ND	50	50		1	101	1.6	70-130	20	10/15/2021 1750
Methyl tertiary butyl ether (MTBE)	ND	50	49		1	97	6.0	70-130	20	10/15/2021 1750
4-Methyl-2-pentanone	ND	100	110		1	112	3.2	70-130	20	10/15/2021 1750
Methylcyclohexane	ND	50	54		1	108	2.6	70-130	20	10/15/2021 1750
Methylene chloride	ND	50	54		1	108	2.9	70-130	20	10/15/2021 1750
Styrene	ND	50	49		1	98	1.7	70-130	20	10/15/2021 1750
1,1,2,2-Tetrachloroethane	ND	50	55		1	110	0.055	70-130	20	10/15/2021 1750
Tetrachloroethene	ND	50	48		1	96	0.97	70-130	20	10/15/2021 1750
Toluene	ND	50	54		1	109	0.025	70-130	20	10/15/2021 1750
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	54		1	108	6.1	70-130	20	10/15/2021 1750
1,2,4-Trichlorobenzene	ND	50	43		1	87	10	70-130	20	10/15/2021 1750
1,1,1-Trichloroethane	ND	50	55		1	110	2.6	70-130	20	10/15/2021 1750
1,1,2-Trichloroethane	ND	50	50		1	101	0.16	70-130	20	10/15/2021 1750

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ08051-005MD

Matrix: Aqueous

Batch: 18971

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date	
Trichloroethene	ND	50	49		1	98	2.3	70-130	20	10/15/2021 1750	
Trichlorofluoromethane	ND	50	61		1	122	3.1	70-130	20	10/15/2021 1750	
Vinyl chloride	ND	50	66	N	1	132	4.9	70-130	20	10/15/2021 1750	
Xylenes (total)	ND	100	98		1	98	0.90	70-130	20	10/15/2021 1750	
Surrogate	Q	% Rec	Acceptance Limit								
Bromofluorobenzene		107	70-130								
1,2-Dichloroethane-d4		119	70-130								
Toluene-d8		108	70-130								

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents





**Samples Receipt Checklist (SRC) (ME0018C-15)**  
 Issuing Authority: Pace ENV - WGOL

Revised: 9/29/2020  
 Page 1 of 1

**Sample Receipt Checklist (SRC)**

Client: Westinghouse Cooler Inspected by/date: JSH / 10/08/2021 Lot #: WJ08051

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA 1.8 / 1.8 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present > "pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)</b>	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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.	
Sample(s) NA were received with TRC > 0.5 mg/L (if #19 is no) and were adjusted accordingly in sample 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: JSH Date: 10/08/2021	

Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Q4 2021 Sampling Event

Lot Number: **WJ11047**

Date Completed: 10/27/2021

10/27/2021 4:22 PM

Approved and released by:  
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: WJ11047

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

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

The laboratory control sample (LCS) associated with batch 20170 had Freon 113 recovered marginally outside of the acceptance limits. Due to the large number of analytes in the LCS, there is a high statistical probability of a few analytes outside of control limits. Per SW-846 Update V 8000D- 23 Revision 4 July 2014, a number of analytes should be allowed to marginally fail the limits without requirement for corrective action

The continuing calibration verification (CCV) associated with batch 20170 had Freon 113, Bromoform, 1,1 Dichloroethene, and 1,1,1 Trichloroethane recovered below acceptance limits. There were no detections for this compound in the associated samples. A LOQ standard was analyzed and the compound was detected, demonstrating there was adequate sensitivity to identify the analyte if it were present.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ11047  
Project Name: Q4 2021 Sampling Event  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-58-2021-Q4	Aqueous	10/11/2021 0911	10/11/2021
002	W-59-2021-Q4	Aqueous	10/11/2021 1118	10/11/2021
003	W-55-2021-Q4	Aqueous	10/11/2021 1216	10/11/2021
004	W-37-2021-Q4	Aqueous	10/11/2021 1307	10/11/2021
005	W-56-2021-Q4	Aqueous	10/11/2021 1418	10/11/2021
006	TB-01-101121	Aqueous	10/11/2021	10/11/2021

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(6 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ11047  
Project Name: Q4 2021 Sampling Event  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-58-2021-Q4	Aqueous	Nitrate - N	353.2	2.2		mg/L	6
002	W-59-2021-Q4	Aqueous	Nitrate - N	353.2	20		mg/L	9
003	W-55-2021-Q4	Aqueous	Nitrate - N	353.2	1.8		mg/L	12
004	W-37-2021-Q4	Aqueous	Nitrate - N	353.2	3.3		mg/L	15
005	W-56-2021-Q4	Aqueous	Nitrate - N	353.2	3.0		mg/L	18

(5 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-001
Description: W-58-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 0911	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/12/2021 1044	AAB		18778

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	2.2	0.040	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-001
Description: W-58-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 0911	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/22/2021 0041	ECB		20170

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-001
Description: W-58-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 0911	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/22/2021 0041	ECB		20170

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		93	70-130
Toluene-d8		99	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-002
Description: W-59-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 1118	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	20	10/12/2021 1138	AAB		18778

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	20	0.40	mg/L	1

---

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-002
Description: W-59-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 1118	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/22/2021 0104	ECB		20170

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-002
Description: W-59-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 1118	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/22/2021 0104	ECB		20170

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		104	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-003
Description: W-55-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 1216	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/12/2021 1119	AAB		18778

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	1.8	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-003
Description: W-55-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 1216	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/22/2021 0127	ECB		20170

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-003
Description: W-55-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 1216	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/22/2021 0127	ECB		20170

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		91	70-130
Toluene-d8		100	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-004
Description: W-37-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 1307	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/12/2021 1116	AAB		18778

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	3.3	0.040	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-004
Description: W-37-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 1307	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/22/2021 0150	ECB		20170

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-004
Description: W-37-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 1307	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/22/2021 0150	ECB		20170

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		100	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-005
Description: W-56-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 1418	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/12/2021 1056	AAB		18778

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		3.0	0.040	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-005
Description: W-56-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 1418	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/22/2021 0213	ECB		20170

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-005
Description: W-56-2021-Q4	Matrix: Aqueous
Date Sampled: 10/11/2021 1418	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/22/2021 0213	ECB		20170

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		91	70-130
Toluene-d8		99	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ11047-006
Description: TB-01-101121	Matrix: Aqueous
Date Sampled: 10/11/2021	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/21/2021 2238	ECB		20170

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)  
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# Volatile Organic Compounds by GC/MS

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Description: TB-01-101121	Matrix: Aqueous
Date Sampled: 10/11/2021	Project Name: Q4 2021 Sampling Event
Date Received: 10/11/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/21/2021 2238	ECB		20170

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		94	70-130
Toluene-d8		98	70-130

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ18778-001

Matrix: Aqueous

Batch: 18778

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/12/2021 1039

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ18778-002

Matrix: Aqueous

Batch: 18778

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.39		1	96	90-110	10/12/2021 1041

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20170-001

Matrix: Aqueous

Batch: 20170

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/21/2021 2129
Benzene	ND		1	1.0	ug/L	10/21/2021 2129
Bromodichloromethane	ND		1	1.0	ug/L	10/21/2021 2129
Bromoform	ND		1	1.0	ug/L	10/21/2021 2129
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/21/2021 2129
2-Butanone (MEK)	ND		1	10	ug/L	10/21/2021 2129
Carbon disulfide	ND		1	1.0	ug/L	10/21/2021 2129
Carbon tetrachloride	ND		1	1.0	ug/L	10/21/2021 2129
Chlorobenzene	ND		1	1.0	ug/L	10/21/2021 2129
Chloroethane	ND		1	2.0	ug/L	10/21/2021 2129
Chloroform	ND		1	1.0	ug/L	10/21/2021 2129
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/21/2021 2129
Cyclohexane	ND		1	1.0	ug/L	10/21/2021 2129
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/21/2021 2129
Dibromochloromethane	ND		1	1.0	ug/L	10/21/2021 2129
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/21/2021 2129
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/21/2021 2129
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/21/2021 2129
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/21/2021 2129
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/21/2021 2129
1,1-Dichloroethane	ND		1	1.0	ug/L	10/21/2021 2129
1,2-Dichloroethane	ND		1	1.0	ug/L	10/21/2021 2129
1,1-Dichloroethene	ND		1	1.0	ug/L	10/21/2021 2129
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/21/2021 2129
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/21/2021 2129
1,2-Dichloropropane	ND		1	1.0	ug/L	10/21/2021 2129
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/21/2021 2129
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/21/2021 2129
Ethylbenzene	ND		1	1.0	ug/L	10/21/2021 2129
2-Hexanone	ND		1	10	ug/L	10/21/2021 2129
Isopropylbenzene	ND		1	1.0	ug/L	10/21/2021 2129
Methyl acetate	ND		1	1.0	ug/L	10/21/2021 2129
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/21/2021 2129
4-Methyl-2-pentanone	ND		1	10	ug/L	10/21/2021 2129
Methylcyclohexane	ND		1	5.0	ug/L	10/21/2021 2129
Methylene chloride	ND		1	1.0	ug/L	10/21/2021 2129
Styrene	ND		1	1.0	ug/L	10/21/2021 2129
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/21/2021 2129
Tetrachloroethene	ND		1	1.0	ug/L	10/21/2021 2129
Toluene	ND		1	1.0	ug/L	10/21/2021 2129
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/21/2021 2129
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/21/2021 2129
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/21/2021 2129
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/21/2021 2129

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20170-001

Matrix: Aqueous

Batch: 20170

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/21/2021 2129
Trichlorofluoromethane	ND		1	1.0	ug/L	10/21/2021 2129
Vinyl chloride	ND		1	1.0	ug/L	10/21/2021 2129
Xylenes (total)	ND		1	1.0	ug/L	10/21/2021 2129
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		101	70-130			
1,2-Dichloroethane-d4		95	70-130			
Toluene-d8		101	70-130			

LOQ = Limit of Quantitation

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+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20170-002

Matrix: Aqueous

Batch: 20170

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	94		1	94	60-140	10/21/2021 2004
Benzene	50	51		1	103	70-130	10/21/2021 2004
Bromodichloromethane	50	44		1	87	70-130	10/21/2021 2004
Bromoform	50	39		1	77	70-130	10/21/2021 2004
Bromomethane (Methyl bromide)	50	48		1	95	70-130	10/21/2021 2004
2-Butanone (MEK)	100	110		1	110	70-130	10/21/2021 2004
Carbon disulfide	50	47		1	94	70-130	10/21/2021 2004
Carbon tetrachloride	50	40		1	80	70-130	10/21/2021 2004
Chlorobenzene	50	45		1	91	70-130	10/21/2021 2004
Chloroethane	50	42		1	84	70-130	10/21/2021 2004
Chloroform	50	45		1	90	70-130	10/21/2021 2004
Chloromethane (Methyl chloride)	50	59		1	117	60-140	10/21/2021 2004
Cyclohexane	50	47		1	94	70-130	10/21/2021 2004
1,2-Dibromo-3-chloropropane (DBCP)	50	42		1	85	70-130	10/21/2021 2004
Dibromochloromethane	50	46		1	92	70-130	10/21/2021 2004
1,2-Dibromoethane (EDB)	50	46		1	92	70-130	10/21/2021 2004
1,2-Dichlorobenzene	50	46		1	91	70-130	10/21/2021 2004
1,3-Dichlorobenzene	50	46		1	91	70-130	10/21/2021 2004
1,4-Dichlorobenzene	50	44		1	88	70-130	10/21/2021 2004
Dichlorodifluoromethane	50	70		1	140	60-140	10/21/2021 2004
1,1-Dichloroethane	50	47		1	95	70-130	10/21/2021 2004
1,2-Dichloroethane	50	45		1	90	70-130	10/21/2021 2004
1,1-Dichloroethene	50	38		1	75	70-130	10/21/2021 2004
cis-1,2-Dichloroethene	50	47		1	94	70-130	10/21/2021 2004
trans-1,2-Dichloroethene	50	45		1	89	70-130	10/21/2021 2004
1,2-Dichloropropane	50	50		1	99	70-130	10/21/2021 2004
cis-1,3-Dichloropropene	50	49		1	97	70-130	10/21/2021 2004
trans-1,3-Dichloropropene	50	46		1	92	70-130	10/21/2021 2004
Ethylbenzene	50	44		1	88	70-130	10/21/2021 2004
2-Hexanone	100	110		1	110	70-130	10/21/2021 2004
Isopropylbenzene	50	46		1	93	70-130	10/21/2021 2004
Methyl acetate	50	59		1	118	70-130	10/21/2021 2004
Methyl tertiary butyl ether (MTBE)	50	47		1	95	70-130	10/21/2021 2004
4-Methyl-2-pentanone	100	110		1	108	70-130	10/21/2021 2004
Methylcyclohexane	50	46		1	93	70-130	10/21/2021 2004
Methylene chloride	50	42		1	84	70-130	10/21/2021 2004
Styrene	50	47		1	94	70-130	10/21/2021 2004
1,1,2,2-Tetrachloroethane	50	47		1	93	70-130	10/21/2021 2004
Tetrachloroethene	50	42		1	84	70-130	10/21/2021 2004
Toluene	50	47		1	93	70-130	10/21/2021 2004
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	34	N	1	69	70-130	10/21/2021 2004
1,2,4-Trichlorobenzene	50	44		1	87	70-130	10/21/2021 2004
1,1,1-Trichloroethane	50	39		1	78	70-130	10/21/2021 2004
1,1,2-Trichloroethane	50	44		1	88	70-130	10/21/2021 2004

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

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Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20170-002

Matrix: Aqueous

Batch: 20170

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	46		1	92	70-130	10/21/2021 2004
Trichlorofluoromethane	50	43		1	86	70-130	10/21/2021 2004
Vinyl chloride	50	58		1	117	70-130	10/21/2021 2004
Xylenes (total)	100	90		1	90	70-130	10/21/2021 2004
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		91			70-130		
1,2-Dichloroethane-d4		88			70-130		
Toluene-d8		92			70-130		

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Chain of Custody  
and  
Miscellaneous Documents



# PACE ANALYTICAL SERVICES, LLC



**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: KDRW / 10/11/2021

Lot #: WJ11047

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA	
1.7 / 1.7 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 60°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (3/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # _____
<b>Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)</b>	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H <sub>2</sub> SO <sub>4</sub> , HNO <sub>3</sub> , 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 mg/L (If #19 is no) and were adjusted accordingly in sample 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: KDRW Date: 10/11/2021	
Comments:	



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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Q4 2021 Groundwater

Lot Number: **WJ12073**

Date Completed: 10/26/2021

10/26/2021 2:50 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



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# 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: WJ12073

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

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

The laboratory control sample (LCS) associated with batch 20071 had Acetone and 3-Butanone recovered above the acceptance limits. This could potentially result in a high bias on analytical results. There were no detections for this compound in the samples associated with this batch; therefore, data quality is not impacted.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ12073  
Project Name: Q4 2021 Groundwater  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-75-2021-Q4	Aqueous	10/12/2021 0851	10/12/2021
002	W-74-2021-Q4	Aqueous	10/12/2021 0949	10/12/2021
003	W-74-2021-Q4-Dup	Aqueous	10/12/2021 0949	10/12/2021
004	W-72-2021-Q4	Aqueous	10/12/2021 1133	10/12/2021
005	W-54-2021-Q4	Aqueous	10/12/2021 1249	10/12/2021
006	W-53-2021-Q4	Aqueous	10/12/2021 1426	10/12/2021
007	TB-01-101221	Aqueous	10/12/2021	10/12/2021
008	W-40-2021-Q4	Aqueous	10/12/2021 0920	10/12/2021
009	W-50-2021-Q4	Aqueous	10/12/2021 1045	10/12/2021
010	W-17-2021-Q4	Aqueous	10/12/2021 1258	10/12/2021

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(10 samples)

# PACE ANALYTICAL SERVICES, LLC

Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ12073  
Project Name: Q4 2021 Groundwater  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-75-2021-Q4	Aqueous	Nitrate - N	353.2	0.21		mg/L	5
002	W-74-2021-Q4	Aqueous	Nitrate - N	353.2	5.5		mg/L	8
002	W-74-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	1.3		ug/L	9
002	W-74-2021-Q4	Aqueous	Tetrachloroethene	8260D	11		ug/L	9
002	W-74-2021-Q4	Aqueous	Trichloroethene	8260D	3.2		ug/L	10
003	W-74-2021-Q4-Dup	Aqueous	Nitrate - N	353.2	5.5		mg/L	11
003	W-74-2021-Q4-Dup	Aqueous	cis-1,2-Dichloroethene	8260D	1.3		ug/L	12
003	W-74-2021-Q4-Dup	Aqueous	Tetrachloroethene	8260D	12		ug/L	12
003	W-74-2021-Q4-Dup	Aqueous	Trichloroethene	8260D	3.1		ug/L	13
004	W-72-2021-Q4	Aqueous	Nitrate - N	353.2	2.4		mg/L	14
005	W-54-2021-Q4	Aqueous	Nitrate - N	353.2	2.0		mg/L	17
006	W-53-2021-Q4	Aqueous	Nitrate - N	353.2	0.33		mg/L	20
006	W-53-2021-Q4	Aqueous	Benzene	8260D	1.1		ug/L	21
008	W-40-2021-Q4	Aqueous	Nitrate - N	353.2	4.1		mg/L	25
010	W-17-2021-Q4	Aqueous	Nitrate - N	353.2	17	S	mg/L	31
010	W-17-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	1.2		ug/L	32
010	W-17-2021-Q4	Aqueous	Tetrachloroethene	8260D	6.1		ug/L	32
010	W-17-2021-Q4	Aqueous	Trichloroethene	8260D	1.3		ug/L	33

(18 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-001
Description: W-75-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 0851	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/13/2021 0933	AAB		18787

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.21	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-001
Description: W-75-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 0851	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1528	BWS		20071

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND	L	20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND	L	10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-001
Description: W-75-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 0851	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1528	BWS		20071

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		103	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-002
Description: W-74-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 0949	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/13/2021 0934	AAB		18787

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	5.5	0.20	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-002
Description: W-74-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 0949	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1553	BWS		20071

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND	L	20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND	L	10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	1.3		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	11		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-002
Description: W-74-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 0949	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1553	BWS		20071

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	3.2		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		87	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		93	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-003
Description: W-74-2021-Q4-Dup	Matrix: Aqueous
Date Sampled: 10/12/2021 0949	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/13/2021 0936	AAB		18787

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	5.5	0.20	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-003
Description: W-74-2021-Q4-Dup	Matrix: Aqueous
Date Sampled: 10/12/2021 0949	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1617	BWS		20071

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND	L	20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND	L	10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	1.3		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	12		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-003
Description: W-74-2021-Q4-Dup	Matrix: Aqueous
Date Sampled: 10/12/2021 0949	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1617	BWS		20071

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	3.1		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		106	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-004
Description: W-72-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1133	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/13/2021 0938	AAB		18787

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	2.4	0.040	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-004
Description: W-72-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1133	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1648	BWS		20071

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND	L	20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND	L	10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-004
Description: W-72-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1133	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1648	BWS		20071

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		104	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-005
Description: W-54-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1249	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/13/2021 0939	AAB		18787

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	2.0	0.10	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-005
Description: W-54-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1249	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1322	TML		20042

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-005
Description: W-54-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1249	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1322	TML		20042

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		102	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-006
Description: W-53-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1426	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/13/2021 0941	AAB		18787

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.33	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-006
Description: W-53-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1426	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1346	TML		20042

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	1.1		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-006
Description: W-53-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1426	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1346	TML		20042

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		103	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-007
Description: TB-01-101221	Matrix: Aqueous
Date Sampled: 10/12/2021	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1234	TML		20042

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-007
Description: TB-01-101221	Matrix: Aqueous
Date Sampled: 10/12/2021	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1234	TML		20042

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		103	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-008
Description: W-40-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 0920	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/13/2021 0943	AAB		18787

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	4.1		0.20	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-008
Description: W-40-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 0920	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/23/2021 2302	BBW		19933

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-008
Description: W-40-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 0920	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/23/2021 2302	BBW		19933

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		107	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-009
Description: W-50-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1045	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/13/2021 1100	AAB		18804

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-009
Description: W-50-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1045	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/23/2021 2326	BBW		19933

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-009
Description: W-50-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1045	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/23/2021 2326	BBW		19933

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		105	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		107	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-010
Description: W-17-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1258	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 353.2	20	10/13/2021 1101	AAB		18804

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	17	S	0.40	mg/L	2

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-010
Description: W-17-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1258	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1410	TML		20042

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	1.2		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	6.1		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ12073-010
Description: W-17-2021-Q4	Matrix: Aqueous
Date Sampled: 10/12/2021 1258	Project Name: Q4 2021 Groundwater
Date Received: 10/12/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/25/2021 1410	TML		20042

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	1.3		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		104	70-130

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

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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ18787-001

Matrix: Aqueous

Batch: 18787

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/13/2021 0913

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ18787-002

Matrix: Aqueous

Batch: 18787

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.38		1	96	90-110	10/13/2021 0914

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MS

Sample ID: WJ12073-010MS

Matrix: Aqueous

Batch: 18787

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	17	0.40	18	N	20	69	90-110	10/13/2021 0953

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MSD

Sample ID: WJ12073-010MD

Matrix: Aqueous

Batch: 18787

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	17	0.40	18	N	20	79	0.24	90-110	20	10/13/2021 0954

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MB

Sample ID: WQ18804-001

Matrix: Aqueous

Batch: 18804

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/13/2021 1056

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ18804-002

Matrix: Aqueous

Batch: 18804

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.37		1	91	90-110	10/13/2021 1058

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MS

Sample ID: WJ12073-010MS

Matrix: Aqueous

Batch: 18804

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	17	0.40	18	N	20	69	90-110	10/13/2021 1103

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MSD

Sample ID: WJ12073-010MD

Matrix: Aqueous

Batch: 18804

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	17	0.40	18	N	20	74	0.12	90-110	20	10/13/2021 1105

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ19933-001

Matrix: Aqueous

Batch: 19933

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/23/2021 1916
Benzene	ND		1	1.0	ug/L	10/23/2021 1916
Bromodichloromethane	ND		1	1.0	ug/L	10/23/2021 1916
Bromoform	ND		1	1.0	ug/L	10/23/2021 1916
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/23/2021 1916
2-Butanone (MEK)	ND		1	10	ug/L	10/23/2021 1916
Carbon disulfide	ND		1	1.0	ug/L	10/23/2021 1916
Carbon tetrachloride	ND		1	1.0	ug/L	10/23/2021 1916
Chlorobenzene	ND		1	1.0	ug/L	10/23/2021 1916
Chloroethane	ND		1	2.0	ug/L	10/23/2021 1916
Chloroform	ND		1	1.0	ug/L	10/23/2021 1916
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/23/2021 1916
Cyclohexane	ND		1	1.0	ug/L	10/23/2021 1916
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/23/2021 1916
Dibromochloromethane	ND		1	1.0	ug/L	10/23/2021 1916
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/23/2021 1916
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/23/2021 1916
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/23/2021 1916
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/23/2021 1916
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/23/2021 1916
1,1-Dichloroethane	ND		1	1.0	ug/L	10/23/2021 1916
1,2-Dichloroethane	ND		1	1.0	ug/L	10/23/2021 1916
1,1-Dichloroethene	ND		1	1.0	ug/L	10/23/2021 1916
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/23/2021 1916
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/23/2021 1916
1,2-Dichloropropane	ND		1	1.0	ug/L	10/23/2021 1916
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/23/2021 1916
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/23/2021 1916
Ethylbenzene	ND		1	1.0	ug/L	10/23/2021 1916
2-Hexanone	ND		1	10	ug/L	10/23/2021 1916
Isopropylbenzene	ND		1	1.0	ug/L	10/23/2021 1916
Methyl acetate	ND		1	1.0	ug/L	10/23/2021 1916
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/23/2021 1916
4-Methyl-2-pentanone	ND		1	10	ug/L	10/23/2021 1916
Methylcyclohexane	ND		1	5.0	ug/L	10/23/2021 1916
Methylene chloride	ND		1	1.0	ug/L	10/23/2021 1916
Styrene	ND		1	1.0	ug/L	10/23/2021 1916
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/23/2021 1916
Tetrachloroethene	ND		1	1.0	ug/L	10/23/2021 1916
Toluene	ND		1	1.0	ug/L	10/23/2021 1916
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/23/2021 1916
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/23/2021 1916
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/23/2021 1916
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/23/2021 1916

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ19933-001

Matrix: Aqueous

Batch: 19933

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/23/2021 1916
Trichlorofluoromethane	ND		1	1.0	ug/L	10/23/2021 1916
Vinyl chloride	ND		1	1.0	ug/L	10/23/2021 1916
Xylenes (total)	ND		1	1.0	ug/L	10/23/2021 1916
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		103	70-130			
1,2-Dichloroethane-d4		102	70-130			
Toluene-d8		105	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ19933-002

Matrix: Aqueous

Batch: 19933

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	110		1	106	60-140	10/23/2021 1813
Benzene	50	50		1	100	70-130	10/23/2021 1813
Bromodichloromethane	50	51		1	101	70-130	10/23/2021 1813
Bromoform	50	53		1	106	70-130	10/23/2021 1813
Bromomethane (Methyl bromide)	50	48		1	95	70-130	10/23/2021 1813
2-Butanone (MEK)	100	110		1	108	70-130	10/23/2021 1813
Carbon disulfide	50	54		1	109	70-130	10/23/2021 1813
Carbon tetrachloride	50	51		1	103	70-130	10/23/2021 1813
Chlorobenzene	50	50		1	99	70-130	10/23/2021 1813
Chloroethane	50	46		1	92	70-130	10/23/2021 1813
Chloroform	50	49		1	97	70-130	10/23/2021 1813
Chloromethane (Methyl chloride)	50	44		1	89	60-140	10/23/2021 1813
Cyclohexane	50	52		1	104	70-130	10/23/2021 1813
1,2-Dibromo-3-chloropropane (DBCP)	50	50		1	100	70-130	10/23/2021 1813
Dibromochloromethane	50	52		1	103	70-130	10/23/2021 1813
1,2-Dibromoethane (EDB)	50	51		1	103	70-130	10/23/2021 1813
1,2-Dichlorobenzene	50	50		1	100	70-130	10/23/2021 1813
1,3-Dichlorobenzene	50	50		1	100	70-130	10/23/2021 1813
1,4-Dichlorobenzene	50	48		1	95	70-130	10/23/2021 1813
Dichlorodifluoromethane	50	45		1	90	60-140	10/23/2021 1813
1,1-Dichloroethane	50	49		1	98	70-130	10/23/2021 1813
1,2-Dichloroethane	50	50		1	100	70-130	10/23/2021 1813
1,1-Dichloroethene	50	55		1	109	70-130	10/23/2021 1813
cis-1,2-Dichloroethene	50	51		1	103	70-130	10/23/2021 1813
trans-1,2-Dichloroethene	50	52		1	104	70-130	10/23/2021 1813
1,2-Dichloropropane	50	48		1	96	70-130	10/23/2021 1813
cis-1,3-Dichloropropene	50	53		1	106	70-130	10/23/2021 1813
trans-1,3-Dichloropropene	50	54		1	109	70-130	10/23/2021 1813
Ethylbenzene	50	52		1	104	70-130	10/23/2021 1813
2-Hexanone	100	100		1	103	70-130	10/23/2021 1813
Isopropylbenzene	50	55		1	110	70-130	10/23/2021 1813
Methyl acetate	50	49		1	99	70-130	10/23/2021 1813
Methyl tertiary butyl ether (MTBE)	50	55		1	111	70-130	10/23/2021 1813
4-Methyl-2-pentanone	100	100		1	101	70-130	10/23/2021 1813
Methylcyclohexane	50	56		1	111	70-130	10/23/2021 1813
Methylene chloride	50	49		1	99	70-130	10/23/2021 1813
Styrene	50	54		1	107	70-130	10/23/2021 1813
1,1,2,2-Tetrachloroethane	50	48		1	96	70-130	10/23/2021 1813
Tetrachloroethene	50	51		1	101	70-130	10/23/2021 1813
Toluene	50	52		1	103	70-130	10/23/2021 1813
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	54		1	108	70-130	10/23/2021 1813
1,2,4-Trichlorobenzene	50	54		1	109	70-130	10/23/2021 1813
1,1,1-Trichloroethane	50	51		1	101	70-130	10/23/2021 1813
1,1,2-Trichloroethane	50	50		1	100	70-130	10/23/2021 1813

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ19933-002

Matrix: Aqueous

Batch: 19933

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	51		1	101	70-130	10/23/2021 1813
Trichlorofluoromethane	50	48		1	96	70-130	10/23/2021 1813
Vinyl chloride	50	58		1	117	70-130	10/23/2021 1813
Xylenes (total)	100	110		1	109	70-130	10/23/2021 1813
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		99			70-130		
1,2-Dichloroethane-d4		97			70-130		
Toluene-d8		97			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20042-001

Matrix: Aqueous

Batch: 20042

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/25/2021 1210
Benzene	ND		1	1.0	ug/L	10/25/2021 1210
Bromodichloromethane	ND		1	1.0	ug/L	10/25/2021 1210
Bromoform	ND		1	1.0	ug/L	10/25/2021 1210
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/25/2021 1210
2-Butanone (MEK)	ND		1	10	ug/L	10/25/2021 1210
Carbon disulfide	ND		1	1.0	ug/L	10/25/2021 1210
Carbon tetrachloride	ND		1	1.0	ug/L	10/25/2021 1210
Chlorobenzene	ND		1	1.0	ug/L	10/25/2021 1210
Chloroethane	ND		1	2.0	ug/L	10/25/2021 1210
Chloroform	ND		1	1.0	ug/L	10/25/2021 1210
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/25/2021 1210
Cyclohexane	ND		1	1.0	ug/L	10/25/2021 1210
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/25/2021 1210
Dibromochloromethane	ND		1	1.0	ug/L	10/25/2021 1210
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/25/2021 1210
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/25/2021 1210
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/25/2021 1210
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/25/2021 1210
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/25/2021 1210
1,1-Dichloroethane	ND		1	1.0	ug/L	10/25/2021 1210
1,2-Dichloroethane	ND		1	1.0	ug/L	10/25/2021 1210
1,1-Dichloroethene	ND		1	1.0	ug/L	10/25/2021 1210
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/25/2021 1210
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/25/2021 1210
1,2-Dichloropropane	ND		1	1.0	ug/L	10/25/2021 1210
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/25/2021 1210
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/25/2021 1210
Ethylbenzene	ND		1	1.0	ug/L	10/25/2021 1210
2-Hexanone	ND		1	10	ug/L	10/25/2021 1210
Isopropylbenzene	ND		1	1.0	ug/L	10/25/2021 1210
Methyl acetate	ND		1	1.0	ug/L	10/25/2021 1210
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/25/2021 1210
4-Methyl-2-pentanone	ND		1	10	ug/L	10/25/2021 1210
Methylcyclohexane	ND		1	5.0	ug/L	10/25/2021 1210
Methylene chloride	ND		1	1.0	ug/L	10/25/2021 1210
Styrene	ND		1	1.0	ug/L	10/25/2021 1210
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/25/2021 1210
Tetrachloroethene	ND		1	1.0	ug/L	10/25/2021 1210
Toluene	ND		1	1.0	ug/L	10/25/2021 1210
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/25/2021 1210
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/25/2021 1210
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/25/2021 1210
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/25/2021 1210

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20042-001

Matrix: Aqueous

Batch: 20042

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/25/2021 1210
Trichlorofluoromethane	ND		1	1.0	ug/L	10/25/2021 1210
Vinyl chloride	ND		1	1.0	ug/L	10/25/2021 1210
Xylenes (total)	ND		1	1.0	ug/L	10/25/2021 1210
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		94	70-130			
1,2-Dichloroethane-d4		105	70-130			
Toluene-d8		102	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20042-002

Matrix: Aqueous

Batch: 20042

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	130		1	132	60-140	10/25/2021 1024
Benzene	50	47		1	95	70-130	10/25/2021 1024
Bromodichloromethane	50	50		1	100	70-130	10/25/2021 1024
Bromoform	50	51		1	103	70-130	10/25/2021 1024
Bromomethane (Methyl bromide)	50	49		1	97	70-130	10/25/2021 1024
2-Butanone (MEK)	100	120		1	117	70-130	10/25/2021 1024
Carbon disulfide	50	51		1	102	70-130	10/25/2021 1024
Carbon tetrachloride	50	49		1	99	70-130	10/25/2021 1024
Chlorobenzene	50	47		1	94	70-130	10/25/2021 1024
Chloroethane	50	48		1	96	70-130	10/25/2021 1024
Chloroform	50	46		1	93	70-130	10/25/2021 1024
Chloromethane (Methyl chloride)	50	49		1	97	60-140	10/25/2021 1024
Cyclohexane	50	48		1	97	70-130	10/25/2021 1024
1,2-Dibromo-3-chloropropane (DBCP)	50	49		1	97	70-130	10/25/2021 1024
Dibromochloromethane	50	50		1	100	70-130	10/25/2021 1024
1,2-Dibromoethane (EDB)	50	49		1	98	70-130	10/25/2021 1024
1,2-Dichlorobenzene	50	46		1	92	70-130	10/25/2021 1024
1,3-Dichlorobenzene	50	46		1	92	70-130	10/25/2021 1024
1,4-Dichlorobenzene	50	44		1	89	70-130	10/25/2021 1024
Dichlorodifluoromethane	50	53		1	106	60-140	10/25/2021 1024
1,1-Dichloroethane	50	46		1	93	70-130	10/25/2021 1024
1,2-Dichloroethane	50	49		1	98	70-130	10/25/2021 1024
1,1-Dichloroethene	50	50		1	100	70-130	10/25/2021 1024
cis-1,2-Dichloroethene	50	48		1	96	70-130	10/25/2021 1024
trans-1,2-Dichloroethene	50	49		1	97	70-130	10/25/2021 1024
1,2-Dichloropropane	50	47		1	95	70-130	10/25/2021 1024
cis-1,3-Dichloropropene	50	51		1	101	70-130	10/25/2021 1024
trans-1,3-Dichloropropene	50	52		1	104	70-130	10/25/2021 1024
Ethylbenzene	50	50		1	100	70-130	10/25/2021 1024
2-Hexanone	100	110		1	109	70-130	10/25/2021 1024
Isopropylbenzene	50	52		1	104	70-130	10/25/2021 1024
Methyl acetate	50	50		1	100	70-130	10/25/2021 1024
Methyl tertiary butyl ether (MTBE)	50	53		1	105	70-130	10/25/2021 1024
4-Methyl-2-pentanone	100	100		1	105	70-130	10/25/2021 1024
Methylcyclohexane	50	52		1	105	70-130	10/25/2021 1024
Methylene chloride	50	45		1	91	70-130	10/25/2021 1024
Styrene	50	51		1	102	70-130	10/25/2021 1024
1,1,2,2-Tetrachloroethane	50	46		1	93	70-130	10/25/2021 1024
Tetrachloroethene	50	49		1	97	70-130	10/25/2021 1024
Toluene	50	49		1	98	70-130	10/25/2021 1024
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	49		1	98	70-130	10/25/2021 1024
1,2,4-Trichlorobenzene	50	49		1	97	70-130	10/25/2021 1024
1,1,1-Trichloroethane	50	48		1	97	70-130	10/25/2021 1024
1,1,2-Trichloroethane	50	48		1	97	70-130	10/25/2021 1024

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20042-002

Matrix: Aqueous

Batch: 20042

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	47		1	94	70-130	10/25/2021 1024
Trichlorofluoromethane	50	50		1	100	70-130	10/25/2021 1024
Vinyl chloride	50	49		1	99	70-130	10/25/2021 1024
Xylenes (total)	100	100		1	102	70-130	10/25/2021 1024
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		93			70-130		
1,2-Dichloroethane-d4		97			70-130		
Toluene-d8		94			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ12073-010MS

Matrix: Aqueous

Batch: 20042

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	ND	100	110		1	106	60-140	10/25/2021 2045
Benzene	ND	50	56		1	112	70-130	10/25/2021 2045
Bromodichloromethane	ND	50	55		1	110	70-130	10/25/2021 2045
Bromoform	ND	50	53		1	105	70-130	10/25/2021 2045
Bromomethane (Methyl bromide)	ND	50	57		1	114	70-130	10/25/2021 2045
2-Butanone (MEK)	ND	100	110		1	106	70-130	10/25/2021 2045
Carbon disulfide	ND	50	58		1	116	70-130	10/25/2021 2045
Carbon tetrachloride	ND	50	58		1	115	70-130	10/25/2021 2045
Chlorobenzene	ND	50	53		1	107	70-130	10/25/2021 2045
Chloroethane	ND	50	56		1	112	70-130	10/25/2021 2045
Chloroform	ND	50	54		1	108	70-130	10/25/2021 2045
Chloromethane (Methyl chloride)	ND	50	57		1	114	60-140	10/25/2021 2045
Cyclohexane	ND	50	58		1	117	70-130	10/25/2021 2045
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	48		1	95	70-130	10/25/2021 2045
Dibromochloromethane	ND	50	54		1	108	70-130	10/25/2021 2045
1,2-Dibromoethane (EDB)	ND	50	52		1	104	70-130	10/25/2021 2045
1,2-Dichlorobenzene	ND	50	51		1	101	70-130	10/25/2021 2045
1,3-Dichlorobenzene	ND	50	50		1	101	70-130	10/25/2021 2045
1,4-Dichlorobenzene	ND	50	49		1	98	70-130	10/25/2021 2045
Dichlorodifluoromethane	ND	50	64		1	129	60-140	10/25/2021 2045
1,1-Dichloroethane	ND	50	54		1	108	70-130	10/25/2021 2045
1,2-Dichloroethane	ND	50	53		1	107	70-130	10/25/2021 2045
1,1-Dichloroethene	ND	50	59		1	118	70-130	10/25/2021 2045
cis-1,2-Dichloroethene	1.2	50	56		1	110	70-130	10/25/2021 2045
trans-1,2-Dichloroethene	ND	50	57		1	114	70-130	10/25/2021 2045
1,2-Dichloropropane	ND	50	53		1	107	70-130	10/25/2021 2045
cis-1,3-Dichloropropene	ND	50	53		1	106	70-130	10/25/2021 2045
trans-1,3-Dichloropropene	ND	50	54		1	107	70-130	10/25/2021 2045
Ethylbenzene	ND	50	56		1	112	70-130	10/25/2021 2045
2-Hexanone	ND	100	110		1	109	70-130	10/25/2021 2045
Isopropylbenzene	ND	50	59		1	118	70-130	10/25/2021 2045
Methyl acetate	ND	50	46		1	92	70-130	10/25/2021 2045
Methyl tertiary butyl ether (MTBE)	ND	50	54		1	108	70-130	10/25/2021 2045
4-Methyl-2-pentanone	ND	100	110		1	107	70-130	10/25/2021 2045
Methylcyclohexane	ND	50	61		1	122	70-130	10/25/2021 2045
Methylene chloride	ND	50	51		1	103	70-130	10/25/2021 2045
Styrene	ND	50	58		1	115	70-130	10/25/2021 2045
1,1,2,2-Tetrachloroethane	ND	50	50		1	100	70-130	10/25/2021 2045
Tetrachloroethene	6.1	50	62		1	111	70-130	10/25/2021 2045
Toluene	ND	50	56		1	112	70-130	10/25/2021 2045
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	60		1	120	70-130	10/25/2021 2045
1,2,4-Trichlorobenzene	ND	50	48		1	96	70-130	10/25/2021 2045
1,1,1-Trichloroethane	ND	50	56		1	113	70-130	10/25/2021 2045
1,1,2-Trichloroethane	ND	50	52		1	104	70-130	10/25/2021 2045

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ12073-010MS

Matrix: Aqueous

Batch: 20042

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	1.3	50	55		1	107	70-130	10/25/2021 2045
Trichlorofluoromethane	ND	50	58		1	116	70-130	10/25/2021 2045
Vinyl chloride	ND	50	58		1	116	70-130	10/25/2021 2045
Xylenes (total)	ND	100	120		1	115	70-130	10/25/2021 2045
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene		102	70-130					
1,2-Dichloroethane-d4		103	70-130					
Toluene-d8		106	70-130					

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ12073-010MD

Matrix: Aqueous

Batch: 20042

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	100	97		1	97	8.2	60-140	20	10/25/2021 2109
Benzene	ND	50	54		1	109	2.7	70-130	20	10/25/2021 2109
Bromodichloromethane	ND	50	54		1	108	1.9	70-130	20	10/25/2021 2109
Bromoform	ND	50	52		1	104	1.4	70-130	20	10/25/2021 2109
Bromomethane (Methyl bromide)	ND	50	56		1	112	2.1	70-130	20	10/25/2021 2109
2-Butanone (MEK)	ND	100	110		1	106	0.44	70-130	20	10/25/2021 2109
Carbon disulfide	ND	50	57		1	115	1.3	70-130	20	10/25/2021 2109
Carbon tetrachloride	ND	50	56		1	113	2.5	70-130	20	10/25/2021 2109
Chlorobenzene	ND	50	52		1	103	3.3	70-130	20	10/25/2021 2109
Chloroethane	ND	50	57		1	114	1.1	70-130	20	10/25/2021 2109
Chloroform	ND	50	52		1	104	3.5	70-130	20	10/25/2021 2109
Chloromethane (Methyl chloride)	ND	50	58		1	116	1.6	60-140	20	10/25/2021 2109
Cyclohexane	ND	50	57		1	113	3.2	70-130	20	10/25/2021 2109
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	49		1	97	2.0	70-130	20	10/25/2021 2109
Dibromochloromethane	ND	50	53		1	106	2.1	70-130	20	10/25/2021 2109
1,2-Dibromoethane (EDB)	ND	50	51		1	103	1.7	70-130	20	10/25/2021 2109
1,2-Dichlorobenzene	ND	50	50		1	100	1.4	70-130	20	10/25/2021 2109
1,3-Dichlorobenzene	ND	50	50		1	100	0.71	70-130	20	10/25/2021 2109
1,4-Dichlorobenzene	ND	50	48		1	96	1.5	70-130	20	10/25/2021 2109
Dichlorodifluoromethane	ND	50	63		1	126	2.4	60-140	20	10/25/2021 2109
1,1-Dichloroethane	ND	50	53		1	105	2.4	70-130	20	10/25/2021 2109
1,2-Dichloroethane	ND	50	52		1	104	2.6	70-130	20	10/25/2021 2109
1,1-Dichloroethene	ND	50	59		1	118	0.33	70-130	20	10/25/2021 2109
cis-1,2-Dichloroethene	1.2	50	55		1	108	1.7	70-130	20	10/25/2021 2109
trans-1,2-Dichloroethene	ND	50	56		1	112	1.9	70-130	20	10/25/2021 2109
1,2-Dichloropropane	ND	50	52		1	105	1.6	70-130	20	10/25/2021 2109
cis-1,3-Dichloropropene	ND	50	52		1	105	0.79	70-130	20	10/25/2021 2109
trans-1,3-Dichloropropene	ND	50	52		1	105	2.6	70-130	20	10/25/2021 2109
Ethylbenzene	ND	50	55		1	109	2.8	70-130	20	10/25/2021 2109
2-Hexanone	ND	100	110		1	109	0.070	70-130	20	10/25/2021 2109
Isopropylbenzene	ND	50	57		1	114	3.4	70-130	20	10/25/2021 2109
Methyl acetate	ND	50	44		1	89	3.9	70-130	20	10/25/2021 2109
Methyl tertiary butyl ether (MTBE)	ND	50	55		1	109	1.0	70-130	20	10/25/2021 2109
4-Methyl-2-pentanone	ND	100	110		1	107	0.32	70-130	20	10/25/2021 2109
Methylcyclohexane	ND	50	57		1	115	5.9	70-130	20	10/25/2021 2109
Methylene chloride	ND	50	51		1	102	1.0	70-130	20	10/25/2021 2109
Styrene	ND	50	57		1	113	1.7	70-130	20	10/25/2021 2109
1,1,2,2-Tetrachloroethane	ND	50	48		1	97	3.2	70-130	20	10/25/2021 2109
Tetrachloroethene	6.1	50	60		1	107	3.0	70-130	20	10/25/2021 2109
Toluene	ND	50	54		1	109	2.7	70-130	20	10/25/2021 2109
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	58		1	116	2.8	70-130	20	10/25/2021 2109
1,2,4-Trichlorobenzene	ND	50	47		1	94	1.6	70-130	20	10/25/2021 2109
1,1,1-Trichloroethane	ND	50	56		1	111	1.3	70-130	20	10/25/2021 2109
1,1,2-Trichloroethane	ND	50	51		1	101	2.6	70-130	20	10/25/2021 2109

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ12073-010MD

Matrix: Aqueous

Batch: 20042

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date	
Trichloroethene	1.3	50	54		1	105	1.8	70-130	20	10/25/2021 2109	
Trichlorofluoromethane	ND	50	60		1	120	3.5	70-130	20	10/25/2021 2109	
Vinyl chloride	ND	50	60		1	120	3.4	70-130	20	10/25/2021 2109	
Xylenes (total)	ND	100	110		1	112	3.0	70-130	20	10/25/2021 2109	
Surrogate	Q	% Rec	Acceptance Limit								
Bromofluorobenzene		100	70-130								
1,2-Dichloroethane-d4		102	70-130								
Toluene-d8		104	70-130								

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20071-001

Matrix: Aqueous

Batch: 20071

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/25/2021 0955
Benzene	ND		1	1.0	ug/L	10/25/2021 0955
Bromodichloromethane	ND		1	1.0	ug/L	10/25/2021 0955
Bromoform	ND		1	1.0	ug/L	10/25/2021 0955
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/25/2021 0955
2-Butanone (MEK)	ND		1	10	ug/L	10/25/2021 0955
Carbon disulfide	ND		1	1.0	ug/L	10/25/2021 0955
Carbon tetrachloride	ND		1	1.0	ug/L	10/25/2021 0955
Chlorobenzene	ND		1	1.0	ug/L	10/25/2021 0955
Chloroethane	ND		1	2.0	ug/L	10/25/2021 0955
Chloroform	ND		1	1.0	ug/L	10/25/2021 0955
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/25/2021 0955
Cyclohexane	ND		1	1.0	ug/L	10/25/2021 0955
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/25/2021 0955
Dibromochloromethane	ND		1	1.0	ug/L	10/25/2021 0955
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/25/2021 0955
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/25/2021 0955
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/25/2021 0955
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/25/2021 0955
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/25/2021 0955
1,1-Dichloroethane	ND		1	1.0	ug/L	10/25/2021 0955
1,2-Dichloroethane	ND		1	1.0	ug/L	10/25/2021 0955
1,1-Dichloroethene	ND		1	1.0	ug/L	10/25/2021 0955
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/25/2021 0955
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/25/2021 0955
1,2-Dichloropropane	ND		1	1.0	ug/L	10/25/2021 0955
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/25/2021 0955
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/25/2021 0955
Ethylbenzene	ND		1	1.0	ug/L	10/25/2021 0955
2-Hexanone	ND		1	10	ug/L	10/25/2021 0955
Isopropylbenzene	ND		1	1.0	ug/L	10/25/2021 0955
Methyl acetate	ND		1	1.0	ug/L	10/25/2021 0955
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/25/2021 0955
4-Methyl-2-pentanone	ND		1	10	ug/L	10/25/2021 0955
Methylcyclohexane	ND		1	5.0	ug/L	10/25/2021 0955
Methylene chloride	ND		1	1.0	ug/L	10/25/2021 0955
Styrene	ND		1	1.0	ug/L	10/25/2021 0955
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/25/2021 0955
Tetrachloroethene	ND		1	1.0	ug/L	10/25/2021 0955
Toluene	ND		1	1.0	ug/L	10/25/2021 0955
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/25/2021 0955
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/25/2021 0955
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/25/2021 0955
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/25/2021 0955

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20071-001

Matrix: Aqueous

Batch: 20071

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/25/2021 0955
Trichlorofluoromethane	ND		1	1.0	ug/L	10/25/2021 0955
Vinyl chloride	ND		1	1.0	ug/L	10/25/2021 0955
Xylenes (total)	ND		1	1.0	ug/L	10/25/2021 0955
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		98	70-130			
1,2-Dichloroethane-d4		108	70-130			
Toluene-d8		104	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20071-002

Matrix: Aqueous

Batch: 20071

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	170	N	1	169	60-140	10/25/2021 0851
Benzene	50	49		1	98	70-130	10/25/2021 0851
Bromodichloromethane	50	52		1	104	70-130	10/25/2021 0851
Bromoform	50	56		1	113	70-130	10/25/2021 0851
Bromomethane (Methyl bromide)	50	56		1	112	70-130	10/25/2021 0851
2-Butanone (MEK)	100	130	N	1	132	70-130	10/25/2021 0851
Carbon disulfide	50	55		1	109	70-130	10/25/2021 0851
Carbon tetrachloride	50	52		1	104	70-130	10/25/2021 0851
Chlorobenzene	50	49		1	98	70-130	10/25/2021 0851
Chloroethane	50	55		1	111	70-130	10/25/2021 0851
Chloroform	50	48		1	96	70-130	10/25/2021 0851
Chloromethane (Methyl chloride)	50	53		1	107	60-140	10/25/2021 0851
Cyclohexane	50	53		1	107	70-130	10/25/2021 0851
1,2-Dibromo-3-chloropropane (DBCP)	50	55		1	110	70-130	10/25/2021 0851
Dibromochloromethane	50	54		1	107	70-130	10/25/2021 0851
1,2-Dibromoethane (EDB)	50	51		1	102	70-130	10/25/2021 0851
1,2-Dichlorobenzene	50	50		1	100	70-130	10/25/2021 0851
1,3-Dichlorobenzene	50	50		1	100	70-130	10/25/2021 0851
1,4-Dichlorobenzene	50	47		1	94	70-130	10/25/2021 0851
Dichlorodifluoromethane	50	65		1	131	60-140	10/25/2021 0851
1,1-Dichloroethane	50	50		1	100	70-130	10/25/2021 0851
1,2-Dichloroethane	50	50		1	100	70-130	10/25/2021 0851
1,1-Dichloroethene	50	51		1	102	70-130	10/25/2021 0851
cis-1,2-Dichloroethene	50	49		1	97	70-130	10/25/2021 0851
trans-1,2-Dichloroethene	50	50		1	99	70-130	10/25/2021 0851
1,2-Dichloropropane	50	50		1	100	70-130	10/25/2021 0851
cis-1,3-Dichloropropene	50	57		1	114	70-130	10/25/2021 0851
trans-1,3-Dichloropropene	50	51		1	102	70-130	10/25/2021 0851
Ethylbenzene	50	51		1	101	70-130	10/25/2021 0851
2-Hexanone	100	120		1	123	70-130	10/25/2021 0851
Isopropylbenzene	50	54		1	108	70-130	10/25/2021 0851
Methyl acetate	50	50		1	99	70-130	10/25/2021 0851
Methyl tertiary butyl ether (MTBE)	50	58		1	117	70-130	10/25/2021 0851
4-Methyl-2-pentanone	100	120		1	116	70-130	10/25/2021 0851
Methylcyclohexane	50	50		1	100	70-130	10/25/2021 0851
Methylene chloride	50	54		1	109	70-130	10/25/2021 0851
Styrene	50	55		1	110	70-130	10/25/2021 0851
1,1,2,2-Tetrachloroethane	50	49		1	97	70-130	10/25/2021 0851
Tetrachloroethene	50	48		1	97	70-130	10/25/2021 0851
Toluene	50	50		1	100	70-130	10/25/2021 0851
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	53		1	105	70-130	10/25/2021 0851
1,2,4-Trichlorobenzene	50	53		1	106	70-130	10/25/2021 0851
1,1,1-Trichloroethane	50	51		1	102	70-130	10/25/2021 0851
1,1,2-Trichloroethane	50	48		1	96	70-130	10/25/2021 0851

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20071-002

Matrix: Aqueous

Batch: 20071

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	49		1	97	70-130	10/25/2021 0851
Trichlorofluoromethane	50	57		1	115	70-130	10/25/2021 0851
Vinyl chloride	50	56		1	112	70-130	10/25/2021 0851
Xylenes (total)	100	110		1	106	70-130	10/25/2021 0851
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		93			70-130		
1,2-Dichloroethane-d4		93			70-130		
Toluene-d8		93			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents



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

**Number 126256**

**PACE ANALYTICAL SERVICES, LLC**

Client: <b>WestonLithouse</b>		Report to Contact:		Telephone No. / Email: <b>803 647 9700</b>		Quote No.
Address: <b>5801 Buff Rd</b>		Sample's Signatory: <b>[Signature]</b>		Analysis: <b>WESTONLITHOUSE.COM</b>		Page <b>1</b> of <b>2</b>
City: <b>Hartman</b>	State: <b>SC</b>	Zip Code: <b>29061</b>	Printer Name: <b>James Leghett</b>		Barcode: <b>WJ12073</b>	
Project No.: <b>60595649.14</b>	F.O. No.	Collection Date(s)	Collection Time (Approx)	Matrix	No. of Containers by Preservative Type	Remarks / Order ID
Sample ID / Description (Containers for each sample may be captured on one line.)						
<b>W-75-2021-Q4</b>		<b>10-12-21</b>	<b>0851</b>		<b>3</b>	<b>VOC's</b>
<b>W-74-2021-Q4</b>			<b>0949</b>		<b>3</b>	
<b>W-74-2021-Q4-DJP</b>			<b>0949</b>		<b>3</b>	
<b>W-72-2021-Q4</b>			<b>1133</b>		<b>3</b>	
<b>W-54-2021-Q4</b>			<b>1249</b>		<b>3</b>	
<b>W-53-2021-Q4</b>			<b>1426</b>		<b>3</b>	
<b>TB-01-101721</b>					<b>2</b>	

Hazardous Waste Disposal by (Lab)		Possible Hazard Identification		OC Requirements (Specify)	
1. Received by	Date	Time	Non-Hazard	Flammable	Corrosive
<b>[Signature]</b>	<b>10-12-21</b>	<b>1340</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Received by	Date	Time	Refrigerant	Refrigerant	Refrigerant
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Received by	Date	Time	Refrigerant	Refrigerant	Refrigerant
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Laboratory received by	Date	Time	Refrigerant	Refrigerant	Refrigerant
<b>[Signature]</b>	<b>10/12/21</b>	<b>1540</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

Document Number: MEC030102-01



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

**Number 126255**

Client: Westinghouse 212 CO  
 Address: 5001 Bluff Rd  
 City: Hopkins State: SC Zip Code: 29061  
 Project Name: Q4 2021 Ground Water  
 Project No.: 160595049.14  
 Sample ID / Description: (Contains for each sample may be combined on one line)  
 W-40-2021-Q4  
 W-50-2021-Q4  
 W-17-2021-Q4  
 W-17-2021-Q4-MS  
 W-17-2021-Q4-MAD

Report to Contact: DIANA JOYNER  
 Sampler's Signature: [Signature]  
 Printed Name: Randy Caen

Telephone No. / Email: 803-647-8920  
 Analysis (Attach list if more options is needed)

Page 1 of 1

Barcode: WJ12073

Sample ID / Description	Collection Date	Collection Time (Military)	Matrix		No. of Containers by Preservative Type						Remarks / Cooler ID	
			Water	Soil	100%	90%	80%	70%	60%	50%		
W-40-2021-Q4	10/12/21	0920	6	0	1	3	0	0	0	0	0	
W-50-2021-Q4	10/12/21	1045	6	0	1	3	0	0	0	0	0	
W-17-2021-Q4	10/12/21	1258	6	0	1	3	0	0	0	0	0	
W-17-2021-Q4-MS	10/12/21	1258	6	0	1	3	0	0	0	0	0	
W-17-2021-Q4-MAD	10/12/21	1258	6	0	1	3	0	0	0	0	0	

Turn Around Time Required (Prior lab approval required for expedited TAT):  
 Standard  Rush (Specify)

Retransmitted by: [Signature]  
 2. Retransmitted by: [Signature]  
 3. Retransmitted by:  
 4. Retransmitted by:

Sample Disposal:  
 Return to Client  Disposed by Lab  
 Date: 10/12/21 Time: 1508  
 Date: 10-12-21 Time: 1540  
 Date:

Possible Hazard Identification:  
 Non-Hazard  Flammable  Skin Irritant  Poison  Unknown  
 1. Received by: [Signature]  
 2. Received by:  
 3. Received by:  
 4. Laboratory received by: [Signature]

OC Requirements (Specify):  
 Date: 12-12-21 Time: 1508  
 Date:  
 Date:

LAB USE ONLY  
 Received on Ice (Check)  Yes  No Ice Pack  Receipt Temp. 2.9 °C

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

Document Number: AEW0302-01

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client 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 / 10/12/2021

Lot #: WJ12073

Means of receipt: <input checked="" type="checkbox"/> Pace <input type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA 2.5 / 2.5 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 mg/L (If #19 is no) and were adjusted accordingly in sample 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: JRG2 Date: 10/12/2021	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Q4 2021 Groundwater

Lot Number: **WJ13058**

Date Completed: 10/27/2021

10/28/2021 3:02 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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# 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: WJ13058

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ13058  
Project Name: Q4 2021 Groundwater  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-36-2021-Q4	Aqueous	10/13/2021 0955	10/13/2021
002	W-122-2021-Q4	Aqueous	10/13/2021 1056	10/13/2021
003	W-87-2021-Q4	Aqueous	10/13/2021 1225	10/13/2021
004	W-52-2021-Q4	Aqueous	10/13/2021 1355	10/13/2021
005	W-51-2021-Q4	Aqueous	10/13/2021 1450	10/13/2021
006	TB-01-101321	Aqueous	10/13/2021	10/13/2021

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(6 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ13058  
Project Name: Q4 2021 Groundwater  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-36-2021-Q4	Aqueous	Nitrate - N	353.2	0.35		mg/L	5
003	W-87-2021-Q4	Aqueous	Nitrate - N	353.2	0.19		mg/L	11
003	W-87-2021-Q4	Aqueous	Tetrachloroethene	8260D	34		ug/L	12
003	W-87-2021-Q4	Aqueous	Trichloroethene	8260D	6.6		ug/L	13
004	W-52-2021-Q4	Aqueous	Nitrate - N	353.2	0.68		mg/L	14
005	W-51-2021-Q4	Aqueous	Nitrate - N	353.2	0.11		mg/L	17

(6 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-001
Description: W-36-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 0955	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/14/2021 1029	AAB		18810

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.35	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-001
Description: W-36-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 0955	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/26/2021 1630	BWS		20164

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-001
Description: W-36-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 0955	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/26/2021 1630	BWS		20164

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		103	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-002
Description: W-122-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 1056	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/14/2021 1031	AAB		18810

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-002
Description: W-122-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 1056	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/26/2021 1656	BWS		20164

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-002
Description: W-122-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 1056	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/26/2021 1656	BWS		20164

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		88	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		98	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-003
Description: W-87-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 1225	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/14/2021 1033	AAB		18810

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	0.19		0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-003
Description: W-87-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 1225	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/26/2021 1722	BWS		20164

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	34		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-003
Description: W-87-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 1225	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/26/2021 1722	BWS		20164

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	6.6		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		100	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-004
Description: W-52-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 1355	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/14/2021 1034	AAB		18810

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.68	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-004
Description: W-52-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 1355	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/26/2021 1748	BWS		20164

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-004
Description: W-52-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 1355	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/26/2021 1748	BWS		20164

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		104	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-005
Description: W-51-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 1450	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/14/2021 1036	AAB		18810

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	0.11		0.020	mg/L	1

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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-005
Description: W-51-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 1450	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/26/2021 1813	BWS		20164

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-005
Description: W-51-2021-Q4	Matrix: Aqueous
Date Sampled: 10/13/2021 1450	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/26/2021 1813	BWS		20164

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		103	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-006
Description: TB-01-101321	Matrix: Aqueous
Date Sampled: 10/13/2021	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/26/2021 1605	BWS		20164

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ13058-006
Description: TB-01-101321	Matrix: Aqueous
Date Sampled: 10/13/2021	Project Name: Q4 2021 Groundwater
Date Received: 10/13/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/26/2021 1605	BWS		20164

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		101	70-130

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

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

## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ18810-001

Matrix: Aqueous

Batch: 18810

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/14/2021 0946

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ18810-002

Matrix: Aqueous

Batch: 18810

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.40		1	100	90-110	10/14/2021 0948

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20164-001

Matrix: Aqueous

Batch: 20164

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/26/2021 1024
Benzene	ND		1	1.0	ug/L	10/26/2021 1024
Bromodichloromethane	ND		1	1.0	ug/L	10/26/2021 1024
Bromoform	ND		1	1.0	ug/L	10/26/2021 1024
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/26/2021 1024
2-Butanone (MEK)	ND		1	10	ug/L	10/26/2021 1024
Carbon disulfide	ND		1	1.0	ug/L	10/26/2021 1024
Carbon tetrachloride	ND		1	1.0	ug/L	10/26/2021 1024
Chlorobenzene	ND		1	1.0	ug/L	10/26/2021 1024
Chloroethane	ND		1	2.0	ug/L	10/26/2021 1024
Chloroform	ND		1	1.0	ug/L	10/26/2021 1024
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/26/2021 1024
Cyclohexane	ND		1	1.0	ug/L	10/26/2021 1024
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/26/2021 1024
Dibromochloromethane	ND		1	1.0	ug/L	10/26/2021 1024
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/26/2021 1024
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/26/2021 1024
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/26/2021 1024
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/26/2021 1024
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/26/2021 1024
1,1-Dichloroethane	ND		1	1.0	ug/L	10/26/2021 1024
1,2-Dichloroethane	ND		1	1.0	ug/L	10/26/2021 1024
1,1-Dichloroethene	ND		1	1.0	ug/L	10/26/2021 1024
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/26/2021 1024
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/26/2021 1024
1,2-Dichloropropane	ND		1	1.0	ug/L	10/26/2021 1024
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/26/2021 1024
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/26/2021 1024
Ethylbenzene	ND		1	1.0	ug/L	10/26/2021 1024
2-Hexanone	ND		1	10	ug/L	10/26/2021 1024
Isopropylbenzene	ND		1	1.0	ug/L	10/26/2021 1024
Methyl acetate	ND		1	1.0	ug/L	10/26/2021 1024
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/26/2021 1024
4-Methyl-2-pentanone	ND		1	10	ug/L	10/26/2021 1024
Methylcyclohexane	ND		1	5.0	ug/L	10/26/2021 1024
Methylene chloride	ND		1	1.0	ug/L	10/26/2021 1024
Styrene	ND		1	1.0	ug/L	10/26/2021 1024
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/26/2021 1024
Tetrachloroethene	ND		1	1.0	ug/L	10/26/2021 1024
Toluene	ND		1	1.0	ug/L	10/26/2021 1024
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/26/2021 1024
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/26/2021 1024
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/26/2021 1024
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/26/2021 1024

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20164-001

Matrix: Aqueous

Batch: 20164

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/26/2021 1024
Trichlorofluoromethane	ND		1	1.0	ug/L	10/26/2021 1024
Vinyl chloride	ND		1	1.0	ug/L	10/26/2021 1024
Xylenes (total)	ND		1	1.0	ug/L	10/26/2021 1024
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		94	70-130			
1,2-Dichloroethane-d4		103	70-130			
Toluene-d8		101	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20164-002

Matrix: Aqueous

Batch: 20164

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	120		1	123	60-140	10/26/2021 0923
Benzene	50	48		1	96	70-130	10/26/2021 0923
Bromodichloromethane	50	49		1	98	70-130	10/26/2021 0923
Bromoform	50	52		1	104	70-130	10/26/2021 0923
Bromomethane (Methyl bromide)	50	60		1	119	70-130	10/26/2021 0923
2-Butanone (MEK)	100	110		1	106	70-130	10/26/2021 0923
Carbon disulfide	50	50		1	100	70-130	10/26/2021 0923
Carbon tetrachloride	50	50		1	101	70-130	10/26/2021 0923
Chlorobenzene	50	48		1	96	70-130	10/26/2021 0923
Chloroethane	50	49		1	97	70-130	10/26/2021 0923
Chloroform	50	50		1	100	70-130	10/26/2021 0923
Chloromethane (Methyl chloride)	50	49		1	97	60-140	10/26/2021 0923
Cyclohexane	50	49		1	98	70-130	10/26/2021 0923
1,2-Dibromo-3-chloropropane (DBCP)	50	46		1	91	70-130	10/26/2021 0923
Dibromochloromethane	50	51		1	102	70-130	10/26/2021 0923
1,2-Dibromoethane (EDB)	50	49		1	97	70-130	10/26/2021 0923
1,2-Dichlorobenzene	50	49		1	99	70-130	10/26/2021 0923
1,3-Dichlorobenzene	50	49		1	97	70-130	10/26/2021 0923
1,4-Dichlorobenzene	50	48		1	97	70-130	10/26/2021 0923
Dichlorodifluoromethane	50	53		1	107	60-140	10/26/2021 0923
1,1-Dichloroethane	50	50		1	100	70-130	10/26/2021 0923
1,2-Dichloroethane	50	49		1	97	70-130	10/26/2021 0923
1,1-Dichloroethene	50	51		1	102	70-130	10/26/2021 0923
cis-1,2-Dichloroethene	50	50		1	100	70-130	10/26/2021 0923
trans-1,2-Dichloroethene	50	50		1	99	70-130	10/26/2021 0923
1,2-Dichloropropane	50	49		1	98	70-130	10/26/2021 0923
cis-1,3-Dichloropropene	50	51		1	101	70-130	10/26/2021 0923
trans-1,3-Dichloropropene	50	49		1	99	70-130	10/26/2021 0923
Ethylbenzene	50	48		1	97	70-130	10/26/2021 0923
2-Hexanone	100	96		1	96	70-130	10/26/2021 0923
Isopropylbenzene	50	50		1	101	70-130	10/26/2021 0923
Methyl acetate	50	52		1	104	70-130	10/26/2021 0923
Methyl tertiary butyl ether (MTBE)	50	53		1	105	70-130	10/26/2021 0923
4-Methyl-2-pentanone	100	99		1	99	70-130	10/26/2021 0923
Methylcyclohexane	50	50		1	100	70-130	10/26/2021 0923
Methylene chloride	50	50		1	99	70-130	10/26/2021 0923
Styrene	50	51		1	102	70-130	10/26/2021 0923
1,1,2,2-Tetrachloroethane	50	49		1	97	70-130	10/26/2021 0923
Tetrachloroethene	50	47		1	95	70-130	10/26/2021 0923
Toluene	50	47		1	93	70-130	10/26/2021 0923
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	50		1	100	70-130	10/26/2021 0923
1,2,4-Trichlorobenzene	50	48		1	96	70-130	10/26/2021 0923
1,1,1-Trichloroethane	50	50		1	101	70-130	10/26/2021 0923
1,1,2-Trichloroethane	50	46		1	92	70-130	10/26/2021 0923

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20164-002

Matrix: Aqueous

Batch: 20164

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	48		1	96	70-130	10/26/2021 0923
Trichlorofluoromethane	50	50		1	101	70-130	10/26/2021 0923
Vinyl chloride	50	50		1	100	70-130	10/26/2021 0923
Xylenes (total)	100	98		1	98	70-130	10/26/2021 0923
Surrogate	Q	% Rec	Acceptance Limit				
Bromofluorobenzene		94	70-130				
1,2-Dichloroethane-d4		94	70-130				
Toluene-d8		94	70-130				

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents



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

**Number 126257**

<b>Client</b> WestinHouse Address: 5801 Bluff RD City: Hopkins State: SC Zip Code: 29061		<b>Refer to Contact</b> Diana Jaynes Signature: <i>[Signature]</i> Printed Name: Diana Jaynes		<b>Telephone No. / Email</b> 803 647 1920 jaynes@westinhouse.com (Add each if more than one is needed)		<b>Quote No.</b> WJ13058 EYG Remarks / Cooler I.D.						
<b>Project Name</b> Q4 2021 Groundwater		<b>Printed Name</b> James Leighton		<b>Analysis</b> VOCs		<b>Peak</b> 1						
Sample ID / Description (Containers for each sample may be analyzed on one line)	Collection Date(s)	Collection Time (Military)	Matrix				No. of Containers by Parameter Type				OC Requirements (Specify)	
			Soil	Water	Sludge	Other	VOCs	SVOCs	Metals	Other		
W-36-2021-Q4		0955	X				1	3				X
W-122-2021-Q4		1056	X				1	3				X
W-87-2021-Q4		1225	X				1	3				X
W-52-2021-Q4		1355	X				1	3				X
W-51-2021-Q4		1450	X				1	3				X
TB-01-101321								2				X

Turn Around Time Required (Prior lab approval required for a specified TAT):  
 Standard  Rush (Specify)  
 1. Relinquished by: *[Signature]* Date: 10-13-21 Time: 1400  
 2. Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 3. Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 4. Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Sample Disposal:  
 Return to Client  Dispose by Lab  
 Possible Hazards Identification:  
 No-Hazard  Flammable  Skin Irritant  Poison  Unknown  
 1. Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 2. Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 3. Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 4. Laboratory received by: *[Signature]* Date: 10/13/21 Time: 1400  
 LAB USE ONLY  
 Received on ice (Circle): Yes  No  Ice Pack  Pallet Temp: 39 °C

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

# PACE ANALYTICAL SERVICES, LLC



**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 / 10/13/2021

Lot #: WJ13058

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA 3.9 / 3.9 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # 24899
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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.	
Sample(s) NA were received with TRC > 0.5 mg/L (if #19 is no) and were adjusted accordingly in sample 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: JRG2 Date: 10/13/2021	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Q4 2021 Sampling

Lot Number: **WJ14038**

Date Completed: 10/29/2021

11/01/2021 9:33 AM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)  
106 Vantage Point Drive West Columbia, SC 29172  
Tel: 803-791-9700 Fax: 803-791-9111 www.pacelabs.com

# 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: WJ14038

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ14038  
Project Name: Q4 2021 Sampling  
Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-115-2021-Q4	Aqueous	10/14/2021 1024	10/14/2021
002	W-116-2021-Q4	Aqueous	10/14/2021 1159	10/14/2021
003	W-118-2021-Q4	Aqueous	10/14/2021 1300	10/14/2021
004	W-117-2021-Q4	Aqueous	10/14/2021 1425	10/14/2021
005	W-RW-1-2021-Q4	Aqueous	10/14/2021 0946	10/14/2021
006	W-45-2021-Q4	Aqueous	10/14/2021 1111	10/14/2021
007	W-35-2021-Q4	Aqueous	10/14/2021 1323	10/14/2021
008	W-33-2021-Q4	Aqueous	10/14/2021 1451	10/14/2021
009	EB-01-101421	Aqueous	10/14/2021 1139	10/14/2021
010	TB-01-101421	Aqueous	10/14/2021	10/14/2021

(10 samples)

# PACE ANALYTICAL SERVICES, LLC

Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ14038  
Project Name: Q4 2021 Sampling  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-115-2021-Q4	Aqueous	Nitrate - N	353.2	3.4		mg/L	5
002	W-116-2021-Q4	Aqueous	Nitrate - N	353.2	5.9		mg/L	8
003	W-118-2021-Q4	Aqueous	Nitrate - N	353.2	3.9		mg/L	11
003	W-118-2021-Q4	Aqueous	Tetrachloroethene	8260D	85		ug/L	12
003	W-118-2021-Q4	Aqueous	Trichloroethene	8260D	2.1		ug/L	13
004	W-117-2021-Q4	Aqueous	Nitrate - N	353.2	2.4		mg/L	14
004	W-117-2021-Q4	Aqueous	Tetrachloroethene	8260D	2.2		ug/L	15
005	W-RW-1-2021-Q4	Aqueous	Nitrate - N	353.2	2.0		mg/L	17
005	W-RW-1-2021-Q4	Aqueous	Tetrachloroethene	8260D	2.3		ug/L	18
006	W-45-2021-Q4	Aqueous	Nitrate - N	353.2	0.24		mg/L	20
006	W-45-2021-Q4	Aqueous	Ethylbenzene	8260D	1.3		ug/L	21
006	W-45-2021-Q4	Aqueous	Isopropylbenzene	8260D	1.2		ug/L	21
007	W-35-2021-Q4	Aqueous	Nitrate - N	353.2	4.2		mg/L	23
007	W-35-2021-Q4	Aqueous	Tetrachloroethene	8260D	1.9		ug/L	24
008	W-33-2021-Q4	Aqueous	Nitrate - N	353.2	18		mg/L	26
008	W-33-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	5.0		ug/L	27
008	W-33-2021-Q4	Aqueous	Tetrachloroethene	8260D	340		ug/L	27
008	W-33-2021-Q4	Aqueous	Trichloroethene	8260D	36		ug/L	28
009	EB-01-101421	Aqueous	Bromodichloromethane	8260D	1.6		ug/L	30
009	EB-01-101421	Aqueous	Chloroform	8260D	6.5		ug/L	30

(20 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-001
Description: W-115-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1024	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/15/2021 1024	AAB		19029

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	3.4	0.10	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-001
Description: W-115-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1024	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0459	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-001
Description: W-115-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1024	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0459	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		97	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-002
Description: W-116-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1159	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/15/2021 1025	AAB		19029

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	5.9	0.20	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-002
Description: W-116-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1159	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0522	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-002
Description: W-116-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1159	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0522	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		106	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		100	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-003
Description: W-118-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1300	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/15/2021 1010	AAB		19029

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	3.9	0.10	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-003
Description: W-118-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1300	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0545	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	85		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-003
Description: W-118-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1300	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0545	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	2.1		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		98	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-004
Description: W-117-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1425	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/15/2021 1030	AAB		19029

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	2.4	0.040	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-004
Description: W-117-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1425	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0608	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	2.2		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-004
Description: W-117-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1425	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0608	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		98	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-005
Description: W-RW-1-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 0946	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/15/2021 1032	AAB		19029

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	2.0	0.040	mg/L	1

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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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-005
Description: W-RW-1-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 0946	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0631	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	2.3		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-005
Description: W-RW-1-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 0946	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0631	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		99	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-006
Description: W-45-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1111	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/15/2021 1015	AAB		19029

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-006
Description: W-45-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1111	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0654	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	1.3		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	1.2		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,1,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-006
Description: W-45-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1111	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0654	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		106	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		100	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-007
Description: W-35-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1323	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/15/2021 1017	AAB		19029

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	4.2	0.10	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-007
Description: W-35-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1323	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0717	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	1.9		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-007
Description: W-35-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1323	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0717	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		99	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-008
Description: W-33-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1451	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/15/2021 1034	AAB		19029

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	18	0.20	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-008
Description: W-33-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1451	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0740	BBW		20262
2	5030B	8260D	5	10/28/2021 1500	CAW		20503

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	5.0		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	340		5.0	ug/L	2
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-008
Description: W-33-2021-Q4	Matrix: Aqueous
Date Sampled: 10/14/2021 1451	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0740	BBW		20262
2	5030B	8260D	5	10/28/2021 1500	CAW		20503

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	36		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		94	70-130		97	70-130
1,2-Dichloroethane-d4		98	70-130		98	70-130
Toluene-d8		98	70-130		97	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-009
Description: EB-01-101421	Matrix: Aqueous
Date Sampled: 10/14/2021 1139	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/15/2021 1124	AAB		19027

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-009
Description: EB-01-101421	Matrix: Aqueous
Date Sampled: 10/14/2021 1139	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0130	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	1.6		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	6.5		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-009
Description: EB-01-101421	Matrix: Aqueous
Date Sampled: 10/14/2021 1139	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0130	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		98	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-010
Description: TB-01-101421	Matrix: Aqueous
Date Sampled: 10/14/2021	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0154	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ14038-010
Description: TB-01-101421	Matrix: Aqueous
Date Sampled: 10/14/2021	Project Name: Q4 2021 Sampling
Date Received: 10/14/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/27/2021 0154	BBW		20262

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		100	70-130

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

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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ19027-001

Matrix: Aqueous

Batch: 19027

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/15/2021 1120

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ19027-002

Matrix: Aqueous

Batch: 19027

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.38		1	94	90-110	10/15/2021 1122

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MB

Sample ID: WQ19029-001

Matrix: Aqueous

Batch: 19029

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/15/2021 0910

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ19029-002

Matrix: Aqueous

Batch: 19029

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.39		1	96	90-110	10/15/2021 0912

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20262-001

Matrix: Aqueous

Batch: 20262

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/26/2021 2323
Benzene	ND		1	1.0	ug/L	10/26/2021 2323
Bromodichloromethane	ND		1	1.0	ug/L	10/26/2021 2323
Bromoform	ND		1	1.0	ug/L	10/26/2021 2323
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/26/2021 2323
2-Butanone (MEK)	ND		1	10	ug/L	10/26/2021 2323
Carbon disulfide	ND		1	1.0	ug/L	10/26/2021 2323
Carbon tetrachloride	ND		1	1.0	ug/L	10/26/2021 2323
Chlorobenzene	ND		1	1.0	ug/L	10/26/2021 2323
Chloroethane	ND		1	2.0	ug/L	10/26/2021 2323
Chloroform	ND		1	1.0	ug/L	10/26/2021 2323
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/26/2021 2323
Cyclohexane	ND		1	1.0	ug/L	10/26/2021 2323
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/26/2021 2323
Dibromochloromethane	ND		1	1.0	ug/L	10/26/2021 2323
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/26/2021 2323
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/26/2021 2323
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/26/2021 2323
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/26/2021 2323
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/26/2021 2323
1,1-Dichloroethane	ND		1	1.0	ug/L	10/26/2021 2323
1,2-Dichloroethane	ND		1	1.0	ug/L	10/26/2021 2323
1,1-Dichloroethene	ND		1	1.0	ug/L	10/26/2021 2323
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/26/2021 2323
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/26/2021 2323
1,2-Dichloropropane	ND		1	1.0	ug/L	10/26/2021 2323
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/26/2021 2323
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/26/2021 2323
Ethylbenzene	ND		1	1.0	ug/L	10/26/2021 2323
2-Hexanone	ND		1	10	ug/L	10/26/2021 2323
Isopropylbenzene	ND		1	1.0	ug/L	10/26/2021 2323
Methyl acetate	ND		1	1.0	ug/L	10/26/2021 2323
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/26/2021 2323
4-Methyl-2-pentanone	ND		1	10	ug/L	10/26/2021 2323
Methylcyclohexane	ND		1	5.0	ug/L	10/26/2021 2323
Methylene chloride	ND		1	1.0	ug/L	10/26/2021 2323
Styrene	ND		1	1.0	ug/L	10/26/2021 2323
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/26/2021 2323
Tetrachloroethene	ND		1	1.0	ug/L	10/26/2021 2323
Toluene	ND		1	1.0	ug/L	10/26/2021 2323
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/26/2021 2323
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/26/2021 2323
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/26/2021 2323
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/26/2021 2323

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20262-001

Matrix: Aqueous

Batch: 20262

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/26/2021 2323
Trichlorofluoromethane	ND		1	1.0	ug/L	10/26/2021 2323
Vinyl chloride	ND		1	1.0	ug/L	10/26/2021 2323
Xylenes (total)	ND		1	1.0	ug/L	10/26/2021 2323
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		101	70-130			
1,2-Dichloroethane-d4		100	70-130			
Toluene-d8		98	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20262-002

Matrix: Aqueous

Batch: 20262

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	93		1	93	60-140	10/26/2021 2201
Benzene	50	47		1	94	70-130	10/26/2021 2201
Bromodichloromethane	50	48		1	96	70-130	10/26/2021 2201
Bromoform	50	50		1	101	70-130	10/26/2021 2201
Bromomethane (Methyl bromide)	50	47		1	95	70-130	10/26/2021 2201
2-Butanone (MEK)	100	110		1	105	70-130	10/26/2021 2201
Carbon disulfide	50	49		1	97	70-130	10/26/2021 2201
Carbon tetrachloride	50	49		1	99	70-130	10/26/2021 2201
Chlorobenzene	50	46		1	92	70-130	10/26/2021 2201
Chloroethane	50	51		1	101	70-130	10/26/2021 2201
Chloroform	50	47		1	93	70-130	10/26/2021 2201
Chloromethane (Methyl chloride)	50	49		1	98	60-140	10/26/2021 2201
Cyclohexane	50	47		1	94	70-130	10/26/2021 2201
1,2-Dibromo-3-chloropropane (DBCP)	50	51		1	103	70-130	10/26/2021 2201
Dibromochloromethane	50	50		1	100	70-130	10/26/2021 2201
1,2-Dibromoethane (EDB)	50	49		1	98	70-130	10/26/2021 2201
1,2-Dichlorobenzene	50	47		1	93	70-130	10/26/2021 2201
1,3-Dichlorobenzene	50	47		1	94	70-130	10/26/2021 2201
1,4-Dichlorobenzene	50	46		1	92	70-130	10/26/2021 2201
Dichlorodifluoromethane	50	55		1	109	60-140	10/26/2021 2201
1,1-Dichloroethane	50	47		1	94	70-130	10/26/2021 2201
1,2-Dichloroethane	50	47		1	93	70-130	10/26/2021 2201
1,1-Dichloroethene	50	50		1	100	70-130	10/26/2021 2201
cis-1,2-Dichloroethene	50	48		1	95	70-130	10/26/2021 2201
trans-1,2-Dichloroethene	50	48		1	95	70-130	10/26/2021 2201
1,2-Dichloropropane	50	46		1	92	70-130	10/26/2021 2201
cis-1,3-Dichloropropene	50	49		1	98	70-130	10/26/2021 2201
trans-1,3-Dichloropropene	50	50		1	99	70-130	10/26/2021 2201
Ethylbenzene	50	47		1	94	70-130	10/26/2021 2201
2-Hexanone	100	99		1	99	70-130	10/26/2021 2201
Isopropylbenzene	50	48		1	95	70-130	10/26/2021 2201
Methyl acetate	50	47		1	94	70-130	10/26/2021 2201
Methyl tertiary butyl ether (MTBE)	50	45		1	89	70-130	10/26/2021 2201
4-Methyl-2-pentanone	100	96		1	96	70-130	10/26/2021 2201
Methylcyclohexane	50	52		1	103	70-130	10/26/2021 2201
Methylene chloride	50	47		1	94	70-130	10/26/2021 2201
Styrene	50	49		1	98	70-130	10/26/2021 2201
1,1,2,2-Tetrachloroethane	50	49		1	98	70-130	10/26/2021 2201
Tetrachloroethene	50	47		1	94	70-130	10/26/2021 2201
Toluene	50	46		1	91	70-130	10/26/2021 2201
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	47		1	95	70-130	10/26/2021 2201
1,2,4-Trichlorobenzene	50	47		1	94	70-130	10/26/2021 2201
1,1,1-Trichloroethane	50	47		1	95	70-130	10/26/2021 2201
1,1,2-Trichloroethane	50	47		1	94	70-130	10/26/2021 2201

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20262-002

Matrix: Aqueous

Batch: 20262

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	47		1	94	70-130	10/26/2021 2201
Trichlorofluoromethane	50	54		1	108	70-130	10/26/2021 2201
Vinyl chloride	50	51		1	102	70-130	10/26/2021 2201
Xylenes (total)	100	94		1	94	70-130	10/26/2021 2201
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		89			70-130		
1,2-Dichloroethane-d4		87			70-130		
Toluene-d8		85			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20503-001

Matrix: Aqueous

Batch: 20503

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Tetrachloroethene	ND		1	1.0	ug/L	10/28/2021 1224
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		100	70-130			
1,2-Dichloroethane-d4		99	70-130			
Toluene-d8		97	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20503-002

Matrix: Aqueous

Batch: 20503

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Tetrachloroethene	50	50		1	100	70-130	10/28/2021 1123
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		97			70-130		
1,2-Dichloroethane-d4		95			70-130		
Toluene-d8		92			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents





## Samples Receipt Checklist (SRC) (MEDD18C-15)

Issuing Authority: Pace ENV - WCOL

Revised: 9/29/2020

Page 1 of 1

## Sample Receipt Checklist (SRC)

Client: Westinghouse

Cooler Inspected by/date: JSH / 10/14/2021

Lot #: WJ14038

Means of receipt: <input checked="" type="checkbox"/> Pace <input type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA	Chlorine Strip ID: NA
Original temperature upon receipt / Derived (Corrected) temperature upon receipt	
3.2 / 3.2 °C	NA / NA °C
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present > "pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA ml. of circle one: H <sub>2</sub> SO <sub>4</sub> , HNO <sub>3</sub> , 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 mg/L (If #19 is no) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub> ) with Shealy ID: NA	
SR barcode labels applied by: JSH Date: 10/14/2021	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Westinghouse RI

Lot Number: **WJ15096**

Date Completed: 10/30/2021

11/01/2021 10:23 AM

Approved and released by:

Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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# 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: WJ15096

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

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

The laboratory control sample (LCS) associated with batch 20427 had 1,1,2-trichloro-1,2,2-trifluoroethane recovered marginally outside of the acceptance limits. Due to the large number of analytes in the LCS, there is a high statistical probability of a few analytes outside of control limits. Per SW-846 Update V 8000D- 23 Revision 4 July 2014, a number of analytes should be allowed to marginally fail the limits without requirement for corrective action. The laboratory's SOP allows for 10% of analytes to recover marginally outside criteria.

The continuing calibration verification (CCV) associated with batch 20427 had Acetone, 1,1,2-trichloro-1,2,2-trifluoroethane, and cyclohexane recovered below acceptance limits. There were no detections for this compound in the associated samples. A LOQ standard was analyzed and the compound was detected, demonstrating there was adequate sensitivity to identify the analyte if it were present.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ15096  
Project Name: Westinghouse RI  
Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-113-2021-Q4	Aqueous	10/15/2021 0912	10/15/2021
002	W-114-2021-Q4	Aqueous	10/15/2021 1036	10/15/2021
003	W-100-2021-Q4	Aqueous	10/15/2021 1203	10/15/2021
004	W-99-2021-Q4	Aqueous	10/15/2021 1300	10/15/2021
005	W-120-2021-Q4	Aqueous	10/15/2021 0932	10/15/2021
006	W-121-2021-Q4	Aqueous	10/15/2021 1034	10/15/2021
007	W-60-2021-Q4	Aqueous	10/15/2021 1134	10/15/2021
008	W-61-2021-Q4	Aqueous	10/15/2021 1240	10/15/2021
009	TB-01-101521	Aqueous	10/15/2021	10/15/2021

(9 samples)

# PACE ANALYTICAL SERVICES, LLC

Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ15096  
Project Name: Westinghouse RI  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-113-2021-Q4	Aqueous	Nitrate - N	353.2	2.2		mg/L	6
002	W-114-2021-Q4	Aqueous	Nitrate - N	353.2	1.1		mg/L	9
003	W-100-2021-Q4	Aqueous	Nitrate - N	353.2	7.6		mg/L	12
004	W-99-2021-Q4	Aqueous	Nitrate - N	353.2	7.8		mg/L	15
005	W-120-2021-Q4	Aqueous	Nitrate - N	353.2	4.5		mg/L	18
005	W-120-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	1.3		ug/L	19
005	W-120-2021-Q4	Aqueous	Tetrachloroethene	8260D	340		ug/L	19
005	W-120-2021-Q4	Aqueous	Trichloroethene	8260D	17		ug/L	20
006	W-121-2021-Q4	Aqueous	Nitrate - N	353.2	2.5		mg/L	21
006	W-121-2021-Q4	Aqueous	Tetrachloroethene	8260D	82		ug/L	22
006	W-121-2021-Q4	Aqueous	Trichloroethene	8260D	2.4		ug/L	23
007	W-60-2021-Q4	Aqueous	Nitrate - N	353.2	0.055	S	mg/L	24
008	W-61-2021-Q4	Aqueous	Nitrate - N	353.2	3.3		mg/L	27

(13 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-001
Description: W-113-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 0912	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/16/2021 0815	AAB		19097

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.040	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-001
Description: W-113-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 0912	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0213	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-001
Description: W-113-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 0912	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0213	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		100	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-002
Description: W-114-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1036	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/16/2021 0816	AAB		19097

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	1.1	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-002
Description: W-114-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1036	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0236	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-002
Description: W-114-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1036	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0236	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		98	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-003
Description: W-100-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1203	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/16/2021 0838	AAB		19097

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	7.6	0.20	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-003
Description: W-100-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1203	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0259	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-003
Description: W-100-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1203	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0259	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		100	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-004
Description: W-99-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1300	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/16/2021 0840	AAB		19097

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		7.8	0.10	mg/L 1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-004
Description: W-99-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1300	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0322	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-004
Description: W-99-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1300	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0322	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		98	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-005
Description: W-120-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 0932	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/16/2021 0821	AAB		19097

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	4.5	0.10	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-005
Description: W-120-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 0932	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0345	JWO		20427
2	5030B	8260D	5	10/29/2021 0301	BBW		20550

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	1.3		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	340		5.0	ug/L	2
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-005
Description: W-120-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 0932	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0345	JWO		20427
2	5030B	8260D	5	10/29/2021 0301	BBW		20550

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	17		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130		92	70-130
1,2-Dichloroethane-d4		100	70-130		108	70-130
Toluene-d8		97	70-130		101	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-006
Description: W-121-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1034	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/16/2021 0828	AAB		19097

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		2.5	0.10	mg/L 1

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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

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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

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-006
Description: W-121-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1034	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0408	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	82		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-006
Description: W-121-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1034	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0408	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	2.4		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		105	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		101	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-007
Description: W-60-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1134	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/16/2021 0830	AAB		19097

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.055	S	0.020	mg/L 1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-007
Description: W-60-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1134	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0431	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-007
Description: W-60-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1134	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0431	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		98	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-008
Description: W-61-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1240	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/16/2021 0835	AAB		19097

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.10	mg/L	1

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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-008
Description: W-61-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1240	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0454	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-008
Description: W-61-2021-Q4	Matrix: Aqueous
Date Sampled: 10/15/2021 1240	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0454	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		101	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-009
Description: TB-01-101521	Matrix: Aqueous
Date Sampled: 10/15/2021	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0517	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	L	1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ15096-009
Description: TB-01-101521	Matrix: Aqueous
Date Sampled: 10/15/2021	Project Name: Westinghouse RI
Date Received: 10/15/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 0517	JWO		20427

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		100	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		97	70-130

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

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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ19097-001

Matrix: Aqueous

Batch: 19097

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/16/2021 0811

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ19097-002

Matrix: Aqueous

Batch: 19097

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.39		1	96	90-110	10/16/2021 0813

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MS

Sample ID: WJ15096-007MS

Matrix: Aqueous

Batch: 19097

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.055	0.40	0.29	N	1	60	90-110	10/16/2021 0831

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MSD

Sample ID: WJ15096-007MD

Matrix: Aqueous

Batch: 19097

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	0.055	0.40	0.28	N	1	57	4.3	90-110	20	10/16/2021 0833

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20427-001

Matrix: Aqueous

Batch: 20427

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/27/2021 2221
Benzene	ND		1	1.0	ug/L	10/27/2021 2221
Bromodichloromethane	ND		1	1.0	ug/L	10/27/2021 2221
Bromoform	ND		1	1.0	ug/L	10/27/2021 2221
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/27/2021 2221
2-Butanone (MEK)	ND		1	10	ug/L	10/27/2021 2221
Carbon disulfide	ND		1	1.0	ug/L	10/27/2021 2221
Carbon tetrachloride	ND		1	1.0	ug/L	10/27/2021 2221
Chlorobenzene	ND		1	1.0	ug/L	10/27/2021 2221
Chloroethane	ND		1	2.0	ug/L	10/27/2021 2221
Chloroform	ND		1	1.0	ug/L	10/27/2021 2221
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/27/2021 2221
Cyclohexane	ND		1	1.0	ug/L	10/27/2021 2221
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/27/2021 2221
Dibromochloromethane	ND		1	1.0	ug/L	10/27/2021 2221
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/27/2021 2221
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/27/2021 2221
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/27/2021 2221
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/27/2021 2221
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/27/2021 2221
1,1-Dichloroethane	ND		1	1.0	ug/L	10/27/2021 2221
1,2-Dichloroethane	ND		1	1.0	ug/L	10/27/2021 2221
1,1-Dichloroethene	ND		1	1.0	ug/L	10/27/2021 2221
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/27/2021 2221
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/27/2021 2221
1,2-Dichloropropane	ND		1	1.0	ug/L	10/27/2021 2221
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/27/2021 2221
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/27/2021 2221
Ethylbenzene	ND		1	1.0	ug/L	10/27/2021 2221
2-Hexanone	ND		1	10	ug/L	10/27/2021 2221
Isopropylbenzene	ND		1	1.0	ug/L	10/27/2021 2221
Methyl acetate	ND		1	1.0	ug/L	10/27/2021 2221
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/27/2021 2221
4-Methyl-2-pentanone	ND		1	10	ug/L	10/27/2021 2221
Methylcyclohexane	ND		1	5.0	ug/L	10/27/2021 2221
Methylene chloride	ND		1	1.0	ug/L	10/27/2021 2221
Styrene	ND		1	1.0	ug/L	10/27/2021 2221
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/27/2021 2221
Tetrachloroethene	ND		1	1.0	ug/L	10/27/2021 2221
Toluene	ND		1	1.0	ug/L	10/27/2021 2221
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/27/2021 2221
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/27/2021 2221
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/27/2021 2221
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/27/2021 2221

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20427-001

Matrix: Aqueous

Batch: 20427

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/27/2021 2221
Trichlorofluoromethane	ND		1	1.0	ug/L	10/27/2021 2221
Vinyl chloride	ND		1	1.0	ug/L	10/27/2021 2221
Xylenes (total)	ND		1	1.0	ug/L	10/27/2021 2221
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		99	70-130			
1,2-Dichloroethane-d4		99	70-130			
Toluene-d8		99	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20427-002

Matrix: Aqueous

Batch: 20427

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	79		1	79	60-140	10/27/2021 2103
Benzene	50	47		1	94	70-130	10/27/2021 2103
Bromodichloromethane	50	48		1	96	70-130	10/27/2021 2103
Bromoform	50	48		1	97	70-130	10/27/2021 2103
Bromomethane (Methyl bromide)	50	43		1	87	70-130	10/27/2021 2103
2-Butanone (MEK)	100	98		1	98	70-130	10/27/2021 2103
Carbon disulfide	50	46		1	92	70-130	10/27/2021 2103
Carbon tetrachloride	50	48		1	97	70-130	10/27/2021 2103
Chlorobenzene	50	46		1	91	70-130	10/27/2021 2103
Chloroethane	50	49		1	97	70-130	10/27/2021 2103
Chloroform	50	47		1	93	70-130	10/27/2021 2103
Chloromethane (Methyl chloride)	50	46		1	91	60-140	10/27/2021 2103
Cyclohexane	50	38		1	76	70-130	10/27/2021 2103
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	96	70-130	10/27/2021 2103
Dibromochloromethane	50	49		1	98	70-130	10/27/2021 2103
1,2-Dibromoethane (EDB)	50	47		1	95	70-130	10/27/2021 2103
1,2-Dichlorobenzene	50	46		1	91	70-130	10/27/2021 2103
1,3-Dichlorobenzene	50	46		1	92	70-130	10/27/2021 2103
1,4-Dichlorobenzene	50	45		1	89	70-130	10/27/2021 2103
Dichlorodifluoromethane	50	56		1	111	60-140	10/27/2021 2103
1,1-Dichloroethane	50	46		1	92	70-130	10/27/2021 2103
1,2-Dichloroethane	50	46		1	92	70-130	10/27/2021 2103
1,1-Dichloroethene	50	43		1	86	70-130	10/27/2021 2103
cis-1,2-Dichloroethene	50	47		1	95	70-130	10/27/2021 2103
trans-1,2-Dichloroethene	50	46		1	93	70-130	10/27/2021 2103
1,2-Dichloropropane	50	46		1	92	70-130	10/27/2021 2103
cis-1,3-Dichloropropene	50	49		1	97	70-130	10/27/2021 2103
trans-1,3-Dichloropropene	50	49		1	98	70-130	10/27/2021 2103
Ethylbenzene	50	47		1	93	70-130	10/27/2021 2103
2-Hexanone	100	97		1	97	70-130	10/27/2021 2103
Isopropylbenzene	50	48		1	96	70-130	10/27/2021 2103
Methyl acetate	50	46		1	91	70-130	10/27/2021 2103
Methyl tertiary butyl ether (MTBE)	50	41		1	82	70-130	10/27/2021 2103
4-Methyl-2-pentanone	100	94		1	94	70-130	10/27/2021 2103
Methylcyclohexane	50	52		1	104	70-130	10/27/2021 2103
Methylene chloride	50	46		1	92	70-130	10/27/2021 2103
Styrene	50	48		1	97	70-130	10/27/2021 2103
1,1,2,2-Tetrachloroethane	50	47		1	94	70-130	10/27/2021 2103
Tetrachloroethene	50	47		1	94	70-130	10/27/2021 2103
Toluene	50	46		1	91	70-130	10/27/2021 2103
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	33	N	1	65	70-130	10/27/2021 2103
1,2,4-Trichlorobenzene	50	45		1	90	70-130	10/27/2021 2103
1,1,1-Trichloroethane	50	47		1	93	70-130	10/27/2021 2103
1,1,2-Trichloroethane	50	46		1	93	70-130	10/27/2021 2103

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20427-002

Matrix: Aqueous

Batch: 20427

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	48		1	95	70-130	10/27/2021 2103
Trichlorofluoromethane	50	44		1	88	70-130	10/27/2021 2103
Vinyl chloride	50	50		1	100	70-130	10/27/2021 2103
Xylenes (total)	100	95		1	95	70-130	10/27/2021 2103
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		95			70-130		
1,2-Dichloroethane-d4		92			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

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20550-001

Matrix: Aqueous

Batch: 20550

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Tetrachloroethene	ND		1	1.0	ug/L	10/28/2021 2107
Surrogate	Q % Rec		Acceptance Limit			
Bromofluorobenzene	95		70-130			
1,2-Dichloroethane-d4	104		70-130			
Toluene-d8	101		70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20550-002

Matrix: Aqueous

Batch: 20550

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Tetrachloroethene	50	51		1	102	70-130	10/28/2021 2003
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		97			70-130		
1,2-Dichloroethane-d4		97			70-130		
Toluene-d8		99			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents





**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 / 10/15/2021

Lot #: WJ13996

Means of receipt: <input checked="" type="checkbox"/> Pace <input type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA	
2.7 / 2.7 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 mg/L (If #19 is no) and were adjusted accordingly in sample 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: JRG2 Date: 10/15/2021	
Comments:	



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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Q4 2021 Sampling

Lot Number: **WJ18028**

Date Completed: 11/05/2021

11/09/2021 3:05 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)  
106 Vantage Point Drive West Columbia, SC 29172  
Tel: 803-791-9700 Fax: 803-791-9111 www.pacelabs.com

# 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: WJ18028

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

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

The continuing calibration verification (CCV) associated with sample 19599 had 1,1-Dichloroethene, 1,1,2-Trichloro-1,2,2-trifluoroethene, 1,1,1-Trichloroethane and Carbon Tetrachloride recovered below acceptance limits. There were no detections for this compound in the associated samples. A LOQ standard was analyzed and the compound was detected, demonstrating there was adequate sensitivity to identify the analyte if it were present.

The sample WJ18028-008 was analyzed at a 5x dilution due to matrix interference. The reporting limits were raised accordingly.

Samples WJ18028-009,-010, -011 was reanalyzed outside of analytical holding time due to a required dilution for Tetrachloroethene.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ18028  
Project Name: Q4 2021 Sampling  
Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-119-2021-Q4	Aqueous	10/18/2021 0858	10/18/2021
002	W-23R-2021-Q4	Aqueous	10/18/2021 1029	10/18/2021
003	W-67-2021-Q4	Aqueous	10/18/2021 1124	10/18/2021
004	W-103-2021-Q4	Aqueous	10/18/2021 1222	10/18/2021
005	W-14-2021-Q4	Aqueous	10/18/2021 1330	10/18/2021
006	W-106-2021-Q4	Aqueous	10/18/2021 1433	10/18/2021
007	TB-01-101821	Aqueous	10/18/2021	10/18/2021
008	W-65-2021-Q4	Aqueous	10/18/2021 0938	10/18/2021
009	W-66-2021-Q4	Aqueous	10/18/2021 1040	10/18/2021
010	W-66-2021-Q4-DUP	Aqueous	10/18/2021 1040	10/18/2021
011	W-39-2021-Q4	Aqueous	10/18/2021 1203	10/18/2021
012	W-43-2021-Q4	Aqueous	10/18/2021 1302	10/18/2021
013	W-44-2021-Q4	Aqueous	10/18/2021 1423	10/18/2021
014	EB-01-101821	Aqueous	10/18/2021 1325	10/18/2021

(14 samples)

# PACE ANALYTICAL SERVICES, LLC

Detection Summary  
 Westinghouse Electric Company  
 Lot Number: WJ18028  
 Project Name: Q4 2021 Sampling  
 Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-119-2021-Q4	Aqueous	Nitrate - N	353.2	1.5	S	mg/L	6
001	W-119-2021-Q4	Aqueous	Tetrachloroethene	8260D	74		ug/L	7
001	W-119-2021-Q4	Aqueous	Trichloroethene	8260D	2.3		ug/L	8
002	W-23R-2021-Q4	Aqueous	Nitrate - N	353.2	0.67		mg/L	9
003	W-67-2021-Q4	Aqueous	Nitrate - N	353.2	14		mg/L	12
003	W-67-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	1.3		ug/L	13
003	W-67-2021-Q4	Aqueous	Tetrachloroethene	8260D	41		ug/L	13
003	W-67-2021-Q4	Aqueous	Trichloroethene	8260D	7.4		ug/L	14
004	W-103-2021-Q4	Aqueous	Nitrate - N	353.2	10		mg/L	15
004	W-103-2021-Q4	Aqueous	Tetrachloroethene	8260D	24		ug/L	16
004	W-103-2021-Q4	Aqueous	Trichloroethene	8260D	5.2		ug/L	17
005	W-14-2021-Q4	Aqueous	Nitrate - N	353.2	0.39		mg/L	18
005	W-14-2021-Q4	Aqueous	Tetrachloroethene	8260D	2.8		ug/L	19
005	W-14-2021-Q4	Aqueous	Trichloroethene	8260D	1.1		ug/L	20
006	W-106-2021-Q4	Aqueous	Nitrate - N	353.2	0.084	S	mg/L	21
008	W-65-2021-Q4	Aqueous	Nitrate - N	353.2	1.6		mg/L	26
008	W-65-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	13		ug/L	27
008	W-65-2021-Q4	Aqueous	Methylene chloride	8260D	33		ug/L	27
008	W-65-2021-Q4	Aqueous	Tetrachloroethene	8260D	340		ug/L	27
008	W-65-2021-Q4	Aqueous	Trichloroethene	8260D	41		ug/L	28
009	W-66-2021-Q4	Aqueous	Nitrate - N	353.2	1.3		mg/L	29
009	W-66-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	8.6		ug/L	30
009	W-66-2021-Q4	Aqueous	Tetrachloroethene	8260D	270	H	ug/L	30
009	W-66-2021-Q4	Aqueous	Trichloroethene	8260D	4.9		ug/L	31
010	W-66-2021-Q4-DUP	Aqueous	Nitrate - N	353.2	1.3		mg/L	32
010	W-66-2021-Q4-DUP	Aqueous	cis-1,2-Dichloroethene	8260D	8.0		ug/L	33
010	W-66-2021-Q4-DUP	Aqueous	Tetrachloroethene	8260D	270	H	ug/L	33
010	W-66-2021-Q4-DUP	Aqueous	Trichloroethene	8260D	4.7		ug/L	34
011	W-39-2021-Q4	Aqueous	Nitrate - N	353.2	57		mg/L	35
011	W-39-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	8.5		ug/L	36
011	W-39-2021-Q4	Aqueous	Tetrachloroethene	8260D	250	H	ug/L	36
011	W-39-2021-Q4	Aqueous	Trichloroethene	8260D	3.7		ug/L	37
012	W-43-2021-Q4	Aqueous	Nitrate - N	353.2	7.4		mg/L	38
013	W-44-2021-Q4	Aqueous	Nitrate - N	353.2	1.7		mg/L	41
014	EB-01-101821	Aqueous	Bromodichloromethane	8260D	1.6		ug/L	45
014	EB-01-101821	Aqueous	Chloroform	8260D	6.3		ug/L	45

(36 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-001
Description: W-119-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 0858	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/20/2021 0839	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	1.5	S	0.020	mg/L 1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-001
Description: W-119-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 0858	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260D	1	10/28/2021 1820	BWS		20481

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	2
Benzene	71-43-2	8260D	ND		1.0	ug/L	2
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	2
Bromoform	75-25-2	8260D	ND		1.0	ug/L	2
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	2
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	2
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	2
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	2
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	2
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	2
Chloroform	67-66-3	8260D	ND		1.0	ug/L	2
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	2
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	2
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	2
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	2
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	2
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	2
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	2
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	2
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	2
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	ug/L	2
1,1-Dichloroethene	75-35-4	8260D	ND		1.0	ug/L	2
cis-1,2-Dichloroethene	156-59-2	8260D	ND		1.0	ug/L	2
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	2
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	2
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	2
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	2
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	2
2-Hexanone	591-78-6	8260D	ND		10	ug/L	2
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	2
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	2
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	2
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	2
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	2
Styrene	100-42-5	8260D	ND		1.0	ug/L	2
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	2
Tetrachloroethene	127-18-4	8260D	74		1.0	ug/L	2
Toluene	108-88-3	8260D	ND		1.0	ug/L	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	2
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	2
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	2
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	2

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-001
Description: W-119-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 0858	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2	5030B	8260D	1	10/28/2021 1820	BWS		20481

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	2.3		1.0	ug/L	2
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	2
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	2
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		102	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-002
Description: W-23R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1029	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/20/2021 0852	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-002
Description: W-23R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1029	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 1435	BWS		20482

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-002
Description: W-23R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1029	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 1435	BWS		20482

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		87	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		100	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-003
Description: W-67-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1124	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/20/2021 0846	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.20	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-003
Description: W-67-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1124	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 1500	BWS		20482

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	1.3		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	41		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-003
Description: W-67-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1124	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 1500	BWS		20482

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	7.4		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		114	70-130
Toluene-d8		102	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-004
Description: W-103-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1222	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/20/2021 0904	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	10	0.20	mg/L	1

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
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 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-004
Description: W-103-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1222	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 1525	BWS		20482

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	24		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-004
Description: W-103-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1222	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/28/2021 1525	BWS		20482

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	5.2		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		83	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		97	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-005
Description: W-14-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1330	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/20/2021 0906	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.39	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-005
Description: W-14-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1330	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1334	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	2.8		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-005
Description: W-14-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1330	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1334	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	1.1		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		99	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-006
Description: W-106-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1433	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/20/2021 0907	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	0.084	S	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-006
Description: W-106-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1433	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1359	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-006
Description: W-106-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1433	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1359	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		97	70-130

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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-007
Description: TB-01-101821	Matrix: Aqueous
Date Sampled: 10/18/2021	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1243	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-007
Description: TB-01-101821	Matrix: Aqueous
Date Sampled: 10/18/2021	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1243	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		92	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		93	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-008
Description: W-65-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 0938	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/20/2021 0854	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	1.6	0.040	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-008
Description: W-65-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 0938	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	5	10/29/2021 1931	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		100	ug/L	1
Benzene	71-43-2	8260D	ND		5.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		5.0	ug/L	1
Bromoform	75-25-2	8260D	ND		5.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		10	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		50	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		5.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		5.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		5.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		10	ug/L	1
Chloroform	67-66-3	8260D	ND		5.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		5.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		5.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		5.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		5.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		5.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		5.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		5.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		5.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		10	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		5.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		5.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND		5.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	13		5.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		5.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		5.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		5.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		5.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		5.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		50	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		5.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		5.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		5.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		50	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		25	ug/L	1
Methylene chloride	75-09-2	8260D	33		5.0	ug/L	1
Styrene	100-42-5	8260D	ND		5.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		5.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	340		5.0	ug/L	1
Toluene	108-88-3	8260D	ND		5.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		5.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		5.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		5.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		5.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-008
Description: W-65-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 0938	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	5	10/29/2021 1931	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	41		5.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		5.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		5.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		5.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		101	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-009
Description: W-66-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1040	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/20/2021 0856	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	1.3	0.040	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-009
Description: W-66-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1040	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1905	BWS		20622
2	5030B	8260D	5	11/04/2021 0735	JWO		21229

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	8.6		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	270	H	5.0	ug/L	2
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-009
Description: W-66-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1040	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1905	BWS		20622
2	5030B	8260D	5	11/04/2021 0735	JWO		21229

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	4.9		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		89	70-130	H	104	70-130
1,2-Dichloroethane-d4		123	70-130	H	100	70-130
Toluene-d8		99	70-130	H	103	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-010
Description: W-66-2021-Q4-DUP	Matrix: Aqueous
Date Sampled: 10/18/2021 1040	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/20/2021 0857	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.040	mg/L	1

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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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-010
Description: W-66-2021-Q4-DUP	Matrix: Aqueous
Date Sampled: 10/18/2021 1040	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1425	BWS		20622
2	5030B	8260D	5	11/04/2021 0436	JWO		21227

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	8.0		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	270	H	5.0	ug/L	2
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1

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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-010
Description: W-66-2021-Q4-DUP	Matrix: Aqueous
Date Sampled: 10/18/2021 1040	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1425	BWS		20622
2	5030B	8260D	5	11/04/2021 0436	JWO		21227

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	4.7		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		88	70-130	H	97	70-130
1,2-Dichloroethane-d4		105	70-130	H	108	70-130
Toluene-d8		96	70-130	H	102	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-011
Description: W-39-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1203	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	50	10/20/2021 0912	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	57	1.0	mg/L	1

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-011
Description: W-39-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1203	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1450	BWS		20622
2	5030B	8260D	5	11/04/2021 0500	JWO		21227

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	8.5		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	250	H	5.0	ug/L	2
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-011
Description: W-39-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1203	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1450	BWS		20622
2	5030B	8260D	5	11/04/2021 0500	JWO		21227

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	3.7		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		91	70-130	H	93	70-130
1,2-Dichloroethane-d4		104	70-130	H	106	70-130
Toluene-d8		99	70-130	H	99	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-012
Description: W-43-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1302	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/20/2021 0914	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	7.4	0.20	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-012
Description: W-43-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1302	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1515	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-012
Description: W-43-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1302	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1515	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		101	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-013
Description: W-44-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1423	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/20/2021 0916	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	1.7	0.10	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-013
Description: W-44-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1423	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1541	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-013
Description: W-44-2021-Q4	Matrix: Aqueous
Date Sampled: 10/18/2021 1423	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1541	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		85	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		98	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-014
Description: EB-01-101821	Matrix: Aqueous
Date Sampled: 10/18/2021 1325	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/20/2021 0917	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-014
Description: EB-01-101821	Matrix: Aqueous
Date Sampled: 10/18/2021 1325	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1308	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	1.6		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	6.3		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ18028-014
Description: EB-01-101821	Matrix: Aqueous
Date Sampled: 10/18/2021 1325	Project Name: Q4 2021 Sampling
Date Received: 10/18/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1308	BWS		20622

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		95	70-130

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

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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ19694-001

Matrix: Aqueous

Batch: 19694

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/20/2021 0836

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ19694-002

Matrix: Aqueous

Batch: 19694

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.40		1	99	90-110	10/20/2021 0837

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MS

Sample ID: WJ18028-001MS

Matrix: Aqueous

Batch: 19694

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	1.5	0.40	1.9	N	1	86	90-110	10/20/2021 0841

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MSD

Sample ID: WJ18028-001MD

Matrix: Aqueous

Batch: 19694

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	1.5	0.40	1.9		1	90	0.70	90-110	20	10/20/2021 0842

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MS

Sample ID: WJ18028-006MS

Matrix: Aqueous

Batch: 19694

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.084	0.40	ND	N	1	-21	90-110	10/20/2021 0909

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MSD

Sample ID: WJ18028-006MD

Matrix: Aqueous

Batch: 19694

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	0.084	0.40	ND	N	1	-21	0.00	90-110	20	10/20/2021 0911

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20481-001

Matrix: Aqueous

Batch: 20481

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/28/2021 0950
Benzene	ND		1	1.0	ug/L	10/28/2021 0950
Bromodichloromethane	ND		1	1.0	ug/L	10/28/2021 0950
Bromoform	ND		1	1.0	ug/L	10/28/2021 0950
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/28/2021 0950
2-Butanone (MEK)	ND		1	10	ug/L	10/28/2021 0950
Carbon disulfide	ND		1	1.0	ug/L	10/28/2021 0950
Carbon tetrachloride	ND		1	1.0	ug/L	10/28/2021 0950
Chlorobenzene	ND		1	1.0	ug/L	10/28/2021 0950
Chloroethane	ND		1	2.0	ug/L	10/28/2021 0950
Chloroform	ND		1	1.0	ug/L	10/28/2021 0950
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/28/2021 0950
Cyclohexane	ND		1	1.0	ug/L	10/28/2021 0950
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/28/2021 0950
Dibromochloromethane	ND		1	1.0	ug/L	10/28/2021 0950
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/28/2021 0950
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/28/2021 0950
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/28/2021 0950
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/28/2021 0950
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/28/2021 0950
1,1-Dichloroethane	ND		1	1.0	ug/L	10/28/2021 0950
1,2-Dichloroethane	ND		1	1.0	ug/L	10/28/2021 0950
1,1-Dichloroethene	ND		1	1.0	ug/L	10/28/2021 0950
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/28/2021 0950
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/28/2021 0950
1,2-Dichloropropane	ND		1	1.0	ug/L	10/28/2021 0950
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/28/2021 0950
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/28/2021 0950
Ethylbenzene	ND		1	1.0	ug/L	10/28/2021 0950
2-Hexanone	ND		1	10	ug/L	10/28/2021 0950
Isopropylbenzene	ND		1	1.0	ug/L	10/28/2021 0950
Methyl acetate	ND		1	1.0	ug/L	10/28/2021 0950
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/28/2021 0950
4-Methyl-2-pentanone	ND		1	10	ug/L	10/28/2021 0950
Methylcyclohexane	ND		1	5.0	ug/L	10/28/2021 0950
Methylene chloride	ND		1	1.0	ug/L	10/28/2021 0950
Styrene	ND		1	1.0	ug/L	10/28/2021 0950
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/28/2021 0950
Tetrachloroethene	ND		1	1.0	ug/L	10/28/2021 0950
Toluene	ND		1	1.0	ug/L	10/28/2021 0950
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/28/2021 0950
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/28/2021 0950
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/28/2021 0950
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/28/2021 0950

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20481-001

Matrix: Aqueous

Batch: 20481

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/28/2021 0950
Trichlorofluoromethane	ND		1	1.0	ug/L	10/28/2021 0950
Vinyl chloride	ND		1	1.0	ug/L	10/28/2021 0950
Xylenes (total)	ND		1	1.0	ug/L	10/28/2021 0950
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		100	70-130			
1,2-Dichloroethane-d4		107	70-130			
Toluene-d8		106	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20481-002

Matrix: Aqueous

Batch: 20481

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	130		1	128	60-140	10/28/2021 0901
Benzene	50	50		1	99	70-130	10/28/2021 0901
Bromodichloromethane	50	52		1	104	70-130	10/28/2021 0901
Bromoform	50	55		1	111	70-130	10/28/2021 0901
Bromomethane (Methyl bromide)	50	49		1	98	70-130	10/28/2021 0901
2-Butanone (MEK)	100	120		1	118	70-130	10/28/2021 0901
Carbon disulfide	50	52		1	103	70-130	10/28/2021 0901
Carbon tetrachloride	50	51		1	102	70-130	10/28/2021 0901
Chlorobenzene	50	50		1	101	70-130	10/28/2021 0901
Chloroethane	50	48		1	96	70-130	10/28/2021 0901
Chloroform	50	47		1	95	70-130	10/28/2021 0901
Chloromethane (Methyl chloride)	50	45		1	91	60-140	10/28/2021 0901
Cyclohexane	50	51		1	102	70-130	10/28/2021 0901
1,2-Dibromo-3-chloropropane (DBCP)	50	52		1	104	70-130	10/28/2021 0901
Dibromochloromethane	50	53		1	106	70-130	10/28/2021 0901
1,2-Dibromoethane (EDB)	50	52		1	105	70-130	10/28/2021 0901
1,2-Dichlorobenzene	50	52		1	103	70-130	10/28/2021 0901
1,3-Dichlorobenzene	50	52		1	104	70-130	10/28/2021 0901
1,4-Dichlorobenzene	50	49		1	98	70-130	10/28/2021 0901
Dichlorodifluoromethane	50	52		1	104	60-140	10/28/2021 0901
1,1-Dichloroethane	50	49		1	97	70-130	10/28/2021 0901
1,2-Dichloroethane	50	50		1	100	70-130	10/28/2021 0901
1,1-Dichloroethene	50	49		1	98	70-130	10/28/2021 0901
cis-1,2-Dichloroethene	50	48		1	95	70-130	10/28/2021 0901
trans-1,2-Dichloroethene	50	48		1	97	70-130	10/28/2021 0901
1,2-Dichloropropane	50	52		1	105	70-130	10/28/2021 0901
cis-1,3-Dichloropropene	50	58		1	116	70-130	10/28/2021 0901
trans-1,3-Dichloropropene	50	51		1	102	70-130	10/28/2021 0901
Ethylbenzene	50	52		1	103	70-130	10/28/2021 0901
2-Hexanone	100	120		1	118	70-130	10/28/2021 0901
Isopropylbenzene	50	54		1	108	70-130	10/28/2021 0901
Methyl acetate	50	49		1	99	70-130	10/28/2021 0901
Methyl tertiary butyl ether (MTBE)	50	53		1	107	70-130	10/28/2021 0901
4-Methyl-2-pentanone	100	110		1	114	70-130	10/28/2021 0901
Methylcyclohexane	50	49		1	98	70-130	10/28/2021 0901
Methylene chloride	50	53		1	106	70-130	10/28/2021 0901
Styrene	50	56		1	112	70-130	10/28/2021 0901
1,1,2,2-Tetrachloroethane	50	50		1	101	70-130	10/28/2021 0901
Tetrachloroethene	50	50		1	100	70-130	10/28/2021 0901
Toluene	50	51		1	102	70-130	10/28/2021 0901
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	49		1	98	70-130	10/28/2021 0901
1,2,4-Trichlorobenzene	50	53		1	106	70-130	10/28/2021 0901
1,1,1-Trichloroethane	50	50		1	101	70-130	10/28/2021 0901
1,1,2-Trichloroethane	50	50		1	100	70-130	10/28/2021 0901

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20481-002

Matrix: Aqueous

Batch: 20481

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	48		1	96	70-130	10/28/2021 0901
Trichlorofluoromethane	50	51		1	102	70-130	10/28/2021 0901
Vinyl chloride	50	48		1	96	70-130	10/28/2021 0901
Xylenes (total)	100	110		1	106	70-130	10/28/2021 0901
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		96			70-130		
1,2-Dichloroethane-d4		95			70-130		
Toluene-d8		97			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ18028-001MS

Matrix: Aqueous

Batch: 20481

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	ND	100	92		1	92	60-140	10/28/2021 1844
Benzene	ND	50	49		1	99	70-130	10/28/2021 1844
Bromodichloromethane	ND	50	50		1	101	70-130	10/28/2021 1844
Bromoform	ND	50	50		1	100	70-130	10/28/2021 1844
Bromomethane (Methyl bromide)	ND	50	50		1	100	70-130	10/28/2021 1844
2-Butanone (MEK)	ND	100	96		1	96	70-130	10/28/2021 1844
Carbon disulfide	ND	50	46		1	93	70-130	10/28/2021 1844
Carbon tetrachloride	ND	50	51		1	103	70-130	10/28/2021 1844
Chlorobenzene	ND	50	49		1	98	70-130	10/28/2021 1844
Chloroethane	ND	50	49		1	98	70-130	10/28/2021 1844
Chloroform	ND	50	47		1	94	70-130	10/28/2021 1844
Chloromethane (Methyl chloride)	ND	50	48		1	95	60-140	10/28/2021 1844
Cyclohexane	ND	50	53		1	106	70-130	10/28/2021 1844
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	50		1	101	70-130	10/28/2021 1844
Dibromochloromethane	ND	50	51		1	101	70-130	10/28/2021 1844
1,2-Dibromoethane (EDB)	ND	50	50		1	101	70-130	10/28/2021 1844
1,2-Dichlorobenzene	ND	50	50		1	101	70-130	10/28/2021 1844
1,3-Dichlorobenzene	ND	50	50		1	99	70-130	10/28/2021 1844
1,4-Dichlorobenzene	ND	50	47		1	94	70-130	10/28/2021 1844
Dichlorodifluoromethane	ND	50	54		1	108	60-140	10/28/2021 1844
1,1-Dichloroethane	ND	50	47		1	95	70-130	10/28/2021 1844
1,2-Dichloroethane	ND	50	49		1	98	70-130	10/28/2021 1844
1,1-Dichloroethene	ND	50	46		1	93	70-130	10/28/2021 1844
cis-1,2-Dichloroethene	ND	50	46		1	91	70-130	10/28/2021 1844
trans-1,2-Dichloroethene	ND	50	47		1	95	70-130	10/28/2021 1844
1,2-Dichloropropane	ND	50	52		1	104	70-130	10/28/2021 1844
cis-1,3-Dichloropropene	ND	50	53		1	106	70-130	10/28/2021 1844
trans-1,3-Dichloropropene	ND	50	47		1	93	70-130	10/28/2021 1844
Ethylbenzene	ND	50	51		1	103	70-130	10/28/2021 1844
2-Hexanone	ND	100	110		1	106	70-130	10/28/2021 1844
Isopropylbenzene	ND	50	54		1	109	70-130	10/28/2021 1844
Methyl acetate	ND	50	42		1	84	70-130	10/28/2021 1844
Methyl tertiary butyl ether (MTBE)	ND	50	48		1	96	70-130	10/28/2021 1844
4-Methyl-2-pentanone	ND	100	110		1	109	70-130	10/28/2021 1844
Methylcyclohexane	ND	50	51		1	103	70-130	10/28/2021 1844
Methylene chloride	ND	50	48		1	97	70-130	10/28/2021 1844
Styrene	ND	50	55		1	111	70-130	10/28/2021 1844
1,1,2,2-Tetrachloroethane	ND	50	47		1	95	70-130	10/28/2021 1844
Tetrachloroethene	74	50	120		1	98	70-130	10/28/2021 1844
Toluene	ND	50	50		1	101	70-130	10/28/2021 1844
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	49		1	97	70-130	10/28/2021 1844
1,2,4-Trichlorobenzene	ND	50	51		1	102	70-130	10/28/2021 1844
1,1,1-Trichloroethane	ND	50	50		1	100	70-130	10/28/2021 1844
1,1,2-Trichloroethane	ND	50	48		1	96	70-130	10/28/2021 1844

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ18028-001MS

Matrix: Aqueous

Batch: 20481

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	2.3	50	50		1	96	70-130	10/28/2021 1844
Trichlorofluoromethane	ND	50	55		1	111	70-130	10/28/2021 1844
Vinyl chloride	ND	50	51		1	103	70-130	10/28/2021 1844
Xylenes (total)	ND	100	100		1	104	70-130	10/28/2021 1844
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene		101	70-130					
1,2-Dichloroethane-d4		101	70-130					
Toluene-d8		103	70-130					

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ18028-001MD

Matrix: Aqueous

Batch: 20481

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	100	91		1	91	0.085	60-140	20	10/28/2021 1909
Benzene	ND	50	50		1	99	0.66	70-130	20	10/28/2021 1909
Bromodichloromethane	ND	50	50		1	101	0.17	70-130	20	10/28/2021 1909
Bromoform	ND	50	50		1	99	0.58	70-130	20	10/28/2021 1909
Bromomethane (Methyl bromide)	ND	50	53		1	105	5.4	70-130	20	10/28/2021 1909
2-Butanone (MEK)	ND	100	93		1	93	3.7	70-130	20	10/28/2021 1909
Carbon disulfide	ND	50	50		1	101	7.9	70-130	20	10/28/2021 1909
Carbon tetrachloride	ND	50	53		1	106	2.9	70-130	20	10/28/2021 1909
Chlorobenzene	ND	50	49		1	98	0.73	70-130	20	10/28/2021 1909
Chloroethane	ND	50	53		1	105	6.8	70-130	20	10/28/2021 1909
Chloroform	ND	50	48		1	97	3.1	70-130	20	10/28/2021 1909
Chloromethane (Methyl chloride)	ND	50	50		1	100	4.5	60-140	20	10/28/2021 1909
Cyclohexane	ND	50	55		1	110	3.5	70-130	20	10/28/2021 1909
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	50		1	99	1.4	70-130	20	10/28/2021 1909
Dibromochloromethane	ND	50	51		1	102	0.37	70-130	20	10/28/2021 1909
1,2-Dibromoethane (EDB)	ND	50	49		1	98	2.3	70-130	20	10/28/2021 1909
1,2-Dichlorobenzene	ND	50	50		1	100	1.1	70-130	20	10/28/2021 1909
1,3-Dichlorobenzene	ND	50	49		1	97	1.7	70-130	20	10/28/2021 1909
1,4-Dichlorobenzene	ND	50	47		1	93	0.93	70-130	20	10/28/2021 1909
Dichlorodifluoromethane	ND	50	59		1	117	7.8	60-140	20	10/28/2021 1909
1,1-Dichloroethane	ND	50	49		1	99	4.5	70-130	20	10/28/2021 1909
1,2-Dichloroethane	ND	50	50		1	99	1.8	70-130	20	10/28/2021 1909
1,1-Dichloroethene	ND	50	50		1	99	7.0	70-130	20	10/28/2021 1909
cis-1,2-Dichloroethene	ND	50	48		1	96	4.7	70-130	20	10/28/2021 1909
trans-1,2-Dichloroethene	ND	50	50		1	99	4.6	70-130	20	10/28/2021 1909
1,2-Dichloropropane	ND	50	51		1	102	2.2	70-130	20	10/28/2021 1909
cis-1,3-Dichloropropene	ND	50	52		1	105	0.71	70-130	20	10/28/2021 1909
trans-1,3-Dichloropropene	ND	50	46		1	92	1.1	70-130	20	10/28/2021 1909
Ethylbenzene	ND	50	50		1	100	2.8	70-130	20	10/28/2021 1909
2-Hexanone	ND	100	96		1	96	10	70-130	20	10/28/2021 1909
Isopropylbenzene	ND	50	54		1	109	0.18	70-130	20	10/28/2021 1909
Methyl acetate	ND	50	42		1	84	0.81	70-130	20	10/28/2021 1909
Methyl tertiary butyl ether (MTBE)	ND	50	50		1	100	5.0	70-130	20	10/28/2021 1909
4-Methyl-2-pentanone	ND	100	100		1	101	7.2	70-130	20	10/28/2021 1909
Methylcyclohexane	ND	50	52		1	104	1.9	70-130	20	10/28/2021 1909
Methylene chloride	ND	50	50		1	101	4.3	70-130	20	10/28/2021 1909
Styrene	ND	50	54		1	107	3.0	70-130	20	10/28/2021 1909
1,1,2,2-Tetrachloroethane	ND	50	46		1	92	3.0	70-130	20	10/28/2021 1909
Tetrachloroethene	74	50	120		1	94	1.5	70-130	20	10/28/2021 1909
Toluene	ND	50	50		1	100	1.2	70-130	20	10/28/2021 1909
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	51		1	103	5.9	70-130	20	10/28/2021 1909
1,2,4-Trichlorobenzene	ND	50	53		1	106	4.0	70-130	20	10/28/2021 1909
1,1,1-Trichloroethane	ND	50	52		1	103	3.1	70-130	20	10/28/2021 1909
1,1,2-Trichloroethane	ND	50	47		1	94	2.0	70-130	20	10/28/2021 1909

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ18028-001MD

Matrix: Aqueous

Batch: 20481

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	2.3	50	51		1	97	0.81	70-130	20	10/28/2021 1909
Trichlorofluoromethane	ND	50	57		1	115	3.8	70-130	20	10/28/2021 1909
Vinyl chloride	ND	50	53		1	106	3.3	70-130	20	10/28/2021 1909
Xylenes (total)	ND	100	100		1	104	0.24	70-130	20	10/28/2021 1909
Surrogate	Q	% Rec	Acceptance Limit							
Bromofluorobenzene		98	70-130							
1,2-Dichloroethane-d4		100	70-130							
Toluene-d8		101	70-130							

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20482-001

Matrix: Aqueous

Batch: 20482

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/28/2021 1016
Benzene	ND		1	1.0	ug/L	10/28/2021 1016
Bromodichloromethane	ND		1	1.0	ug/L	10/28/2021 1016
Bromoform	ND		1	1.0	ug/L	10/28/2021 1016
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/28/2021 1016
2-Butanone (MEK)	ND		1	10	ug/L	10/28/2021 1016
Carbon disulfide	ND		1	1.0	ug/L	10/28/2021 1016
Carbon tetrachloride	ND		1	1.0	ug/L	10/28/2021 1016
Chlorobenzene	ND		1	1.0	ug/L	10/28/2021 1016
Chloroethane	ND		1	2.0	ug/L	10/28/2021 1016
Chloroform	ND		1	1.0	ug/L	10/28/2021 1016
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/28/2021 1016
Cyclohexane	ND		1	1.0	ug/L	10/28/2021 1016
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/28/2021 1016
Dibromochloromethane	ND		1	1.0	ug/L	10/28/2021 1016
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/28/2021 1016
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/28/2021 1016
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/28/2021 1016
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/28/2021 1016
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/28/2021 1016
1,1-Dichloroethane	ND		1	1.0	ug/L	10/28/2021 1016
1,2-Dichloroethane	ND		1	1.0	ug/L	10/28/2021 1016
1,1-Dichloroethene	ND		1	1.0	ug/L	10/28/2021 1016
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/28/2021 1016
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/28/2021 1016
1,2-Dichloropropane	ND		1	1.0	ug/L	10/28/2021 1016
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/28/2021 1016
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/28/2021 1016
Ethylbenzene	ND		1	1.0	ug/L	10/28/2021 1016
2-Hexanone	ND		1	10	ug/L	10/28/2021 1016
Isopropylbenzene	ND		1	1.0	ug/L	10/28/2021 1016
Methyl acetate	ND		1	1.0	ug/L	10/28/2021 1016
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/28/2021 1016
4-Methyl-2-pentanone	ND		1	10	ug/L	10/28/2021 1016
Methylcyclohexane	ND		1	5.0	ug/L	10/28/2021 1016
Methylene chloride	ND		1	1.0	ug/L	10/28/2021 1016
Styrene	ND		1	1.0	ug/L	10/28/2021 1016
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/28/2021 1016
Tetrachloroethene	ND		1	1.0	ug/L	10/28/2021 1016
Toluene	ND		1	1.0	ug/L	10/28/2021 1016
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/28/2021 1016
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/28/2021 1016
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/28/2021 1016
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/28/2021 1016

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20482-001

Matrix: Aqueous

Batch: 20482

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/28/2021 1016
Trichlorofluoromethane	ND		1	1.0	ug/L	10/28/2021 1016
Vinyl chloride	ND		1	1.0	ug/L	10/28/2021 1016
Xylenes (total)	ND		1	1.0	ug/L	10/28/2021 1016
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		87	70-130			
1,2-Dichloroethane-d4		109	70-130			
Toluene-d8		99	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20482-002

Matrix: Aqueous

Batch: 20482

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	120		1	122	60-140	10/28/2021 0927
Benzene	50	48		1	96	70-130	10/28/2021 0927
Bromodichloromethane	50	50		1	99	70-130	10/28/2021 0927
Bromoform	50	51		1	102	70-130	10/28/2021 0927
Bromomethane (Methyl bromide)	50	60		1	119	70-130	10/28/2021 0927
2-Butanone (MEK)	100	100		1	102	70-130	10/28/2021 0927
Carbon disulfide	50	49		1	98	70-130	10/28/2021 0927
Carbon tetrachloride	50	50		1	101	70-130	10/28/2021 0927
Chlorobenzene	50	49		1	97	70-130	10/28/2021 0927
Chloroethane	50	47		1	95	70-130	10/28/2021 0927
Chloroform	50	49		1	97	70-130	10/28/2021 0927
Chloromethane (Methyl chloride)	50	42		1	84	60-140	10/28/2021 0927
Cyclohexane	50	42		1	85	70-130	10/28/2021 0927
1,2-Dibromo-3-chloropropane (DBCP)	50	43		1	86	70-130	10/28/2021 0927
Dibromochloromethane	50	52		1	103	70-130	10/28/2021 0927
1,2-Dibromoethane (EDB)	50	50		1	100	70-130	10/28/2021 0927
1,2-Dichlorobenzene	50	49		1	97	70-130	10/28/2021 0927
1,3-Dichlorobenzene	50	47		1	94	70-130	10/28/2021 0927
1,4-Dichlorobenzene	50	47		1	95	70-130	10/28/2021 0927
Dichlorodifluoromethane	50	44		1	89	60-140	10/28/2021 0927
1,1-Dichloroethane	50	48		1	95	70-130	10/28/2021 0927
1,2-Dichloroethane	50	47		1	93	70-130	10/28/2021 0927
1,1-Dichloroethene	50	49		1	98	70-130	10/28/2021 0927
cis-1,2-Dichloroethene	50	48		1	95	70-130	10/28/2021 0927
trans-1,2-Dichloroethene	50	48		1	97	70-130	10/28/2021 0927
1,2-Dichloropropane	50	49		1	99	70-130	10/28/2021 0927
cis-1,3-Dichloropropene	50	48		1	96	70-130	10/28/2021 0927
trans-1,3-Dichloropropene	50	46		1	93	70-130	10/28/2021 0927
Ethylbenzene	50	47		1	95	70-130	10/28/2021 0927
2-Hexanone	100	91		1	91	70-130	10/28/2021 0927
Isopropylbenzene	50	49		1	98	70-130	10/28/2021 0927
Methyl acetate	50	47		1	95	70-130	10/28/2021 0927
Methyl tertiary butyl ether (MTBE)	50	44		1	89	70-130	10/28/2021 0927
4-Methyl-2-pentanone	100	92		1	92	70-130	10/28/2021 0927
Methylcyclohexane	50	46		1	92	70-130	10/28/2021 0927
Methylene chloride	50	49		1	97	70-130	10/28/2021 0927
Styrene	50	51		1	102	70-130	10/28/2021 0927
1,1,2,2-Tetrachloroethane	50	47		1	93	70-130	10/28/2021 0927
Tetrachloroethene	50	48		1	96	70-130	10/28/2021 0927
Toluene	50	46		1	92	70-130	10/28/2021 0927
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	49		1	99	70-130	10/28/2021 0927
1,2,4-Trichlorobenzene	50	45		1	90	70-130	10/28/2021 0927
1,1,1-Trichloroethane	50	49		1	98	70-130	10/28/2021 0927
1,1,2-Trichloroethane	50	47		1	94	70-130	10/28/2021 0927

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20482-002

Matrix: Aqueous

Batch: 20482

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	48		1	97	70-130	10/28/2021 0927
Trichlorofluoromethane	50	47		1	94	70-130	10/28/2021 0927
Vinyl chloride	50	45		1	89	70-130	10/28/2021 0927
Xylenes (total)	100	94		1	94	70-130	10/28/2021 0927
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		98			70-130		
1,2-Dichloroethane-d4		99			70-130		
Toluene-d8		100			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20622-001

Matrix: Aqueous

Batch: 20622

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/29/2021 1143
Benzene	ND		1	1.0	ug/L	10/29/2021 1143
Bromodichloromethane	ND		1	1.0	ug/L	10/29/2021 1143
Bromoform	ND		1	1.0	ug/L	10/29/2021 1143
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/29/2021 1143
2-Butanone (MEK)	ND		1	10	ug/L	10/29/2021 1143
Carbon disulfide	ND		1	1.0	ug/L	10/29/2021 1143
Carbon tetrachloride	ND		1	1.0	ug/L	10/29/2021 1143
Chlorobenzene	ND		1	1.0	ug/L	10/29/2021 1143
Chloroethane	ND		1	2.0	ug/L	10/29/2021 1143
Chloroform	ND		1	1.0	ug/L	10/29/2021 1143
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/29/2021 1143
Cyclohexane	ND		1	1.0	ug/L	10/29/2021 1143
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/29/2021 1143
Dibromochloromethane	ND		1	1.0	ug/L	10/29/2021 1143
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/29/2021 1143
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 1143
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 1143
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 1143
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/29/2021 1143
1,1-Dichloroethane	ND		1	1.0	ug/L	10/29/2021 1143
1,2-Dichloroethane	ND		1	1.0	ug/L	10/29/2021 1143
1,1-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 1143
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 1143
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 1143
1,2-Dichloropropane	ND		1	1.0	ug/L	10/29/2021 1143
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/29/2021 1143
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/29/2021 1143
Ethylbenzene	ND		1	1.0	ug/L	10/29/2021 1143
2-Hexanone	ND		1	10	ug/L	10/29/2021 1143
Isopropylbenzene	ND		1	1.0	ug/L	10/29/2021 1143
Methyl acetate	ND		1	1.0	ug/L	10/29/2021 1143
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/29/2021 1143
4-Methyl-2-pentanone	ND		1	10	ug/L	10/29/2021 1143
Methylcyclohexane	ND		1	5.0	ug/L	10/29/2021 1143
Methylene chloride	ND		1	1.0	ug/L	10/29/2021 1143
Styrene	ND		1	1.0	ug/L	10/29/2021 1143
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/29/2021 1143
Tetrachloroethene	ND		1	1.0	ug/L	10/29/2021 1143
Toluene	ND		1	1.0	ug/L	10/29/2021 1143
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/29/2021 1143
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/29/2021 1143
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/29/2021 1143
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/29/2021 1143

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20622-001

Matrix: Aqueous

Batch: 20622

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/29/2021 1143
Trichlorofluoromethane	ND		1	1.0	ug/L	10/29/2021 1143
Vinyl chloride	ND		1	1.0	ug/L	10/29/2021 1143
Xylenes (total)	ND		1	1.0	ug/L	10/29/2021 1143
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		94	70-130			
1,2-Dichloroethane-d4		103	70-130			
Toluene-d8		100	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20622-002

Matrix: Aqueous

Batch: 20622

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	110		1	108	60-140	10/29/2021 1027
Benzene	50	52		1	104	70-130	10/29/2021 1027
Bromodichloromethane	50	51		1	101	70-130	10/29/2021 1027
Bromoform	50	55		1	110	70-130	10/29/2021 1027
Bromomethane (Methyl bromide)	50	44		1	88	70-130	10/29/2021 1027
2-Butanone (MEK)	100	110		1	108	70-130	10/29/2021 1027
Carbon disulfide	50	49		1	99	70-130	10/29/2021 1027
Carbon tetrachloride	50	48		1	95	70-130	10/29/2021 1027
Chlorobenzene	50	49		1	98	70-130	10/29/2021 1027
Chloroethane	50	44		1	88	70-130	10/29/2021 1027
Chloroform	50	48		1	96	70-130	10/29/2021 1027
Chloromethane (Methyl chloride)	50	49		1	99	60-140	10/29/2021 1027
Cyclohexane	50	49		1	98	70-130	10/29/2021 1027
1,2-Dibromo-3-chloropropane (DBCP)	50	52		1	104	70-130	10/29/2021 1027
Dibromochloromethane	50	52		1	103	70-130	10/29/2021 1027
1,2-Dibromoethane (EDB)	50	49		1	98	70-130	10/29/2021 1027
1,2-Dichlorobenzene	50	51		1	101	70-130	10/29/2021 1027
1,3-Dichlorobenzene	50	50		1	100	70-130	10/29/2021 1027
1,4-Dichlorobenzene	50	48		1	96	70-130	10/29/2021 1027
Dichlorodifluoromethane	50	48		1	96	60-140	10/29/2021 1027
1,1-Dichloroethane	50	49		1	98	70-130	10/29/2021 1027
1,2-Dichloroethane	50	57		1	113	70-130	10/29/2021 1027
1,1-Dichloroethene	50	50		1	99	70-130	10/29/2021 1027
cis-1,2-Dichloroethene	50	50		1	101	70-130	10/29/2021 1027
trans-1,2-Dichloroethene	50	49		1	99	70-130	10/29/2021 1027
1,2-Dichloropropane	50	49		1	98	70-130	10/29/2021 1027
cis-1,3-Dichloropropene	50	57		1	113	70-130	10/29/2021 1027
trans-1,3-Dichloropropene	50	54		1	108	70-130	10/29/2021 1027
Ethylbenzene	50	53		1	106	70-130	10/29/2021 1027
2-Hexanone	100	85		1	85	70-130	10/29/2021 1027
Isopropylbenzene	50	54		1	108	70-130	10/29/2021 1027
Methyl acetate	50	50		1	101	70-130	10/29/2021 1027
Methyl tertiary butyl ether (MTBE)	50	57		1	115	70-130	10/29/2021 1027
4-Methyl-2-pentanone	100	100		1	100	70-130	10/29/2021 1027
Methylcyclohexane	50	53		1	106	70-130	10/29/2021 1027
Methylene chloride	50	47		1	94	70-130	10/29/2021 1027
Styrene	50	51		1	103	70-130	10/29/2021 1027
1,1,2,2-Tetrachloroethane	50	53		1	105	70-130	10/29/2021 1027
Tetrachloroethene	50	50		1	99	70-130	10/29/2021 1027
Toluene	50	53		1	105	70-130	10/29/2021 1027
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	47		1	94	70-130	10/29/2021 1027
1,2,4-Trichlorobenzene	50	46		1	93	70-130	10/29/2021 1027
1,1,1-Trichloroethane	50	48		1	96	70-130	10/29/2021 1027
1,1,2-Trichloroethane	50	48		1	97	70-130	10/29/2021 1027

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20622-002

Matrix: Aqueous

Batch: 20622

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	49		1	98	70-130	10/29/2021 1027
Trichlorofluoromethane	50	49		1	99	70-130	10/29/2021 1027
Vinyl chloride	50	48		1	96	70-130	10/29/2021 1027
Xylenes (total)	100	110		1	107	70-130	10/29/2021 1027
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		104			70-130		
1,2-Dichloroethane-d4		104			70-130		
Toluene-d8		98			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ18028-008MS

Matrix: Aqueous

Batch: 20622

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	ND	500	500		5	101	60-140	10/29/2021 1956
Benzene	ND	250	250		5	101	70-130	10/29/2021 1956
Bromodichloromethane	ND	250	240		5	96	70-130	10/29/2021 1956
Bromoform	ND	250	240		5	96	70-130	10/29/2021 1956
Bromomethane (Methyl bromide)	ND	250	260		5	103	70-130	10/29/2021 1956
2-Butanone (MEK)	ND	500	510		5	102	70-130	10/29/2021 1956
Carbon disulfide	ND	250	250		5	99	70-130	10/29/2021 1956
Carbon tetrachloride	ND	250	250		5	99	70-130	10/29/2021 1956
Chlorobenzene	ND	250	250		5	99	70-130	10/29/2021 1956
Chloroethane	ND	250	270		5	110	70-130	10/29/2021 1956
Chloroform	ND	250	240		5	95	70-130	10/29/2021 1956
Chloromethane (Methyl chloride)	ND	250	280		5	114	60-140	10/29/2021 1956
Cyclohexane	ND	250	240		5	98	70-130	10/29/2021 1956
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	220		5	90	70-130	10/29/2021 1956
Dibromochloromethane	ND	250	250		5	101	70-130	10/29/2021 1956
1,2-Dibromoethane (EDB)	ND	250	250		5	98	70-130	10/29/2021 1956
1,2-Dichlorobenzene	ND	250	250		5	98	70-130	10/29/2021 1956
1,3-Dichlorobenzene	ND	250	240		5	97	70-130	10/29/2021 1956
1,4-Dichlorobenzene	ND	250	230		5	93	70-130	10/29/2021 1956
Dichlorodifluoromethane	ND	250	330		5	132	60-140	10/29/2021 1956
1,1-Dichloroethane	ND	250	240		5	96	70-130	10/29/2021 1956
1,2-Dichloroethane	ND	250	240		5	97	70-130	10/29/2021 1956
1,1-Dichloroethene	ND	250	250		5	101	70-130	10/29/2021 1956
cis-1,2-Dichloroethene	13	250	250		5	95	70-130	10/29/2021 1956
trans-1,2-Dichloroethene	ND	250	250		5	99	70-130	10/29/2021 1956
1,2-Dichloropropane	ND	250	240		5	97	70-130	10/29/2021 1956
cis-1,3-Dichloropropene	ND	250	240		5	95	70-130	10/29/2021 1956
trans-1,3-Dichloropropene	ND	250	240		5	96	70-130	10/29/2021 1956
Ethylbenzene	ND	250	270		5	108	70-130	10/29/2021 1956
2-Hexanone	ND	500	430		5	86	70-130	10/29/2021 1956
Isopropylbenzene	ND	250	250		5	102	70-130	10/29/2021 1956
Methyl acetate	ND	250	210		5	85	70-130	10/29/2021 1956
Methyl tertiary butyl ether (MTBE)	ND	250	250		5	101	70-130	10/29/2021 1956
4-Methyl-2-pentanone	ND	500	470		5	94	70-130	10/29/2021 1956
Methylcyclohexane	ND	250	270		5	109	70-130	10/29/2021 1956
Methylene chloride	33	250	250		5	88	70-130	10/29/2021 1956
Styrene	ND	250	260		5	106	70-130	10/29/2021 1956
1,1,2,2-Tetrachloroethane	ND	250	250		5	101	70-130	10/29/2021 1956
Tetrachloroethene	340	250	620		5	113	70-130	10/29/2021 1956
Toluene	ND	250	270		5	108	70-130	10/29/2021 1956
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	250	240		5	95	70-130	10/29/2021 1956
1,2,4-Trichlorobenzene	ND	250	220		5	87	70-130	10/29/2021 1956
1,1,1-Trichloroethane	ND	250	250		5	99	70-130	10/29/2021 1956
1,1,2-Trichloroethane	ND	250	240		5	97	70-130	10/29/2021 1956

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ18028-008MS

Matrix: Aqueous

Batch: 20622

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	41	250	290		5	98	70-130	10/29/2021 1956
Trichlorofluoromethane	ND	250	320		5	128	70-130	10/29/2021 1956
Vinyl chloride	ND	250	290		5	114	70-130	10/29/2021 1956
Xylenes (total)	ND	500	540		5	107	70-130	10/29/2021 1956
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene		94	70-130					
1,2-Dichloroethane-d4		97	70-130					
Toluene-d8		103	70-130					

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ18028-008MD

Matrix: Aqueous

Batch: 20622

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	500	420		5	83	19	60-140	20	10/29/2021 2021
Benzene	ND	250	250		5	101	0.28	70-130	20	10/29/2021 2021
Bromodichloromethane	ND	250	240		5	96	0.28	70-130	20	10/29/2021 2021
Bromoform	ND	250	240		5	98	2.1	70-130	20	10/29/2021 2021
Bromomethane (Methyl bromide)	ND	250	270		5	107	3.4	70-130	20	10/29/2021 2021
2-Butanone (MEK)	ND	500	480		5	97	4.9	70-130	20	10/29/2021 2021
Carbon disulfide	ND	250	250		5	99	0.070	70-130	20	10/29/2021 2021
Carbon tetrachloride	ND	250	240		5	96	2.7	70-130	20	10/29/2021 2021
Chlorobenzene	ND	250	240		5	98	1.3	70-130	20	10/29/2021 2021
Chloroethane	ND	250	290		5	117	6.6	70-130	20	10/29/2021 2021
Chloroform	ND	250	240		5	95	0.76	70-130	20	10/29/2021 2021
Chloromethane (Methyl chloride)	ND	250	280		5	112	1.2	60-140	20	10/29/2021 2021
Cyclohexane	ND	250	230		5	94	4.0	70-130	20	10/29/2021 2021
1,2-Dibromo-3-chloropropane (DBCP)	ND	250	220		5	89	0.50	70-130	20	10/29/2021 2021
Dibromochloromethane	ND	250	250		5	99	1.5	70-130	20	10/29/2021 2021
1,2-Dibromoethane (EDB)	ND	250	240		5	97	1.3	70-130	20	10/29/2021 2021
1,2-Dichlorobenzene	ND	250	240		5	97	1.5	70-130	20	10/29/2021 2021
1,3-Dichlorobenzene	ND	250	240		5	96	1.1	70-130	20	10/29/2021 2021
1,4-Dichlorobenzene	ND	250	230		5	92	1.6	70-130	20	10/29/2021 2021
Dichlorodifluoromethane	ND	250	330		5	131	0.34	60-140	20	10/29/2021 2021
1,1-Dichloroethane	ND	250	240		5	96	0.64	70-130	20	10/29/2021 2021
1,2-Dichloroethane	ND	250	240		5	97	0.44	70-130	20	10/29/2021 2021
1,1-Dichloroethene	ND	250	260		5	105	4.1	70-130	20	10/29/2021 2021
cis-1,2-Dichloroethene	13	250	250		5	97	1.8	70-130	20	10/29/2021 2021
trans-1,2-Dichloroethene	ND	250	240		5	97	2.0	70-130	20	10/29/2021 2021
1,2-Dichloropropane	ND	250	250		5	98	0.94	70-130	20	10/29/2021 2021
cis-1,3-Dichloropropene	ND	250	250		5	99	4.6	70-130	20	10/29/2021 2021
trans-1,3-Dichloropropene	ND	250	240		5	97	1.7	70-130	20	10/29/2021 2021
Ethylbenzene	ND	250	260		5	105	2.9	70-130	20	10/29/2021 2021
2-Hexanone	ND	500	430		5	86	0.023	70-130	20	10/29/2021 2021
Isopropylbenzene	ND	250	250		5	101	0.62	70-130	20	10/29/2021 2021
Methyl acetate	ND	250	210		5	83	2.1	70-130	20	10/29/2021 2021
Methyl tertiary butyl ether (MTBE)	ND	250	250		5	98	2.2	70-130	20	10/29/2021 2021
4-Methyl-2-pentanone	ND	500	480		5	97	2.8	70-130	20	10/29/2021 2021
Methylcyclohexane	ND	250	260		5	104	5.4	70-130	20	10/29/2021 2021
Methylene chloride	33	250	250		5	88	0.20	70-130	20	10/29/2021 2021
Styrene	ND	250	260		5	104	1.7	70-130	20	10/29/2021 2021
1,1,2,2-Tetrachloroethane	ND	250	260		5	103	2.0	70-130	20	10/29/2021 2021
Tetrachloroethene	340	250	600		5	107	2.6	70-130	20	10/29/2021 2021
Toluene	ND	250	260		5	104	3.5	70-130	20	10/29/2021 2021
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	250	250		5	101	6.0	70-130	20	10/29/2021 2021
1,2,4-Trichlorobenzene	ND	250	230		5	93	6.1	70-130	20	10/29/2021 2021
1,1,1-Trichloroethane	ND	250	240		5	97	1.2	70-130	20	10/29/2021 2021
1,1,2-Trichloroethane	ND	250	240		5	97	0.83	70-130	20	10/29/2021 2021

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ18028-008MD

Matrix: Aqueous

Batch: 20622

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date	
Trichloroethene	41	250	290		5	100	1.1	70-130	20	10/29/2021 2021	
Trichlorofluoromethane	ND	250	320		5	129	0.82	70-130	20	10/29/2021 2021	
Vinyl chloride	ND	250	290		5	115	0.20	70-130	20	10/29/2021 2021	
Xylenes (total)	ND	500	520		5	105	2.4	70-130	20	10/29/2021 2021	
Surrogate	Q	% Rec	Acceptance Limit								
Bromofluorobenzene		94	70-130								
1,2-Dichloroethane-d4		95	70-130								
Toluene-d8		98	70-130								

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ21227-001

Matrix: Aqueous

Batch: 21227

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Tetrachloroethene	ND		1	1.0	ug/L	11/03/2021 2339
Surrogate	Q % Rec		Acceptance Limit			
Bromofluorobenzene	97		70-130			
1,2-Dichloroethane-d4	97		70-130			
Toluene-d8	101		70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ21227-002

Matrix: Aqueous

Batch: 21227

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Tetrachloroethene	50	48		1	96	70-130	11/03/2021 2055
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		95			70-130		
1,2-Dichloroethane-d4		92			70-130		
Toluene-d8		98			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ18028-010MS

Matrix: Aqueous

Batch: 21227

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Tetrachloroethene	270	250	540		5	106	70-130	11/04/2021 0613
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene		100	70-130					
1,2-Dichloroethane-d4		106	70-130					
Toluene-d8		104	70-130					

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ18028-010MD

Matrix: Aqueous

Batch: 21227

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Tetrachloroethene	270	250	500		5	91	7.2	70-130	20	11/04/2021 0637
Surrogate	Q	% Rec	Acceptance Limit							
Bromofluorobenzene		96	70-130							
1,2-Dichloroethane-d4		101	70-130							
Toluene-d8		99	70-130							

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ21229-001

Matrix: Aqueous

Batch: 21229

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Tetrachloroethene	ND		1	1.0	ug/L	11/04/2021 0047
Surrogate	Q % Rec		Acceptance Limit			
Bromofluorobenzene	104		70-130			
1,2-Dichloroethane-d4	97		70-130			
Toluene-d8	101		70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ21229-002

Matrix: Aqueous

Batch: 21229

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Tetrachloroethene	50	51		1	102	70-130	11/03/2021 2346
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		102			70-130		
1,2-Dichloroethane-d4		95			70-130		
Toluene-d8		98			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ18028-009MS

Matrix: Aqueous

Batch: 21229

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Tetrachloroethene	270	250	540		5	105	70-130	11/04/2021 0758
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene		104	70-130					
1,2-Dichloroethane-d4		96	70-130					
Toluene-d8		104	70-130					

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ18028-009MD

Matrix: Aqueous

Batch: 21229

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Tetrachloroethene	270	250	510		5	95	4.5	70-130	20	11/04/2021 0821
Surrogate	Q	% Rec	Acceptance Limit							
Bromofluorobenzene		98	70-130							
1,2-Dichloroethane-d4		91	70-130							
Toluene-d8		99	70-130							

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents





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

**Number 126221**

Client: **WESTINGHOUSE**  
 Address: **5801 BLUFF RD**  
 City: **Hopkins** State: **SC** Zip Code: **29061**  
 Project Name: **Q4 2021 Sampling**  
 Project No.: \_\_\_\_\_

Refer to Contact: **DIANA JOYCE**  
 Sampler's Signature: *[Signature]*  
 Printer Name: **JAMES LEIGHTON**  
 Project Name: **Randy Carzins**

Telephone No. / Email: **803 647 1920**  
**Joyce.DP@westinghouse.com**  
 Analysts (Attach list if more spaces is needed)

QC No. \_\_\_\_\_  
 Page **2** of **2**



WJ18028

Sample ID / Description (Containers for each sample may be combined on one form)	P.O. No.	Collection Date	Collection Time (Military)	Matrix				No. of Containers by Preservative Type				Remarks / Cooler I.D.	
				Water	Soil	Sludge	Other	None	ACM	ACM	ACM		
W-65-2021-Q4	10-18-21		0938	G				1	3				X
W-66-2021-Q4			1040	G				1	3				X
W-66-2021-Q4-Dup			1040	G				1	3				X
W-39-2021-Q4			1203	G				1	3				X
W-43-2021-Q4			1302	G				1	3				X
W-44-2021-Q4			1423	G				1	3				X
EB-01-101821			1325	G				1	3				X

Turn Around Time Required (Prior lab approval required for expedited TAT.)  
 Standard  Rush (Specify) \_\_\_\_\_

1. Relinquished by: *[Signature]* Date: **12-18-21** Time: **1550**

2. Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3. Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

4. Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Sample Disposal:  Return to Client  Approval by Lab  Hazard  Flammable  Skin Irritant  Poison  Unknown

OC Requirements (Specify): \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

LAB USE ONLY  
 Received on line (Circle) Yes No Ice Pack Receipt Temp **2.5** °C

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Samples; PINK-Field/Client Copy

Document Number: MEDCS26-07



**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: KSC / 10/18/2021

Lot #: WJ18028

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA 2.5 / 2.5 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present > "pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)</b>	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 mg/L (if #19 is no) and were adjusted accordingly in sample 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: KSC Date: 10/18/2021	
Comments:	



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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Westinghouse RI

Lot Number: **WJ19081**

Date Completed: 11/23/2021

11/23/2021 2:57 PM

Approved and released by:

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: WJ19081

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

### **Nitrate Analysis- Method 353.2**

The continuing calibration verification (CCV) associated with samples WJ19081-009, -010, -011, -012 had nitrate recovered below acceptance limits. The sample was reanalyzed outside of analytical holding time to confirm initial results. Run 1 is reported.

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

Sample WJ19081-009 was reanalyzed outside of analytical hold due to a required dilution for tetrachloroethene. Both run 1 and run 3 are reported.

The laboratory control sample (LCS) associated with batch 23141 had 3-Nitroaniline recovered marginally outside of the acceptance limits. Due to the large number of analytes in the LCS, there is a high statistical probability of a few analytes outside of control limits. Per SW-846 Update V 8000D- 23 Revision 4 July 2014, a number of analytes should be allowed to marginally fail the limits without requirement for corrective action. The laboratory's SOP allows for 10% of analytes to recover marginally outside criteria.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ19081  
Project Name: Westinghouse RI  
Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-64-2021-Q4	Aqueous	10/19/2021 0854	10/19/2021
002	W-47-2021-Q4	Aqueous	10/19/2021 0947	10/19/2021
003	W-15-2021-Q4	Aqueous	10/19/2021 1054	10/19/2021
004	W-16-2021-Q4	Aqueous	10/19/2021 1218	10/19/2021
005	W-63-2021-Q4	Aqueous	10/19/2021 1323	10/19/2021
006	W-98-2021-Q4	Aqueous	10/19/2021 1451	10/19/2021
007	TB-01-101921	Aqueous	10/19/2021	10/19/2021
008	W-26-2021-Q4	Aqueous	10/19/2021 1153	10/19/2021
009	W-48-2021-Q4	Aqueous	10/19/2021 1335	10/19/2021
010	W-62-2021-Q4	Aqueous	10/19/2021 1024	10/19/2021
011	W-68-2021-Q4	Aqueous	10/19/2021 0913	10/19/2021
012	EB-01-101921	Aqueous	10/19/2021 1053	10/19/2021

(12 samples)

# PACE ANALYTICAL SERVICES, LLC

Detection Summary  
 Westinghouse Electric Company  
 Lot Number: WJ19081  
 Project Name: Westinghouse RI  
 Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-64-2021-Q4	Aqueous	Nitrate - N	353.2	35		mg/L	6
001	W-64-2021-Q4	Aqueous	Tetrachloroethene	8260D	1.1		ug/L	7
002	W-47-2021-Q4	Aqueous	Nitrate - N	353.2	33		mg/L	9
002	W-47-2021-Q4	Aqueous	Tetrachloroethene	8260D	1.3		ug/L	10
003	W-15-2021-Q4	Aqueous	Nitrate - N	353.2	39		mg/L	12
003	W-15-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	1.1		ug/L	13
003	W-15-2021-Q4	Aqueous	Tetrachloroethene	8260D	10		ug/L	13
003	W-15-2021-Q4	Aqueous	Trichloroethene	8260D	1.9		ug/L	14
004	W-16-2021-Q4	Aqueous	Nitrate - N	353.2	2.0		mg/L	15
004	W-16-2021-Q4	Aqueous	Tetrachloroethene	8260D	3.1		ug/L	16
004	W-16-2021-Q4	Aqueous	Trichloroethene	8260D	1.1		ug/L	17
005	W-63-2021-Q4	Aqueous	Nitrate - N	353.2	4.1		mg/L	18
005	W-63-2021-Q4	Aqueous	Tetrachloroethene	8260D	1.8		ug/L	19
005	W-63-2021-Q4	Aqueous	Trichloroethene	8260D	1.4		ug/L	20
006	W-98-2021-Q4	Aqueous	Nitrate - N	353.2	11		mg/L	21
008	W-26-2021-Q4	Aqueous	Nitrate - N	353.2	2.4		mg/L	26
008	W-26-2021-Q4	Aqueous	Naphthalene	8270E	0.33		ug/L	30
009	W-48-2021-Q4	Aqueous	Nitrate - N	353.2	5.5		mg/L	31
009	W-48-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	2.0		ug/L	32
009	W-48-2021-Q4	Aqueous	Trichloroethene	8260D	4.8		ug/L	33
009	W-48-2021-Q4	Aqueous	Tetrachloroethene	8260D	16	H	ug/L	34
009	W-48-2021-Q4	Aqueous	Naphthalene	8270E	1.1		ug/L	37
010	W-62-2021-Q4	Aqueous	Nitrate - N	353.2	4.1		mg/L	38
010	W-62-2021-Q4	Aqueous	Tetrachloroethene	8260D	28		ug/L	39
011	W-68-2021-Q4	Aqueous	Nitrate - N	353.2	2.8		mg/L	41
011	W-68-2021-Q4	Aqueous	Tetrachloroethene	8260D	55		ug/L	42
011	W-68-2021-Q4	Aqueous	Trichloroethene	8260D	1.0		ug/L	43
012	EB-01-101921	Aqueous	Nitrate - N	353.2	0.052	H	mg/L	44
012	EB-01-101921	Aqueous	Bromodichloromethane	8260D	1.3		ug/L	45
012	EB-01-101921	Aqueous	Chloroform	8260D	7.8		ug/L	45

(30 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-001
Description: W-64-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 0854	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	30	10/20/2021 0924	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.60	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-001
Description: W-64-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 0854	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1552	TML		20624

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	1.1		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-001
Description: W-64-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 0854	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1552	TML		20624

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		100	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-002
Description: W-47-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 0947	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	30	10/20/2021 0926	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	33	0.60	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-002
Description: W-47-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 0947	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1615	TML		20624

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	1.3		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-002
Description: W-47-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 0947	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1615	TML		20624

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		104	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		103	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-003
Description: W-15-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1054	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	30	10/20/2021 0927	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	39	0.60	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-003
Description: W-15-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1054	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1639	TML		20624

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	1.1		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	10		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-003
Description: W-15-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1054	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1639	TML		20624

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	1.9		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		99	70-130
Toluene-d8		100	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-004
Description: W-16-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 12:18	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/20/2021 09:29	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	2.0	0.10	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-004
Description: W-16-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1218	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1702	TML		20624

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	3.1		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-004
Description: W-16-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1218	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/29/2021 1702	TML		20624

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	1.1		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		98	70-130
Toluene-d8		102	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-005
Description: W-63-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1323	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/20/2021 0931	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		4.1	0.10	mg/L 1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-005
Description: W-63-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1323	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0147	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	1.8		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-005
Description: W-63-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1323	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0147	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	1.4		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		97	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-006
Description: W-98-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1451	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/20/2021 1039	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	11	0.20	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-006
Description: W-98-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1451	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0212	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-006
Description: W-98-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1451	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0212	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		111	70-130
Toluene-d8		98	70-130

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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-007
Description: TB-01-101921	Matrix: Aqueous
Date Sampled: 10/19/2021	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0033	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-007
Description: TB-01-101921	Matrix: Aqueous
Date Sampled: 10/19/2021	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0033	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		121	70-130
Toluene-d8		98	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-008
Description: W-26-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1153	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/20/2021 0939	AAB		19694

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		2.4	0.10	mg/L 1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-008
Description: W-26-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1153	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0237	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-008
Description: W-26-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1153	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0237	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		101	70-130

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

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# Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-008
Description: W-26-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1153	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270E	1	11/19/2021 1512	JCG	10/25/2021 1400	20010

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		0.16	ug/L	1
Acenaphthylene	208-96-8	8270E	ND		0.16	ug/L	1
Acetophenone	98-86-2	8270E	ND		0.80	ug/L	1
Anthracene	120-12-7	8270E	ND		0.16	ug/L	1
Atrazine	1912-24-9	8270E	ND		0.80	ug/L	1
Benzaldehyde	100-52-7	8270E	ND		4.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270E	ND		0.16	ug/L	1
Benzo(a)pyrene	50-32-8	8270E	ND		0.16	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270E	ND		0.16	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270E	ND		0.16	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		0.16	ug/L	1
1,1'-Biphenyl	92-52-4	8270E	ND		0.80	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		0.80	ug/L	1
Butyl benzyl phthalate	85-68-7	8270E	ND		4.0	ug/L	1
Caprolactam	105-60-2	8270E	ND		4.0	ug/L	1
Carbazole	86-74-8	8270E	ND		0.80	ug/L	1
bis(2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		0.80	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		0.80	ug/L	1
4-Chloroaniline	106-47-8	8270E	ND		0.80	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		0.80	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		0.80	ug/L	1
2-Chloronaphthalene	91-58-7	8270E	ND		0.80	ug/L	1
2-Chlorophenol	95-57-8	8270E	ND		0.80	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		0.80	ug/L	1
Chrysene	218-01-9	8270E	ND		0.16	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		0.16	ug/L	1
Dibenzofuran	132-64-9	8270E	ND		0.80	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		4.0	ug/L	1
2,4-Dichlorophenol	120-83-2	8270E	ND		0.80	ug/L	1
Diethylphthalate	84-66-2	8270E	ND		4.0	ug/L	1
Dimethyl phthalate	131-11-3	8270E	ND		4.0	ug/L	1
2,4-Dimethylphenol	105-67-9	8270E	ND	L	0.80	ug/L	1
Di-n-butyl phthalate	84-74-2	8270E	ND		4.0	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		4.0	ug/L	1
2,4-Dinitrophenol	51-28-5	8270E	ND		4.0	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1.6	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1.6	ug/L	1
Di-n-octylphthalate	117-84-0	8270E	ND		4.0	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		4.0	ug/L	1
Fluoranthene	206-44-0	8270E	ND		0.16	ug/L	1
Fluorene	86-73-7	8270E	ND		0.16	ug/L	1
Hexachlorobenzene	118-74-1	8270E	ND		0.80	ug/L	1
Hexachlorobutadiene	87-68-3	8270E	ND		0.80	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270E	ND		4.0	ug/L	1

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

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# Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-008
Description: W-26-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1153	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270E	1	11/19/2021 1512	JCG	10/25/2021 1400	20010

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270E	ND		0.80	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		0.16	ug/L	1
Isophorone	78-59-1	8270E	ND		0.80	ug/L	1
2-Methylnaphthalene	91-57-6	8270E	ND		0.16	ug/L	1
2-Methylphenol	95-48-7	8270E	ND		0.80	ug/L	1
3+4-Methylphenol	106-44-5	8270E	ND		1.6	ug/L	1
Naphthalene	91-20-3	8270E	0.33		0.16	ug/L	1
2-Nitroaniline	88-74-4	8270E	ND		1.6	ug/L	1
3-Nitroaniline	99-09-2	8270E	ND	L	1.6	ug/L	1
4-Nitroaniline	100-01-6	8270E	ND		1.6	ug/L	1
Nitrobenzene	98-95-3	8270E	ND		0.80	ug/L	1
2-Nitrophenol	88-75-5	8270E	ND		1.6	ug/L	1
4-Nitrophenol	100-02-7	8270E	ND		4.0	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		0.80	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		0.80	ug/L	1
Pentachlorophenol	87-86-5	8270E	ND		4.0	ug/L	1
Phenanthrene	85-01-8	8270E	ND		0.16	ug/L	1
Phenol	108-95-2	8270E	ND		0.80	ug/L	1
Pyrene	129-00-0	8270E	ND		0.16	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		0.80	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		0.80	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		72	37-129
2-Fluorophenol		41	24-127
Nitrobenzene-d5		74	38-127
Phenol-d5		62	28-128
Terphenyl-d14		95	10-148
2,4,6-Tribromophenol		94	35-144

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-009
Description: W-48-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1335	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/20/2021 0949	AAB		19718

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	5.5	0.10	mg/L	1

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 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-009
Description: W-48-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1335	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0302	BBW		20673
3	5030B	8260D	5	11/03/2021 1859	CAW		21141

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	2.0		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	220	E	1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-009
Description: W-48-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1335	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0302	BBW		20673
3	5030B	8260D	5	11/03/2021 1859	CAW		21141

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	4.8		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 3 % Recovery	Acceptance Limits
Bromofluorobenzene		90	70-130	H	98	70-130
1,2-Dichloroethane-d4		125	70-130	H	96	70-130
Toluene-d8		100	70-130	H	99	70-130

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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-009
Description: W-48-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1335	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0302	BBW		20673
3	5030B	8260D	5	11/03/2021 1859	CAW		21141

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND	H	100	ug/L	3
Benzene	71-43-2	8260D	ND	H	5.0	ug/L	3
Bromodichloromethane	75-27-4	8260D	ND	H	5.0	ug/L	3
Bromoform	75-25-2	8260D	ND	H	5.0	ug/L	3
Bromomethane (Methyl bromide)	74-83-9	8260D	ND	H	10	ug/L	3
2-Butanone (MEK)	78-93-3	8260D	ND	H	50	ug/L	3
Carbon disulfide	75-15-0	8260D	ND	H	5.0	ug/L	3
Carbon tetrachloride	56-23-5	8260D	ND	H	5.0	ug/L	3
Chlorobenzene	108-90-7	8260D	ND	H	5.0	ug/L	3
Chloroethane	75-00-3	8260D	ND	H	10	ug/L	3
Chloroform	67-66-3	8260D	ND	H	5.0	ug/L	3
Chloromethane (Methyl chloride)	74-87-3	8260D	ND	H	5.0	ug/L	3
Cyclohexane	110-82-7	8260D	ND	H	5.0	ug/L	3
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND	H	5.0	ug/L	3
Dibromochloromethane	124-48-1	8260D	ND	H	5.0	ug/L	3
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND	H	5.0	ug/L	3
1,2-Dichlorobenzene	95-50-1	8260D	ND	H	5.0	ug/L	3
1,3-Dichlorobenzene	541-73-1	8260D	ND	H	5.0	ug/L	3
1,4-Dichlorobenzene	106-46-7	8260D	ND	H	5.0	ug/L	3
Dichlorodifluoromethane	75-71-8	8260D	ND	H	10	ug/L	3
1,1-Dichloroethane	75-34-3	8260D	ND	H	5.0	ug/L	3
1,2-Dichloroethane	107-06-2	8260D	ND	H	5.0	ug/L	3
1,1-Dichloroethene	75-35-4	8260D	ND	H	5.0	ug/L	3
cis-1,2-Dichloroethene	156-59-2	8260D	ND	H	5.0	ug/L	3
trans-1,2-Dichloroethene	156-60-5	8260D	ND	H	5.0	ug/L	3
1,2-Dichloropropane	78-87-5	8260D	ND	H	5.0	ug/L	3
cis-1,3-Dichloropropene	10061-01-5	8260D	ND	H	5.0	ug/L	3
trans-1,3-Dichloropropene	10061-02-6	8260D	ND	H	5.0	ug/L	3
Ethylbenzene	100-41-4	8260D	ND	H	5.0	ug/L	3
2-Hexanone	591-78-6	8260D	ND	H	50	ug/L	3
Isopropylbenzene	98-82-8	8260D	ND	H	5.0	ug/L	3
Methyl acetate	79-20-9	8260D	ND	H	5.0	ug/L	3
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND	HL	5.0	ug/L	3
4-Methyl-2-pentanone	108-10-1	8260D	ND	H	50	ug/L	3
Methylcyclohexane	108-87-2	8260D	ND	H	25	ug/L	3
Methylene chloride	75-09-2	8260D	ND	H	5.0	ug/L	3
Styrene	100-42-5	8260D	ND	H	5.0	ug/L	3
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND	H	5.0	ug/L	3
Tetrachloroethene	127-18-4	8260D	16	H	5.0	ug/L	3
Toluene	108-88-3	8260D	ND	H	5.0	ug/L	3
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND	H	5.0	ug/L	3
1,2,4-Trichlorobenzene	120-82-1	8260D	ND	H	5.0	ug/L	3
1,1,1-Trichloroethane	71-55-6	8260D	ND	H	5.0	ug/L	3

LOQ = Limit of Quantitation      B = Detected in the method blank      E = Quantitation of compound exceeded the calibration range      Q = Surrogate failure  
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 H = Out of holding time      W = Reported on wet weight basis      S = MS/MSD failure

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-009
Description: W-48-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1335	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0302	BBW		20673
3	5030B	8260D	5	11/03/2021 1859	CAW		21141

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND	H	5.0	ug/L	3
Trichloroethene	79-01-6	8260D	ND	H	5.0	ug/L	3
Trichlorofluoromethane	75-69-4	8260D	ND	H	5.0	ug/L	3
Vinyl chloride	75-01-4	8260D	ND	H	5.0	ug/L	3
Xylenes (total)	1330-20-7	8260D	ND	H	5.0	ug/L	3

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 3 % Recovery	Acceptance Limits
Bromofluorobenzene		90	70-130	H	98	70-130
1,2-Dichloroethane-d4		125	70-130	H	96	70-130
Toluene-d8		100	70-130	H	99	70-130

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

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# Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-009
Description: W-48-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1335	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270E	1	11/19/2021 1538	JCG	10/25/2021 1400	20010

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		0.16	ug/L	1
Acenaphthylene	208-96-8	8270E	ND		0.16	ug/L	1
Acetophenone	98-86-2	8270E	ND		0.80	ug/L	1
Anthracene	120-12-7	8270E	ND		0.16	ug/L	1
Atrazine	1912-24-9	8270E	ND		0.80	ug/L	1
Benzaldehyde	100-52-7	8270E	ND		4.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270E	ND		0.16	ug/L	1
Benzo(a)pyrene	50-32-8	8270E	ND		0.16	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270E	ND		0.16	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270E	ND		0.16	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		0.16	ug/L	1
1,1'-Biphenyl	92-52-4	8270E	ND		0.80	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		0.80	ug/L	1
Butyl benzyl phthalate	85-68-7	8270E	ND		4.0	ug/L	1
Caprolactam	105-60-2	8270E	ND		4.0	ug/L	1
Carbazole	86-74-8	8270E	ND		0.80	ug/L	1
bis(2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		0.80	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		0.80	ug/L	1
4-Chloroaniline	106-47-8	8270E	ND		0.80	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		0.80	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		0.80	ug/L	1
2-Chloronaphthalene	91-58-7	8270E	ND		0.80	ug/L	1
2-Chlorophenol	95-57-8	8270E	ND		0.80	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		0.80	ug/L	1
Chrysene	218-01-9	8270E	ND		0.16	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		0.16	ug/L	1
Dibenzofuran	132-64-9	8270E	ND		0.80	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		4.0	ug/L	1
2,4-Dichlorophenol	120-83-2	8270E	ND		0.80	ug/L	1
Diethylphthalate	84-66-2	8270E	ND		4.0	ug/L	1
Dimethyl phthalate	131-11-3	8270E	ND		4.0	ug/L	1
2,4-Dimethylphenol	105-67-9	8270E	ND	L	0.80	ug/L	1
Di-n-butyl phthalate	84-74-2	8270E	ND		4.0	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		4.0	ug/L	1
2,4-Dinitrophenol	51-28-5	8270E	ND		4.0	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1.6	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1.6	ug/L	1
Di-n-octylphthalate	117-84-0	8270E	ND		4.0	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		4.0	ug/L	1
Fluoranthene	206-44-0	8270E	ND		0.16	ug/L	1
Fluorene	86-73-7	8270E	ND		0.16	ug/L	1
Hexachlorobenzene	118-74-1	8270E	ND		0.80	ug/L	1
Hexachlorobutadiene	87-68-3	8270E	ND		0.80	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270E	ND		4.0	ug/L	1

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

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# Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-009
Description: W-48-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1335	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270E	1	11/19/2021 1538	JCG	10/25/2021 1400	20010

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270E	ND		0.80	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		0.16	ug/L	1
Isophorone	78-59-1	8270E	ND		0.80	ug/L	1
2-Methylnaphthalene	91-57-6	8270E	ND		0.16	ug/L	1
2-Methylphenol	95-48-7	8270E	ND		0.80	ug/L	1
3+4-Methylphenol	106-44-5	8270E	ND		1.6	ug/L	1
Naphthalene	91-20-3	8270E	1.1		0.16	ug/L	1
2-Nitroaniline	88-74-4	8270E	ND		1.6	ug/L	1
3-Nitroaniline	99-09-2	8270E	ND	L	1.6	ug/L	1
4-Nitroaniline	100-01-6	8270E	ND		1.6	ug/L	1
Nitrobenzene	98-95-3	8270E	ND		0.80	ug/L	1
2-Nitrophenol	88-75-5	8270E	ND		1.6	ug/L	1
4-Nitrophenol	100-02-7	8270E	ND		4.0	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		0.80	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		0.80	ug/L	1
Pentachlorophenol	87-86-5	8270E	ND		4.0	ug/L	1
Phenanthrene	85-01-8	8270E	ND		0.16	ug/L	1
Phenol	108-95-2	8270E	ND		0.80	ug/L	1
Pyrene	129-00-0	8270E	ND		0.16	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		0.80	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		0.80	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		72	37-129
2-Fluorophenol		45	24-127
Nitrobenzene-d5		80	38-127
Phenol-d5		59	28-128
Terphenyl-d14		97	10-148
2,4,6-Tribromophenol		92	35-144

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-010
Description: W-62-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1024	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/20/2021 0951	AAB		19718

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	4.1	0.10	mg/L	1

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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-010
Description: W-62-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1024	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0327	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	28		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-010
Description: W-62-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 1024	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0327	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		84	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		94	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-011
Description: W-68-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 0913	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/20/2021 0952	AAB		19718

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	2.8	0.10	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-011
Description: W-68-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 0913	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0352	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	55		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-011
Description: W-68-2021-Q4	Matrix: Aqueous
Date Sampled: 10/19/2021 0913	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0352	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	1.0		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		86	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		97	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-012
Description: EB-01-101921	Matrix: Aqueous
Date Sampled: 10/19/2021 1053	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 353.2	1	10/22/2021 0955	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.052	H	0.020	mg/L 2

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-012
Description: EB-01-101921	Matrix: Aqueous
Date Sampled: 10/19/2021 1053	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0058	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	1.3		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	7.8		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ19081-012
Description: EB-01-101921	Matrix: Aqueous
Date Sampled: 10/19/2021 1053	Project Name: Westinghouse RI
Date Received: 10/19/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0058	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		111	70-130
Toluene-d8		103	70-130

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

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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ19694-001

Matrix: Aqueous

Batch: 19694

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/20/2021 0836

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ19694-002

Matrix: Aqueous

Batch: 19694

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.40		1	99	90-110	10/20/2021 0837

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MB

Sample ID: WQ19718-001

Matrix: Aqueous

Batch: 19718

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/20/2021 0946

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ19718-002

Matrix: Aqueous

Batch: 19718

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.39		1	96	90-110	10/20/2021 0947

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MB

Sample ID: WQ19888-001

Matrix: Aqueous

Batch: 19888

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/22/2021 0905

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ19888-002

Matrix: Aqueous

Batch: 19888

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.40		1	101	90-110	10/22/2021 0907

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20624-001

Matrix: Aqueous

Batch: 20624

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/29/2021 1331
Benzene	ND		1	1.0	ug/L	10/29/2021 1331
Bromodichloromethane	ND		1	1.0	ug/L	10/29/2021 1331
Bromoform	ND		1	1.0	ug/L	10/29/2021 1331
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/29/2021 1331
2-Butanone (MEK)	ND		1	10	ug/L	10/29/2021 1331
Carbon disulfide	ND		1	1.0	ug/L	10/29/2021 1331
Carbon tetrachloride	ND		1	1.0	ug/L	10/29/2021 1331
Chlorobenzene	ND		1	1.0	ug/L	10/29/2021 1331
Chloroethane	ND		1	2.0	ug/L	10/29/2021 1331
Chloroform	ND		1	1.0	ug/L	10/29/2021 1331
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/29/2021 1331
Cyclohexane	ND		1	1.0	ug/L	10/29/2021 1331
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/29/2021 1331
Dibromochloromethane	ND		1	1.0	ug/L	10/29/2021 1331
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/29/2021 1331
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 1331
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 1331
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 1331
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/29/2021 1331
1,1-Dichloroethane	ND		1	1.0	ug/L	10/29/2021 1331
1,2-Dichloroethane	ND		1	1.0	ug/L	10/29/2021 1331
1,1-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 1331
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 1331
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 1331
1,2-Dichloropropane	ND		1	1.0	ug/L	10/29/2021 1331
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/29/2021 1331
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/29/2021 1331
Ethylbenzene	ND		1	1.0	ug/L	10/29/2021 1331
2-Hexanone	ND		1	10	ug/L	10/29/2021 1331
Isopropylbenzene	ND		1	1.0	ug/L	10/29/2021 1331
Methyl acetate	ND		1	1.0	ug/L	10/29/2021 1331
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/29/2021 1331
4-Methyl-2-pentanone	ND		1	10	ug/L	10/29/2021 1331
Methylcyclohexane	ND		1	5.0	ug/L	10/29/2021 1331
Methylene chloride	ND		1	1.0	ug/L	10/29/2021 1331
Styrene	ND		1	1.0	ug/L	10/29/2021 1331
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/29/2021 1331
Tetrachloroethene	ND		1	1.0	ug/L	10/29/2021 1331
Toluene	ND		1	1.0	ug/L	10/29/2021 1331
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/29/2021 1331
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/29/2021 1331
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/29/2021 1331
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/29/2021 1331

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20624-001

Matrix: Aqueous

Batch: 20624

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/29/2021 1331
Trichlorofluoromethane	ND		1	1.0	ug/L	10/29/2021 1331
Vinyl chloride	ND		1	1.0	ug/L	10/29/2021 1331
Xylenes (total)	ND		1	1.0	ug/L	10/29/2021 1331
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		98	70-130			
1,2-Dichloroethane-d4		97	70-130			
Toluene-d8		99	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20624-002

Matrix: Aqueous

Batch: 20624

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	88		1	88	60-140	10/29/2021 1245
Benzene	50	50		1	100	70-130	10/29/2021 1245
Bromodichloromethane	50	51		1	102	70-130	10/29/2021 1245
Bromoform	50	47		1	94	70-130	10/29/2021 1245
Bromomethane (Methyl bromide)	50	54		1	109	70-130	10/29/2021 1245
2-Butanone (MEK)	100	100		1	104	70-130	10/29/2021 1245
Carbon disulfide	50	50		1	99	70-130	10/29/2021 1245
Carbon tetrachloride	50	52		1	104	70-130	10/29/2021 1245
Chlorobenzene	50	50		1	99	70-130	10/29/2021 1245
Chloroethane	50	48		1	96	70-130	10/29/2021 1245
Chloroform	50	49		1	99	70-130	10/29/2021 1245
Chloromethane (Methyl chloride)	50	53		1	107	60-140	10/29/2021 1245
Cyclohexane	50	46		1	91	70-130	10/29/2021 1245
1,2-Dibromo-3-chloropropane (DBCP)	50	55		1	111	70-130	10/29/2021 1245
Dibromochloromethane	50	47		1	94	70-130	10/29/2021 1245
1,2-Dibromoethane (EDB)	50	51		1	102	70-130	10/29/2021 1245
1,2-Dichlorobenzene	50	50		1	101	70-130	10/29/2021 1245
1,3-Dichlorobenzene	50	51		1	101	70-130	10/29/2021 1245
1,4-Dichlorobenzene	50	49		1	99	70-130	10/29/2021 1245
Dichlorodifluoromethane	50	65		1	130	60-140	10/29/2021 1245
1,1-Dichloroethane	50	49		1	97	70-130	10/29/2021 1245
1,2-Dichloroethane	50	49		1	98	70-130	10/29/2021 1245
1,1-Dichloroethene	50	48		1	97	70-130	10/29/2021 1245
cis-1,2-Dichloroethene	50	49		1	98	70-130	10/29/2021 1245
trans-1,2-Dichloroethene	50	49		1	98	70-130	10/29/2021 1245
1,2-Dichloropropane	50	49		1	98	70-130	10/29/2021 1245
cis-1,3-Dichloropropene	50	52		1	104	70-130	10/29/2021 1245
trans-1,3-Dichloropropene	50	54		1	108	70-130	10/29/2021 1245
Ethylbenzene	50	51		1	101	70-130	10/29/2021 1245
2-Hexanone	100	110		1	106	70-130	10/29/2021 1245
Isopropylbenzene	50	52		1	103	70-130	10/29/2021 1245
Methyl acetate	50	46		1	92	70-130	10/29/2021 1245
Methyl tertiary butyl ether (MTBE)	50	46		1	91	70-130	10/29/2021 1245
4-Methyl-2-pentanone	100	100		1	101	70-130	10/29/2021 1245
Methylcyclohexane	50	50		1	100	70-130	10/29/2021 1245
Methylene chloride	50	48		1	97	70-130	10/29/2021 1245
Styrene	50	54		1	107	70-130	10/29/2021 1245
1,1,2,2-Tetrachloroethane	50	52		1	105	70-130	10/29/2021 1245
Tetrachloroethene	50	51		1	102	70-130	10/29/2021 1245
Toluene	50	50		1	101	70-130	10/29/2021 1245
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	49		1	97	70-130	10/29/2021 1245
1,2,4-Trichlorobenzene	50	50		1	101	70-130	10/29/2021 1245
1,1,1-Trichloroethane	50	48		1	97	70-130	10/29/2021 1245
1,1,2-Trichloroethane	50	50		1	100	70-130	10/29/2021 1245

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20624-002

Matrix: Aqueous

Batch: 20624

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	50		1	100	70-130	10/29/2021 1245
Trichlorofluoromethane	50	48		1	96	70-130	10/29/2021 1245
Vinyl chloride	50	57		1	115	70-130	10/29/2021 1245
Xylenes (total)	100	100		1	102	70-130	10/29/2021 1245
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		101			70-130		
1,2-Dichloroethane-d4		96			70-130		
Toluene-d8		99			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20673-001

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/29/2021 2335
Benzene	ND		1	1.0	ug/L	10/29/2021 2335
Bromodichloromethane	ND		1	1.0	ug/L	10/29/2021 2335
Bromoform	ND		1	1.0	ug/L	10/29/2021 2335
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/29/2021 2335
2-Butanone (MEK)	ND		1	10	ug/L	10/29/2021 2335
Carbon disulfide	ND		1	1.0	ug/L	10/29/2021 2335
Carbon tetrachloride	ND		1	1.0	ug/L	10/29/2021 2335
Chlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
Chloroethane	ND		1	2.0	ug/L	10/29/2021 2335
Chloroform	ND		1	1.0	ug/L	10/29/2021 2335
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/29/2021 2335
Cyclohexane	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/29/2021 2335
Dibromochloromethane	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/29/2021 2335
1,1-Dichloroethane	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dichloroethane	ND		1	1.0	ug/L	10/29/2021 2335
1,1-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 2335
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 2335
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dichloropropane	ND		1	1.0	ug/L	10/29/2021 2335
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/29/2021 2335
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/29/2021 2335
Ethylbenzene	ND		1	1.0	ug/L	10/29/2021 2335
2-Hexanone	ND		1	10	ug/L	10/29/2021 2335
Isopropylbenzene	ND		1	1.0	ug/L	10/29/2021 2335
Methyl acetate	ND		1	1.0	ug/L	10/29/2021 2335
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/29/2021 2335
4-Methyl-2-pentanone	ND		1	10	ug/L	10/29/2021 2335
Methylcyclohexane	ND		1	5.0	ug/L	10/29/2021 2335
Methylene chloride	ND		1	1.0	ug/L	10/29/2021 2335
Styrene	ND		1	1.0	ug/L	10/29/2021 2335
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/29/2021 2335
Tetrachloroethene	ND		1	1.0	ug/L	10/29/2021 2335
Toluene	ND		1	1.0	ug/L	10/29/2021 2335
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/29/2021 2335
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/29/2021 2335
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/29/2021 2335

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20673-001

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/29/2021 2335
Trichlorofluoromethane	ND		1	1.0	ug/L	10/29/2021 2335
Vinyl chloride	ND		1	1.0	ug/L	10/29/2021 2335
Xylenes (total)	ND		1	1.0	ug/L	10/29/2021 2335
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		95	70-130			
1,2-Dichloroethane-d4		113	70-130			
Toluene-d8		99	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20673-002

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	110		1	105	60-140	10/29/2021 2214
Benzene	50	49		1	99	70-130	10/29/2021 2214
Bromodichloromethane	50	47		1	95	70-130	10/29/2021 2214
Bromoform	50	53		1	106	70-130	10/29/2021 2214
Bromomethane (Methyl bromide)	50	49		1	98	70-130	10/29/2021 2214
2-Butanone (MEK)	100	110		1	111	70-130	10/29/2021 2214
Carbon disulfide	50	49		1	98	70-130	10/29/2021 2214
Carbon tetrachloride	50	47		1	94	70-130	10/29/2021 2214
Chlorobenzene	50	49		1	99	70-130	10/29/2021 2214
Chloroethane	50	48		1	96	70-130	10/29/2021 2214
Chloroform	50	46		1	92	70-130	10/29/2021 2214
Chloromethane (Methyl chloride)	50	56		1	111	60-140	10/29/2021 2214
Cyclohexane	50	47		1	93	70-130	10/29/2021 2214
1,2-Dibromo-3-chloropropane (DBCP)	50	46		1	92	70-130	10/29/2021 2214
Dibromochloromethane	50	51		1	103	70-130	10/29/2021 2214
1,2-Dibromoethane (EDB)	50	50		1	100	70-130	10/29/2021 2214
1,2-Dichlorobenzene	50	50		1	99	70-130	10/29/2021 2214
1,3-Dichlorobenzene	50	49		1	98	70-130	10/29/2021 2214
1,4-Dichlorobenzene	50	47		1	93	70-130	10/29/2021 2214
Dichlorodifluoromethane	50	58		1	117	60-140	10/29/2021 2214
1,1-Dichloroethane	50	47		1	95	70-130	10/29/2021 2214
1,2-Dichloroethane	50	48		1	95	70-130	10/29/2021 2214
1,1-Dichloroethene	50	49		1	98	70-130	10/29/2021 2214
cis-1,2-Dichloroethene	50	48		1	96	70-130	10/29/2021 2214
trans-1,2-Dichloroethene	50	48		1	96	70-130	10/29/2021 2214
1,2-Dichloropropane	50	48		1	97	70-130	10/29/2021 2214
cis-1,3-Dichloropropene	50	53		1	107	70-130	10/29/2021 2214
trans-1,3-Dichloropropene	50	52		1	104	70-130	10/29/2021 2214
Ethylbenzene	50	54		1	108	70-130	10/29/2021 2214
2-Hexanone	100	100		1	102	70-130	10/29/2021 2214
Isopropylbenzene	50	53		1	107	70-130	10/29/2021 2214
Methyl acetate	50	45		1	90	70-130	10/29/2021 2214
Methyl tertiary butyl ether (MTBE)	50	50		1	101	70-130	10/29/2021 2214
4-Methyl-2-pentanone	100	100		1	100	70-130	10/29/2021 2214
Methylcyclohexane	50	52		1	103	70-130	10/29/2021 2214
Methylene chloride	50	46		1	91	70-130	10/29/2021 2214
Styrene	50	53		1	105	70-130	10/29/2021 2214
1,1,2,2-Tetrachloroethane	50	50		1	100	70-130	10/29/2021 2214
Tetrachloroethene	50	50		1	100	70-130	10/29/2021 2214
Toluene	50	52		1	105	70-130	10/29/2021 2214
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	48		1	96	70-130	10/29/2021 2214
1,2,4-Trichlorobenzene	50	48		1	97	70-130	10/29/2021 2214
1,1,1-Trichloroethane	50	47		1	94	70-130	10/29/2021 2214
1,1,2-Trichloroethane	50	50		1	101	70-130	10/29/2021 2214

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20673-002

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	49		1	98	70-130	10/29/2021 2214
Trichlorofluoromethane	50	52		1	105	70-130	10/29/2021 2214
Vinyl chloride	50	54		1	107	70-130	10/29/2021 2214
Xylenes (total)	100	110		1	106	70-130	10/29/2021 2214
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		105			70-130		
1,2-Dichloroethane-d4		94			70-130		
Toluene-d8		100			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ21141-001

Matrix: Aqueous

Batch: 21141

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	11/03/2021 1124
Benzene	ND		1	1.0	ug/L	11/03/2021 1124
Bromodichloromethane	ND		1	1.0	ug/L	11/03/2021 1124
Bromoform	ND		1	1.0	ug/L	11/03/2021 1124
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	11/03/2021 1124
2-Butanone (MEK)	ND		1	10	ug/L	11/03/2021 1124
Carbon disulfide	ND		1	1.0	ug/L	11/03/2021 1124
Carbon tetrachloride	ND		1	1.0	ug/L	11/03/2021 1124
Chlorobenzene	ND		1	1.0	ug/L	11/03/2021 1124
Chloroethane	ND		1	2.0	ug/L	11/03/2021 1124
Chloroform	ND		1	1.0	ug/L	11/03/2021 1124
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	11/03/2021 1124
Cyclohexane	ND		1	1.0	ug/L	11/03/2021 1124
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	11/03/2021 1124
Dibromochloromethane	ND		1	1.0	ug/L	11/03/2021 1124
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	11/03/2021 1124
1,2-Dichlorobenzene	ND		1	1.0	ug/L	11/03/2021 1124
1,3-Dichlorobenzene	ND		1	1.0	ug/L	11/03/2021 1124
1,4-Dichlorobenzene	ND		1	1.0	ug/L	11/03/2021 1124
Dichlorodifluoromethane	ND		1	2.0	ug/L	11/03/2021 1124
1,1-Dichloroethane	ND		1	1.0	ug/L	11/03/2021 1124
1,2-Dichloroethane	ND		1	1.0	ug/L	11/03/2021 1124
1,1-Dichloroethene	ND		1	1.0	ug/L	11/03/2021 1124
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	11/03/2021 1124
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	11/03/2021 1124
1,2-Dichloropropane	ND		1	1.0	ug/L	11/03/2021 1124
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	11/03/2021 1124
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	11/03/2021 1124
Ethylbenzene	ND		1	1.0	ug/L	11/03/2021 1124
2-Hexanone	ND		1	10	ug/L	11/03/2021 1124
Isopropylbenzene	ND		1	1.0	ug/L	11/03/2021 1124
Methyl acetate	ND		1	1.0	ug/L	11/03/2021 1124
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	11/03/2021 1124
4-Methyl-2-pentanone	ND		1	10	ug/L	11/03/2021 1124
Methylcyclohexane	ND		1	5.0	ug/L	11/03/2021 1124
Methylene chloride	ND		1	1.0	ug/L	11/03/2021 1124
Styrene	ND		1	1.0	ug/L	11/03/2021 1124
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	11/03/2021 1124
Tetrachloroethene	ND		1	1.0	ug/L	11/03/2021 1124
Toluene	ND		1	1.0	ug/L	11/03/2021 1124
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	11/03/2021 1124
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	11/03/2021 1124
1,1,1-Trichloroethane	ND		1	1.0	ug/L	11/03/2021 1124
1,1,2-Trichloroethane	ND		1	1.0	ug/L	11/03/2021 1124

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ21141-001

Matrix: Aqueous

Batch: 21141

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	11/03/2021 1124
Trichlorofluoromethane	ND		1	1.0	ug/L	11/03/2021 1124
Vinyl chloride	ND		1	1.0	ug/L	11/03/2021 1124
Xylenes (total)	ND		1	1.0	ug/L	11/03/2021 1124
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		99	70-130			
1,2-Dichloroethane-d4		98	70-130			
Toluene-d8		96	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ21141-002

Matrix: Aqueous

Batch: 21141

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	92		1	92	60-140	11/03/2021 1020
Benzene	50	48		1	97	70-130	11/03/2021 1020
Bromodichloromethane	50	50		1	100	70-130	11/03/2021 1020
Bromoform	50	45		1	89	70-130	11/03/2021 1020
Bromomethane (Methyl bromide)	50	53		1	106	70-130	11/03/2021 1020
2-Butanone (MEK)	100	100		1	105	70-130	11/03/2021 1020
Carbon disulfide	50	44		1	88	70-130	11/03/2021 1020
Carbon tetrachloride	50	46		1	93	70-130	11/03/2021 1020
Chlorobenzene	50	47		1	95	70-130	11/03/2021 1020
Chloroethane	50	50		1	100	70-130	11/03/2021 1020
Chloroform	50	49		1	97	70-130	11/03/2021 1020
Chloromethane (Methyl chloride)	50	45		1	90	60-140	11/03/2021 1020
Cyclohexane	50	36		1	72	70-130	11/03/2021 1020
1,2-Dibromo-3-chloropropane (DBCP)	50	50		1	100	70-130	11/03/2021 1020
Dibromochloromethane	50	45		1	90	70-130	11/03/2021 1020
1,2-Dibromoethane (EDB)	50	49		1	98	70-130	11/03/2021 1020
1,2-Dichlorobenzene	50	47		1	94	70-130	11/03/2021 1020
1,3-Dichlorobenzene	50	47		1	94	70-130	11/03/2021 1020
1,4-Dichlorobenzene	50	46		1	91	70-130	11/03/2021 1020
Dichlorodifluoromethane	50	50		1	100	60-140	11/03/2021 1020
1,1-Dichloroethane	50	47		1	95	70-130	11/03/2021 1020
1,2-Dichloroethane	50	48		1	96	70-130	11/03/2021 1020
1,1-Dichloroethene	50	44		1	87	70-130	11/03/2021 1020
cis-1,2-Dichloroethene	50	49		1	98	70-130	11/03/2021 1020
trans-1,2-Dichloroethene	50	48		1	95	70-130	11/03/2021 1020
1,2-Dichloropropane	50	48		1	96	70-130	11/03/2021 1020
cis-1,3-Dichloropropene	50	51		1	102	70-130	11/03/2021 1020
trans-1,3-Dichloropropene	50	51		1	101	70-130	11/03/2021 1020
Ethylbenzene	50	48		1	95	70-130	11/03/2021 1020
2-Hexanone	100	98		1	98	70-130	11/03/2021 1020
Isopropylbenzene	50	49		1	98	70-130	11/03/2021 1020
Methyl acetate	50	46		1	91	70-130	11/03/2021 1020
Methyl tertiary butyl ether (MTBE)	50	30	N	1	60	70-130	11/03/2021 1020
4-Methyl-2-pentanone	100	97		1	97	70-130	11/03/2021 1020
Methylcyclohexane	50	40		1	80	70-130	11/03/2021 1020
Methylene chloride	50	47		1	93	70-130	11/03/2021 1020
Styrene	50	52		1	103	70-130	11/03/2021 1020
1,1,2,2-Tetrachloroethane	50	48		1	95	70-130	11/03/2021 1020
Tetrachloroethene	50	47		1	95	70-130	11/03/2021 1020
Toluene	50	48		1	95	70-130	11/03/2021 1020
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	39		1	79	70-130	11/03/2021 1020
1,2,4-Trichlorobenzene	50	48		1	95	70-130	11/03/2021 1020
1,1,1-Trichloroethane	50	44		1	88	70-130	11/03/2021 1020
1,1,2-Trichloroethane	50	47		1	95	70-130	11/03/2021 1020

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ21141-002

Matrix: Aqueous

Batch: 21141

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	48		1	97	70-130	11/03/2021 1020
Trichlorofluoromethane	50	41		1	83	70-130	11/03/2021 1020
Vinyl chloride	50	52		1	104	70-130	11/03/2021 1020
Xylenes (total)	100	97		1	97	70-130	11/03/2021 1020
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		95			70-130		
1,2-Dichloroethane-d4		93			70-130		
Toluene-d8		93			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

## Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ20010-001

Matrix: Aqueous

Batch: 20010

Prep Method: 3520C

Analytical Method: 8270E

Prep Date: 10/25/2021 1400

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acenaphthene	ND		1	0.16	ug/L	11/19/2021 1422
Acenaphthylene	ND		1	0.16	ug/L	11/19/2021 1422
Acetophenone	ND		1	0.80	ug/L	11/19/2021 1422
Anthracene	ND		1	0.16	ug/L	11/19/2021 1422
Atrazine	ND		1	0.80	ug/L	11/19/2021 1422
Benzaldehyde	ND		1	4.0	ug/L	11/19/2021 1422
Benzo(a)anthracene	ND		1	0.16	ug/L	11/19/2021 1422
Benzo(a)pyrene	ND		1	0.16	ug/L	11/19/2021 1422
Benzo(b)fluoranthene	ND		1	0.16	ug/L	11/19/2021 1422
Benzo(g,h,i)perylene	ND		1	0.16	ug/L	11/19/2021 1422
Benzo(k)fluoranthene	ND		1	0.16	ug/L	11/19/2021 1422
1,1'-Biphenyl	ND		1	0.80	ug/L	11/19/2021 1422
4-Bromophenyl phenyl ether	ND		1	0.80	ug/L	11/19/2021 1422
Butyl benzyl phthalate	ND		1	4.0	ug/L	11/19/2021 1422
Caprolactam	ND		1	4.0	ug/L	11/19/2021 1422
Carbazole	ND		1	0.80	ug/L	11/19/2021 1422
bis (2-Chloro-1-methylethyl) ether	ND		1	0.80	ug/L	11/19/2021 1422
4-Chloro-3-methyl phenol	ND		1	0.80	ug/L	11/19/2021 1422
4-Chloroaniline	ND		1	0.80	ug/L	11/19/2021 1422
bis(2-Chloroethoxy)methane	ND		1	0.80	ug/L	11/19/2021 1422
bis(2-Chloroethyl)ether	ND		1	0.80	ug/L	11/19/2021 1422
2-Chloronaphthalene	ND		1	0.80	ug/L	11/19/2021 1422
2-Chlorophenol	ND		1	0.80	ug/L	11/19/2021 1422
4-Chlorophenyl phenyl ether	ND		1	0.80	ug/L	11/19/2021 1422
Chrysene	ND		1	0.16	ug/L	11/19/2021 1422
Dibenzo(a,h)anthracene	ND		1	0.16	ug/L	11/19/2021 1422
Dibenzofuran	ND		1	0.80	ug/L	11/19/2021 1422
3,3'-Dichlorobenzidine	ND		1	4.0	ug/L	11/19/2021 1422
2,4-Dichlorophenol	ND		1	0.80	ug/L	11/19/2021 1422
Diethylphthalate	ND		1	4.0	ug/L	11/19/2021 1422
Dimethyl phthalate	ND		1	4.0	ug/L	11/19/2021 1422
2,4-Dimethylphenol	ND		1	0.80	ug/L	11/19/2021 1422
Di-n-butyl phthalate	ND		1	4.0	ug/L	11/19/2021 1422
4,6-Dinitro-2-methylphenol	ND		1	4.0	ug/L	11/19/2021 1422
2,4-Dinitrophenol	ND		1	4.0	ug/L	11/19/2021 1422
2,4-Dinitrotoluene	ND		1	1.6	ug/L	11/19/2021 1422
2,6-Dinitrotoluene	ND		1	1.6	ug/L	11/19/2021 1422
Di-n-octylphthalate	ND		1	4.0	ug/L	11/19/2021 1422
bis(2-Ethylhexyl)phthalate	ND		1	4.0	ug/L	11/19/2021 1422
Fluoranthene	ND		1	0.16	ug/L	11/19/2021 1422
Fluorene	ND		1	0.16	ug/L	11/19/2021 1422
Hexachlorobenzene	ND		1	0.80	ug/L	11/19/2021 1422
Hexachlorobutadiene	ND		1	0.80	ug/L	11/19/2021 1422
Hexachlorocyclopentadiene	ND		1	4.0	ug/L	11/19/2021 1422

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ20010-001

Matrix: Aqueous

Batch: 20010

Prep Method: 3520C

Analytical Method: 8270E

Prep Date: 10/25/2021 1400

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Hexachloroethane	ND		1	0.80	ug/L	11/19/2021 1422
Indeno(1,2,3-c,d)pyrene	ND		1	0.16	ug/L	11/19/2021 1422
Isophorone	ND		1	0.80	ug/L	11/19/2021 1422
2-Methylnaphthalene	ND		1	0.16	ug/L	11/19/2021 1422
2-Methylphenol	ND		1	0.80	ug/L	11/19/2021 1422
3+4-Methylphenol	ND		1	1.6	ug/L	11/19/2021 1422
Naphthalene	ND		1	0.16	ug/L	11/19/2021 1422
2-Nitroaniline	ND		1	1.6	ug/L	11/19/2021 1422
3-Nitroaniline	ND		1	1.6	ug/L	11/19/2021 1422
4-Nitroaniline	ND		1	1.6	ug/L	11/19/2021 1422
Nitrobenzene	ND		1	0.80	ug/L	11/19/2021 1422
2-Nitrophenol	ND		1	1.6	ug/L	11/19/2021 1422
4-Nitrophenol	ND		1	4.0	ug/L	11/19/2021 1422
N-Nitrosodi-n-propylamine	ND		1	0.80	ug/L	11/19/2021 1422
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	0.80	ug/L	11/19/2021 1422
Pentachlorophenol	ND		1	4.0	ug/L	11/19/2021 1422
Phenanthrene	ND		1	0.16	ug/L	11/19/2021 1422
Phenol	ND		1	0.80	ug/L	11/19/2021 1422
Pyrene	ND		1	0.16	ug/L	11/19/2021 1422
2,4,5-Trichlorophenol	ND		1	0.80	ug/L	11/19/2021 1422
2,4,6-Trichlorophenol	ND		1	0.80	ug/L	11/19/2021 1422

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		77	37-129
2-Fluorophenol		45	24-127
Nitrobenzene-d5		78	38-127
Phenol-d5		66	28-128
Terphenyl-d14		99	10-148
2,4,6-Tribromophenol		92	35-144

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20010-002

Matrix: Aqueous

Batch: 20010

Prep Method: 3520C

Analytical Method: 8270E

Prep Date: 10/25/2021 1400

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acenaphthene	8.0	6.4		1	80	30-122	11/19/2021 1447
Acenaphthylene	8.0	6.4		1	80	30-130	11/19/2021 1447
Acetophenone	8.0	6.4		1	80	52-125	11/19/2021 1447
Anthracene	8.0	6.6		1	83	30-123	11/19/2021 1447
Atrazine	8.0	5.5		1	68	25-121	11/19/2021 1447
Benzaldehyde	8.0	1.7		1	21	20-115	11/19/2021 1447
Benzo(a)anthracene	8.0	6.5		1	81	40-125	11/19/2021 1447
Benzo(a)pyrene	8.0	6.4		1	80	40-128	11/19/2021 1447
Benzo(b)fluoranthene	8.0	6.3		1	79	30-130	11/19/2021 1447
Benzo(g,h,i)perylene	8.0	7.1		1	89	30-130	11/19/2021 1447
Benzo(k)fluoranthene	8.0	6.4		1	80	30-130	11/19/2021 1447
1,1'-Biphenyl	8.0	5.9		1	73	42-120	11/19/2021 1447
4-Bromophenyl phenyl ether	8.0	6.0		1	75	30-124	11/19/2021 1447
Butyl benzyl phthalate	8.0	7.4		1	92	54-135	11/19/2021 1447
Caprolactam	8.0	7.9		1	99	44-152	11/19/2021 1447
Carbazole	8.0	5.9		1	74	45-101	11/19/2021 1447
bis (2-Chloro-1-methylethyl) ether	8.0	5.0		1	62	42-124	11/19/2021 1447
4-Chloro-3-methyl phenol	8.0	6.8		1	85	30-123	11/19/2021 1447
4-Chloroaniline	8.0	4.4		1	56	12-157	11/19/2021 1447
bis(2-Chloroethoxy)methane	8.0	6.3		1	79	44-127	11/19/2021 1447
bis(2-Chloroethyl)ether	8.0	5.9		1	74	46-120	11/19/2021 1447
2-Chloronaphthalene	8.0	5.6		1	70	46-100	11/19/2021 1447
2-Chlorophenol	8.0	5.7		1	71	50-117	11/19/2021 1447
4-Chlorophenyl phenyl ether	8.0	5.9		1	74	30-121	11/19/2021 1447
Chrysene	8.0	6.8		1	85	30-130	11/19/2021 1447
Dibenzo(a,h)anthracene	8.0	6.2		1	77	30-130	11/19/2021 1447
Dibenzofuran	8.0	5.9		1	74	30-118	11/19/2021 1447
3,3'-Dichlorobenzidine	8.0	3.9		1	49	10-126	11/19/2021 1447
2,4-Dichlorophenol	8.0	5.8		1	72	30-121	11/19/2021 1447
Diethylphthalate	8.0	6.5		1	82	40-125	11/19/2021 1447
Dimethyl phthalate	8.0	6.3		1	79	40-127	11/19/2021 1447
2,4-Dimethylphenol	8.0	10	N	1	129	20-125	11/19/2021 1447
Di-n-butyl phthalate	8.0	6.9		1	87	40-127	11/19/2021 1447
4,6-Dinitro-2-methylphenol	8.0	7.3		1	92	56-128	11/19/2021 1447
2,4-Dinitrophenol	16	11		1	70	11-126	11/19/2021 1447
2,4-Dinitrotoluene	8.0	6.8		1	85	59-127	11/19/2021 1447
2,6-Dinitrotoluene	8.0	6.4		1	79	59-126	11/19/2021 1447
Di-n-octylphthalate	8.0	5.9		1	74	50-136	11/19/2021 1447
bis(2-Ethylhexyl)phthalate	8.0	7.2		1	89	56-128	11/19/2021 1447
Fluoranthene	8.0	6.5		1	81	40-128	11/19/2021 1447
Fluorene	8.0	6.1		1	76	30-124	11/19/2021 1447
Hexachlorobenzene	8.0	6.3		1	78	30-125	11/19/2021 1447
Hexachlorobutadiene	8.0	4.7		1	59	24-110	11/19/2021 1447
Hexachlorocyclopentadiene	40	29		1	73	16-96	11/19/2021 1447

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20010-002

Matrix: Aqueous

Batch: 20010

Prep Method: 3520C

Analytical Method: 8270E

Prep Date: 10/25/2021 1400

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Hexachloroethane	8.0	5.2		1	65	31-110	11/19/2021 1447
Indeno(1,2,3-c,d)pyrene	8.0	6.8		1	85	30-130	11/19/2021 1447
Isophorone	8.0	6.3		1	79	57-123	11/19/2021 1447
2-Methylnaphthalene	8.0	6.1		1	76	40-132	11/19/2021 1447
2-Methylphenol	8.0	7.6		1	95	56-119	11/19/2021 1447
3+4-Methylphenol	8.0	6.3		1	79	53-119	11/19/2021 1447
Naphthalene	8.0	5.8		1	73	30-130	11/19/2021 1447
2-Nitroaniline	8.0	5.9		1	74	60-124	11/19/2021 1447
3-Nitroaniline	8.0	3.1	N	1	39	43-123	11/19/2021 1447
4-Nitroaniline	8.0	5.1		1	64	30-135	11/19/2021 1447
Nitrobenzene	8.0	6.5		1	81	51-122	11/19/2021 1447
2-Nitrophenol	8.0	6.3		1	78	51-118	11/19/2021 1447
4-Nitrophenol	16	13		1	82	53-130	11/19/2021 1447
N-Nitrosodi-n-propylamine	8.0	6.8		1	85	54-127	11/19/2021 1447
N-Nitrosodiphenylamine (Diphenylamine)	8.0	6.8		1	85	30-123	11/19/2021 1447
Pentachlorophenol	16	11		1	71	42-131	11/19/2021 1447
Phenanthrene	8.0	6.2		1	77	40-123	11/19/2021 1447
Phenol	8.0	6.0		1	75	49-117	11/19/2021 1447
Pyrene	8.0	6.5		1	81	40-126	11/19/2021 1447
2,4,5-Trichlorophenol	8.0	6.3		1	79	30-123	11/19/2021 1447
2,4,6-Trichlorophenol	8.0	5.7		1	72	30-125	11/19/2021 1447

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		78	37-129
2-Fluorophenol		71	24-127
Nitrobenzene-d5		90	38-127
Phenol-d5		80	28-128
Terphenyl-d14		90	10-148
2,4,6-Tribromophenol		90	35-144

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents



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

**Number 126229**

<b>Client</b> WestingHouse Address 5801 Bluff Rd City Hopkins State SC Zip Code 29061		<b>Report to Contact</b> DIANA JOYNER Sampler's Signature X <i>[Signature]</i> Printed Name Diana Joyner		Telephone No. / E-mail 803-647-1904 joynerdp@westinghouse.com Analyte (Attach list if more analytes are needed)		Quote No. WJ19081 Page 1 of 2	
<b>Project Name</b> Q4 2021 Sampling		<b>Printed Name</b> RANBY CREEK		Matrix WJ19081		No of Containers by Representative Type WJ19081	
<b>Project No.</b> W-64-2021-Q4		<b>PC. No.</b> 10-19-21		Collection Time (Military) 0854		Matrix WJ19081	
<b>Sample ID / Description</b> W-47-2021-Q4		Collection Date 10-15-2021		Collection Time (Military) 0947		Matrix WJ19081	
W-15-2021-Q4		10-16-2021		1054		WJ19081	
W-16-2021-Q4		10-16-2021		1218		WJ19081	
W-63-2021-Q4		10-16-2021		1323		WJ19081	
W-98-2021-Q4		10-16-2021		1451		WJ19081	
TB-01-101921		10-19-21		0854		WJ19081	

<b>Turn Around Time Required (After lab approval required for expedited INT.)</b> Rush (Specify) <input checked="" type="checkbox"/> Standard <input type="checkbox"/>		<b>Sample Disposal</b> Return to Client <input checked="" type="checkbox"/> Dispose by Lab <input type="checkbox"/>		<b>Possible Hazard Identification</b> Non-Hazard <input checked="" type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown <input type="checkbox"/>	
1. Requisitioned by <i>[Signature]</i>		1. Received by <i>[Signature]</i>		Date 10-19-21 Time 1610	
2. Requisitioned by		2. Received by		Date Time	
3. Requisitioned by		3. Received by		Date Time	
4. Requisitioned by		4. Laboratory received by <i>[Signature]</i>		Date 10-19-21 Time 1610	

Note: All samples are retained for four weeks from receipt unless other arrangements are made.		Temp Blank <i>[Signature]</i>	
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Ice Pack <input type="checkbox"/>		Ramp Temp 34 °C	

DISTRIBUTION: WJ19081 & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy  
 Document Number: MFR0392-01



# PACE ANALYTICAL SERVICES, LLC



**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: KSC / 10/19/2021 Lot #: WJ19081

Means of receipt: <input checked="" type="checkbox"/> Pace <input type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>NA</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>NA</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: <u>NA</u> 3.4 / 3.4 °C <u>NA</u> / <u>NA</u> °C <u>NA</u> / <u>NA</u> °C <u>NA</u> / <u>NA</u> °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: <u>6</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # <u>43507</u>
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) <u>NA</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>NA</u> mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # <u>NA</u>	
Time of preservation <u>NA</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) <u>NA</u> were received with bubbles >6 mm in diameter.	
Sample(s) <u>NA</u> were received with TRC > 0.5 mg/L (if #19 is <b>no</b> ) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: <u>NA</u>	
SR barcode labels applied by: <u>KDRW</u> Date: <u>10/19/2021</u>	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Q4 2021 Sampling

Lot Number: **WJ20072**

Date Completed: 10/31/2021

11/01/2021 10:56 AM

Approved and released by:  
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: WJ20072

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ20072  
Project Name: Q4 2021 Sampling  
Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-42-2021-Q4	Aqueous	10/20/2021 0917	10/20/2021
002	W-49-2021-Q4	Aqueous	10/20/2021 1018	10/20/2021
003	W-90-2021-Q4	Aqueous	10/20/2021 1127	10/20/2021
004	W-91-2021-Q4	Aqueous	10/20/2021 1220	10/20/2021
005	W-19B-2021-Q4	Aqueous	10/20/2021 1353	10/20/2021
006	TB-01-102021	Aqueous	10/20/2021	10/20/2021

(6 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ20072  
Project Name: Q4 2021 Sampling  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-42-2021-Q4	Aqueous	Nitrate - N	353.2	1.6		mg/L	5
003	W-90-2021-Q4	Aqueous	Nitrate - N	353.2	2.8		mg/L	11
004	W-91-2021-Q4	Aqueous	Nitrate - N	353.2	1.2		mg/L	14
005	W-19B-2021-Q4	Aqueous	Nitrate - N	353.2	3.7		mg/L	17
005	W-19B-2021-Q4	Aqueous	Tetrachloroethene	8260D	89		ug/L	18
005	W-19B-2021-Q4	Aqueous	Trichloroethene	8260D	1.6		ug/L	19

(6 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-001
Description: W-42-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 0917	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/22/2021 0909	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	1.6	0.040	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-001
Description: W-42-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 0917	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0416	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-001
Description: W-42-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 0917	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0416	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		91	70-130
1,2-Dichloroethane-d4		128	70-130
Toluene-d8		101	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-002
Description: W-49-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 1018	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/22/2021 0910	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-002
Description: W-49-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 1018	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0441	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-002
Description: W-49-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 1018	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0441	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		111	70-130
Toluene-d8		97	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-003
Description: W-90-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 1127	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/22/2021 0912	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	2.8	0.040	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-003
Description: W-90-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 1127	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0506	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-003
Description: W-90-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 1127	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0506	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		92	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		101	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-004
Description: W-91-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 1220	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/22/2021 0914	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	1.2	0.040	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-004
Description: W-91-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 1220	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0531	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-004
Description: W-91-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 1220	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0531	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		88	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		101	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-005
Description: W-19B-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 1353	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/22/2021 0915	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.10	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-005
Description: W-19B-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 1353	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0556	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	89		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-005
Description: W-19B-2021-Q4	Matrix: Aqueous
Date Sampled: 10/20/2021 1353	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0556	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	1.6		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		88	70-130
1,2-Dichloroethane-d4		123	70-130
Toluene-d8		98	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-006
Description: TB-01-102021	Matrix: Aqueous
Date Sampled: 10/20/2021	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0122	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ20072-006
Description: TB-01-102021	Matrix: Aqueous
Date Sampled: 10/20/2021	Project Name: Q4 2021 Sampling
Date Received: 10/20/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0122	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		78	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		96	70-130

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

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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ19888-001

Matrix: Aqueous

Batch: 19888

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/22/2021 0905

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ19888-002

Matrix: Aqueous

Batch: 19888

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.40		1	101	90-110	10/22/2021 0907

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20673-001

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/29/2021 2335
Benzene	ND		1	1.0	ug/L	10/29/2021 2335
Bromodichloromethane	ND		1	1.0	ug/L	10/29/2021 2335
Bromoform	ND		1	1.0	ug/L	10/29/2021 2335
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/29/2021 2335
2-Butanone (MEK)	ND		1	10	ug/L	10/29/2021 2335
Carbon disulfide	ND		1	1.0	ug/L	10/29/2021 2335
Carbon tetrachloride	ND		1	1.0	ug/L	10/29/2021 2335
Chlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
Chloroethane	ND		1	2.0	ug/L	10/29/2021 2335
Chloroform	ND		1	1.0	ug/L	10/29/2021 2335
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/29/2021 2335
Cyclohexane	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/29/2021 2335
Dibromochloromethane	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/29/2021 2335
1,1-Dichloroethane	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dichloroethane	ND		1	1.0	ug/L	10/29/2021 2335
1,1-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 2335
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 2335
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dichloropropane	ND		1	1.0	ug/L	10/29/2021 2335
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/29/2021 2335
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/29/2021 2335
Ethylbenzene	ND		1	1.0	ug/L	10/29/2021 2335
2-Hexanone	ND		1	10	ug/L	10/29/2021 2335
Isopropylbenzene	ND		1	1.0	ug/L	10/29/2021 2335
Methyl acetate	ND		1	1.0	ug/L	10/29/2021 2335
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/29/2021 2335
4-Methyl-2-pentanone	ND		1	10	ug/L	10/29/2021 2335
Methylcyclohexane	ND		1	5.0	ug/L	10/29/2021 2335
Methylene chloride	ND		1	1.0	ug/L	10/29/2021 2335
Styrene	ND		1	1.0	ug/L	10/29/2021 2335
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/29/2021 2335
Tetrachloroethene	ND		1	1.0	ug/L	10/29/2021 2335
Toluene	ND		1	1.0	ug/L	10/29/2021 2335
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/29/2021 2335
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/29/2021 2335
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/29/2021 2335

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20673-001

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/29/2021 2335
Trichlorofluoromethane	ND		1	1.0	ug/L	10/29/2021 2335
Vinyl chloride	ND		1	1.0	ug/L	10/29/2021 2335
Xylenes (total)	ND		1	1.0	ug/L	10/29/2021 2335
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		95	70-130			
1,2-Dichloroethane-d4		113	70-130			
Toluene-d8		99	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20673-002

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	110		1	105	60-140	10/29/2021 2214
Benzene	50	49		1	99	70-130	10/29/2021 2214
Bromodichloromethane	50	47		1	95	70-130	10/29/2021 2214
Bromoform	50	53		1	106	70-130	10/29/2021 2214
Bromomethane (Methyl bromide)	50	49		1	98	70-130	10/29/2021 2214
2-Butanone (MEK)	100	110		1	111	70-130	10/29/2021 2214
Carbon disulfide	50	49		1	98	70-130	10/29/2021 2214
Carbon tetrachloride	50	47		1	94	70-130	10/29/2021 2214
Chlorobenzene	50	49		1	99	70-130	10/29/2021 2214
Chloroethane	50	48		1	96	70-130	10/29/2021 2214
Chloroform	50	46		1	92	70-130	10/29/2021 2214
Chloromethane (Methyl chloride)	50	56		1	111	60-140	10/29/2021 2214
Cyclohexane	50	47		1	93	70-130	10/29/2021 2214
1,2-Dibromo-3-chloropropane (DBCP)	50	46		1	92	70-130	10/29/2021 2214
Dibromochloromethane	50	51		1	103	70-130	10/29/2021 2214
1,2-Dibromoethane (EDB)	50	50		1	100	70-130	10/29/2021 2214
1,2-Dichlorobenzene	50	50		1	99	70-130	10/29/2021 2214
1,3-Dichlorobenzene	50	49		1	98	70-130	10/29/2021 2214
1,4-Dichlorobenzene	50	47		1	93	70-130	10/29/2021 2214
Dichlorodifluoromethane	50	58		1	117	60-140	10/29/2021 2214
1,1-Dichloroethane	50	47		1	95	70-130	10/29/2021 2214
1,2-Dichloroethane	50	48		1	95	70-130	10/29/2021 2214
1,1-Dichloroethene	50	49		1	98	70-130	10/29/2021 2214
cis-1,2-Dichloroethene	50	48		1	96	70-130	10/29/2021 2214
trans-1,2-Dichloroethene	50	48		1	96	70-130	10/29/2021 2214
1,2-Dichloropropane	50	48		1	97	70-130	10/29/2021 2214
cis-1,3-Dichloropropene	50	53		1	107	70-130	10/29/2021 2214
trans-1,3-Dichloropropene	50	52		1	104	70-130	10/29/2021 2214
Ethylbenzene	50	54		1	108	70-130	10/29/2021 2214
2-Hexanone	100	100		1	102	70-130	10/29/2021 2214
Isopropylbenzene	50	53		1	107	70-130	10/29/2021 2214
Methyl acetate	50	45		1	90	70-130	10/29/2021 2214
Methyl tertiary butyl ether (MTBE)	50	50		1	101	70-130	10/29/2021 2214
4-Methyl-2-pentanone	100	100		1	100	70-130	10/29/2021 2214
Methylcyclohexane	50	52		1	103	70-130	10/29/2021 2214
Methylene chloride	50	46		1	91	70-130	10/29/2021 2214
Styrene	50	53		1	105	70-130	10/29/2021 2214
1,1,2,2-Tetrachloroethane	50	50		1	100	70-130	10/29/2021 2214
Tetrachloroethene	50	50		1	100	70-130	10/29/2021 2214
Toluene	50	52		1	105	70-130	10/29/2021 2214
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	48		1	96	70-130	10/29/2021 2214
1,2,4-Trichlorobenzene	50	48		1	97	70-130	10/29/2021 2214
1,1,1-Trichloroethane	50	47		1	94	70-130	10/29/2021 2214
1,1,2-Trichloroethane	50	50		1	101	70-130	10/29/2021 2214

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20673-002

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	49		1	98	70-130	10/29/2021 2214
Trichlorofluoromethane	50	52		1	105	70-130	10/29/2021 2214
Vinyl chloride	50	54		1	107	70-130	10/29/2021 2214
Xylenes (total)	100	110		1	106	70-130	10/29/2021 2214
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		105			70-130		
1,2-Dichloroethane-d4		94			70-130		
Toluene-d8		100			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents



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

**Number 126228**

Client <b>WESTON HOUSE</b>		Telephone No. / E-mail <b>JOYNER@WESTONHOUSE.COM</b>		Quote No.
Address <b>5801 BUFF RD</b>		Analysis (Attach if more space is needed)		Page <u>1</u> of <u>1</u>
City <b>HOLKINS</b>	State <b>SC</b>	Zip Code <b>29061</b>	<b>VJ20072</b> DIMS Remarks / Order I.D.	
Project Name <b>Q4 2021 Sampling</b>		Project No. _____ Sample ID / Description (Continues on each sample tag as indicated on our I.D.)		
Project No.		No. of Containers by Preservative Type Matrix: <input type="checkbox"/> Solid <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input type="checkbox"/> Other		
Sample ID / Description	Collection Date	Collection Time (Military)	Matrix	Preservative Type
W-42 - 2021 - Q4	10-20-21	0917	✓ X	3
W-49 - 2021 - Q4		1018	✓ X	3
W-90 - 2021 - Q4		1127	✓ X	3
W-91 - 2021 - Q4		1220	✓ X	3
W-19B - 2021 - Q4		1353	✓ X	3
TB-01 - 102021			✓ X	2

Turn Around Time Required (Prior lab approval required for expedited TAT)	Sample Disposal	Possible Hazard Identification	CC Requirements (Specify)
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify)	Return to Client <input checked="" type="checkbox"/> Disposal by Lab	<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown	Date _____ Time _____ Date _____ Time _____ Date _____ Time _____ Date _____ Time _____
1. Requisitioned by <i>[Signature]</i>	1. Received by Date: 10-20-21 Time: 1515		
2. Requisitioned by	2. Received by		
3. Requisitioned by	3. Received by		
4. Requisitioned by	4. Laboratory received by <i>[Signature]</i>		

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY  
 Received on ice (check)  No  Ice Pack  No  Receipt Temp. 1.6 °C

# PACE ANALYTICAL SERVICES, LLC



**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: ISH / 10/20/2021 Lot #: W120072

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>NA</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>NA</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: <u>NA</u> <u>1.6 / 1.6 °C NA / NA °C NA / NA °C NA / NA °C</u>	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: <u>5</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phcnol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # _____
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) <u>NA</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>NA</u> mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # <u>NA</u>	
Time of preservation <u>NA</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) <u>NA</u> were received with bubbles >6 mm in diameter.	
Samples(s) <u>NA</u> were received with TRC > 0.5 mg/L (If #19 is <i>no</i> ) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: <u>NA</u>	
SR barcode labels applied by: <u>KDRW</u> Date: <u>10/26/2021</u>	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Q4 2021 Sampling

Lot Number: **WJ21072**

Date Completed: 11/05/2021

11/05/2021 3:41 PM

Approved and released by:  
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.

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

# 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: WJ21072

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

### **Volatile Organic Analysis-Method 5210B**

The continuing calibration verification (CCV) associated with batch 20685 had 1,2,4-trichlorobenzene recovered below acceptance limits. There were no detections for this compound in the associated samples. A LOQ standard was analyzed and the compound was detected, demonstrating there was adequate sensitivity to identify the analyte if it were present.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ21072  
Project Name: Q4 2021 Sampling  
Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-46-2021-Q4	Aqueous	10/21/2021 0903	10/21/2021
002	W-RW2-2021-Q4	Aqueous	10/21/2021 1003	10/21/2021
003	W-70-2021-Q4	Aqueous	10/21/2021 1127	10/21/2021
004	W-69-2021-Q4	Aqueous	10/21/2021 1223	10/21/2021
005	W-71-2021-Q4	Aqueous	10/21/2021 1324	10/21/2021
006	W-71-2021-Q4-DUP	Aqueous	10/21/2021 1324	10/21/2021
007	TB-01-102121	Aqueous	10/21/2021	10/21/2021
008	W-41R-2021-Q4	Aqueous	10/21/2021 0906	10/21/2021
009	W-88-2021-Q4	Aqueous	10/21/2021 1112	10/21/2021
010	W-89-2021-Q4	Aqueous	10/21/2021 1208	10/21/2021
011	W-24-2021-Q4	Aqueous	10/21/2021 1415	10/21/2021
012	EB-01-102121	Aqueous	10/21/2021 1233	10/21/2021

(12 samples)

# PACE ANALYTICAL SERVICES, LLC

Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ21072  
Project Name: Q4 2021 Sampling  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-46-2021-Q4	Aqueous	Nitrate - N	353.2	7.7		mg/L	5
001	W-46-2021-Q4	Aqueous	Tetrachloroethene	8260D	2.9		ug/L	6
002	W-RW2-2021-Q4	Aqueous	Nitrate - N	353.2	16		mg/L	8
002	W-RW2-2021-Q4	Aqueous	Tetrachloroethene	8260D	150		ug/L	9
002	W-RW2-2021-Q4	Aqueous	Trichloroethene	8260D	9.5		ug/L	10
003	W-70-2021-Q4	Aqueous	Nitrate - N	353.2	1.6		mg/L	13
004	W-69-2021-Q4	Aqueous	Nitrate - N	353.2	0.35		mg/L	16
008	W-41R-2021-Q4	Aqueous	Nitrate - N	353.2	46	S	mg/L	27
008	W-41R-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	4.2		ug/L	28
008	W-41R-2021-Q4	Aqueous	Tetrachloroethene	8260D	160		ug/L	28
008	W-41R-2021-Q4	Aqueous	Trichloroethene	8260D	8.5		ug/L	29
009	W-88-2021-Q4	Aqueous	Nitrate - N	353.2	3.5		mg/L	32
009	W-88-2021-Q4	Aqueous	Tetrachloroethene	8260D	2.4		ug/L	33
010	W-89-2021-Q4	Aqueous	Nitrate - N	353.2	2.2		mg/L	35
010	W-89-2021-Q4	Aqueous	Tetrachloroethene	8260D	1.2		ug/L	36
012	EB-01-102121	Aqueous	Nitrate - N	353.2	0.023		mg/L	41
012	EB-01-102121	Aqueous	Bromodichloromethane	8260D	1.2		ug/L	42
012	EB-01-102121	Aqueous	Chloroform	8260D	6.7		ug/L	42

(18 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-001
Description: W-46-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 0903	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/22/2021 0932	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	7.7	0.20	mg/L	1

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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

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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

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-001
Description: W-46-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 0903	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0646	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	2.9		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-001
Description: W-46-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 0903	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0646	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		88	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		96	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-002
Description: W-RW2-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1003	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/22/2021 0934	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	16	0.20	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-002
Description: W-RW2-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1003	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0711	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,1,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	150		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-002
Description: W-RW2-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1003	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0711	BBW		20673

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	9.5		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		87	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		96	70-130

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

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# Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-002
Description: W-RW2-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1003	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270E	1	11/04/2021 1358	JCG	10/27/2021 1500	20359

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		0.16	ug/L	1
Acenaphthylene	208-96-8	8270E	ND		0.16	ug/L	1
Acetophenone	98-86-2	8270E	ND		0.80	ug/L	1
Anthracene	120-12-7	8270E	ND		0.16	ug/L	1
Atrazine	1912-24-9	8270E	ND		0.80	ug/L	1
Benzaldehyde	100-52-7	8270E	ND		4.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270E	ND		0.16	ug/L	1
Benzo(a)pyrene	50-32-8	8270E	ND		0.16	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270E	ND		0.16	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270E	ND		0.16	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		0.16	ug/L	1
1,1'-Biphenyl	92-52-4	8270E	ND		0.80	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		0.80	ug/L	1
Butyl benzyl phthalate	85-68-7	8270E	ND		4.0	ug/L	1
Caprolactam	105-60-2	8270E	ND		4.0	ug/L	1
Carbazole	86-74-8	8270E	ND		0.80	ug/L	1
bis(2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		0.80	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		0.80	ug/L	1
4-Chloroaniline	106-47-8	8270E	ND		0.80	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		0.80	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		0.80	ug/L	1
2-Chloronaphthalene	91-58-7	8270E	ND		0.80	ug/L	1
2-Chlorophenol	95-57-8	8270E	ND		0.80	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		0.80	ug/L	1
Chrysene	218-01-9	8270E	ND		0.16	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		0.16	ug/L	1
Dibenzofuran	132-64-9	8270E	ND		0.80	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		4.0	ug/L	1
2,4-Dichlorophenol	120-83-2	8270E	ND		0.80	ug/L	1
Diethylphthalate	84-66-2	8270E	ND		4.0	ug/L	1
Dimethyl phthalate	131-11-3	8270E	ND		4.0	ug/L	1
2,4-Dimethylphenol	105-67-9	8270E	ND		0.80	ug/L	1
Di-n-butyl phthalate	84-74-2	8270E	ND		4.0	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		4.0	ug/L	1
2,4-Dinitrophenol	51-28-5	8270E	ND		4.0	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1.6	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1.6	ug/L	1
Di-n-octylphthalate	117-84-0	8270E	ND		4.0	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		4.0	ug/L	1
Fluoranthene	206-44-0	8270E	ND		0.16	ug/L	1
Fluorene	86-73-7	8270E	ND		0.16	ug/L	1
Hexachlorobenzene	118-74-1	8270E	ND		0.80	ug/L	1
Hexachlorobutadiene	87-68-3	8270E	ND		0.80	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270E	ND		4.0	ug/L	1

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

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# Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-002
Description: W-RW2-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1003	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270E	1	11/04/2021 1358	JCG	10/27/2021 1500	20359

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270E	ND		0.80	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		0.16	ug/L	1
Isophorone	78-59-1	8270E	ND		0.80	ug/L	1
2-Methylnaphthalene	91-57-6	8270E	ND		0.16	ug/L	1
2-Methylphenol	95-48-7	8270E	ND		0.80	ug/L	1
3+4-Methylphenol	106-44-5	8270E	ND		1.6	ug/L	1
Naphthalene	91-20-3	8270E	ND		0.16	ug/L	1
2-Nitroaniline	88-74-4	8270E	ND		1.6	ug/L	1
3-Nitroaniline	99-09-2	8270E	ND		1.6	ug/L	1
4-Nitroaniline	100-01-6	8270E	ND		1.6	ug/L	1
Nitrobenzene	98-95-3	8270E	ND		0.80	ug/L	1
2-Nitrophenol	88-75-5	8270E	ND		1.6	ug/L	1
4-Nitrophenol	100-02-7	8270E	ND		4.0	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		0.80	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		0.80	ug/L	1
Pentachlorophenol	87-86-5	8270E	ND		4.0	ug/L	1
Phenanthrene	85-01-8	8270E	ND		0.16	ug/L	1
Phenol	108-95-2	8270E	ND		0.80	ug/L	1
Pyrene	129-00-0	8270E	ND		0.16	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		0.80	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		0.80	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		58	37-129
2-Fluorophenol		39	24-127
Nitrobenzene-d5		61	38-127
Phenol-d5		50	28-128
Terphenyl-d14		72	10-148
2,4,6-Tribromophenol		59	35-144

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-003
Description: W-70-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1127	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	10/22/2021 0935	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.040	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-003
Description: W-70-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1127	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1331	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-003
Description: W-70-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1127	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1331	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		103	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-004
Description: W-69-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1223	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/22/2021 0942	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.35	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-004
Description: W-69-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1223	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1355	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-004
Description: W-69-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1223	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1355	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		103	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-005
Description: W-71-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1324	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/22/2021 0944	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-005
Description: W-71-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1324	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1418	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-005
Description: W-71-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1324	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1418	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		103	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-006
Description: W-71-2021-Q4-DUP	Matrix: Aqueous
Date Sampled: 10/21/2021 1324	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/22/2021 0945	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-006
Description: W-71-2021-Q4-DUP	Matrix: Aqueous
Date Sampled: 10/21/2021 1324	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1442	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-006
Description: W-71-2021-Q4-DUP	Matrix: Aqueous
Date Sampled: 10/21/2021 1324	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1442	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		102	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-007
Description: TB-01-102121	Matrix: Aqueous
Date Sampled: 10/21/2021	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1220	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-007
Description: TB-01-102121	Matrix: Aqueous
Date Sampled: 10/21/2021	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1220	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		108	70-130
Toluene-d8		103	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-008
Description: W-41R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 0906	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	50	10/22/2021 0947	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	46	S	1.0	mg/L 1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-008
Description: W-41R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 0906	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0736	BBW		20673
2	5030B	8260D	5	11/03/2021 1802	BWS		21134

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND	S	1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND	S	2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	4.2		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	160		5.0	ug/L	2
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1

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 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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-008
Description: W-41R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 0906	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 0736	BBW		20673
2	5030B	8260D	5	11/03/2021 1802	BWS		21134

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	8.5		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND	S	1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		86	70-130		95	70-130
1,2-Dichloroethane-d4		108	70-130		107	70-130
Toluene-d8		95	70-130		104	70-130

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

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## Semivolatle Organic Compounds by GC/MS

Client: Westinghouse Electric Company

Laboratory ID: WJ21072-008

Description: W-41R-2021-Q4

Matrix: Aqueous

Date Sampled: 10/21/2021 0906

Project Name: Q4 2021 Sampling

Date Received: 10/21/2021

Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270E	1	11/04/2021 1422	JCG	10/27/2021 1500	20359

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270E	ND		0.16	ug/L	1
Acenaphthylene	208-96-8	8270E	ND		0.16	ug/L	1
Acetophenone	98-86-2	8270E	ND		0.80	ug/L	1
Anthracene	120-12-7	8270E	ND		0.16	ug/L	1
Atrazine	1912-24-9	8270E	ND		0.80	ug/L	1
Benzaldehyde	100-52-7	8270E	ND		4.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270E	ND		0.16	ug/L	1
Benzo(a)pyrene	50-32-8	8270E	ND		0.16	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270E	ND		0.16	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270E	ND		0.16	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270E	ND		0.16	ug/L	1
1,1'-Biphenyl	92-52-4	8270E	ND		0.80	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270E	ND		0.80	ug/L	1
Butyl benzyl phthalate	85-68-7	8270E	ND		4.0	ug/L	1
Caprolactam	105-60-2	8270E	ND		4.0	ug/L	1
Carbazole	86-74-8	8270E	ND		0.80	ug/L	1
bis(2-Chloro-1-methylethyl) ether	108-60-1	8270E	ND		0.80	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270E	ND		0.80	ug/L	1
4-Chloroaniline	106-47-8	8270E	ND	S	0.80	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270E	ND		0.80	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270E	ND		0.80	ug/L	1
2-Chloronaphthalene	91-58-7	8270E	ND		0.80	ug/L	1
2-Chlorophenol	95-57-8	8270E	ND		0.80	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270E	ND		0.80	ug/L	1
Chrysene	218-01-9	8270E	ND		0.16	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270E	ND		0.16	ug/L	1
Dibenzofuran	132-64-9	8270E	ND		0.80	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270E	ND		4.0	ug/L	1
2,4-Dichlorophenol	120-83-2	8270E	ND		0.80	ug/L	1
Diethylphthalate	84-66-2	8270E	ND		4.0	ug/L	1
Dimethyl phthalate	131-11-3	8270E	ND		4.0	ug/L	1
2,4-Dimethylphenol	105-67-9	8270E	ND	S	0.80	ug/L	1
Di-n-butyl phthalate	84-74-2	8270E	ND		4.0	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270E	ND		4.0	ug/L	1
2,4-Dinitrophenol	51-28-5	8270E	ND		4.0	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270E	ND		1.6	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270E	ND		1.6	ug/L	1
Di-n-octylphthalate	117-84-0	8270E	ND		4.0	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270E	ND		4.0	ug/L	1
Fluoranthene	206-44-0	8270E	ND		0.16	ug/L	1
Fluorene	86-73-7	8270E	ND		0.16	ug/L	1
Hexachlorobenzene	118-74-1	8270E	ND		0.80	ug/L	1
Hexachlorobutadiene	87-68-3	8270E	ND		0.80	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270E	ND		4.0	ug/L	1

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

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# Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-008
Description: W-41R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 0906	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270E	1	11/04/2021 1422	JCG	10/27/2021 1500	20359

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270E	ND		0.80	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270E	ND		0.16	ug/L	1
Isophorone	78-59-1	8270E	ND		0.80	ug/L	1
2-Methylnaphthalene	91-57-6	8270E	ND		0.16	ug/L	1
2-Methylphenol	95-48-7	8270E	ND		0.80	ug/L	1
3+4-Methylphenol	106-44-5	8270E	ND		1.6	ug/L	1
Naphthalene	91-20-3	8270E	ND		0.16	ug/L	1
2-Nitroaniline	88-74-4	8270E	ND	S	1.6	ug/L	1
3-Nitroaniline	99-09-2	8270E	ND	S	1.6	ug/L	1
4-Nitroaniline	100-01-6	8270E	ND		1.6	ug/L	1
Nitrobenzene	98-95-3	8270E	ND		0.80	ug/L	1
2-Nitrophenol	88-75-5	8270E	ND		1.6	ug/L	1
4-Nitrophenol	100-02-7	8270E	ND		4.0	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270E	ND		0.80	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270E	ND		0.80	ug/L	1
Pentachlorophenol	87-86-5	8270E	ND		4.0	ug/L	1
Phenanthrene	85-01-8	8270E	ND		0.16	ug/L	1
Phenol	108-95-2	8270E	ND		0.80	ug/L	1
Pyrene	129-00-0	8270E	ND		0.16	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270E	ND		0.80	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270E	ND		0.80	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		49	37-129
2-Fluorophenol		33	24-127
Nitrobenzene-d5		52	38-127
Phenol-d5		35	28-128
Terphenyl-d14		72	10-148
2,4,6-Tribromophenol		53	35-144

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-009
Description: W-88-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1112	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/22/2021 0952	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	3.5	0.10	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-009
Description: W-88-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1112	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1505	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	2.4		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-009
Description: W-88-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1112	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1505	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		94	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		104	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-010
Description: W-89-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1208	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/22/2021 0954	AAB		19888

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	2.2	0.10	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-010
Description: W-89-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1208	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1529	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	1.2		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-010
Description: W-89-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1208	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1529	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		92	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		103	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-011
Description: W-24-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1415	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/22/2021 1014	AAB		19890

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-011
Description: W-24-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1415	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1553	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-011
Description: W-24-2021-Q4	Matrix: Aqueous
Date Sampled: 10/21/2021 1415	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1553	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		104	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-012
Description: EB-01-102121	Matrix: Aqueous
Date Sampled: 10/21/2021 1233	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/22/2021 1015	AAB		19890

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.023	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-012
Description: EB-01-102121	Matrix: Aqueous
Date Sampled: 10/21/2021 1233	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1243	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	1.2		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	6.7		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ21072-012
Description: EB-01-102121	Matrix: Aqueous
Date Sampled: 10/21/2021 1233	Project Name: Q4 2021 Sampling
Date Received: 10/21/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/30/2021 1243	TML		20685

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		103	70-130

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

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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ19888-001

Matrix: Aqueous

Batch: 19888

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/22/2021 0905

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ19888-002

Matrix: Aqueous

Batch: 19888

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.40		1	101	90-110	10/22/2021 0907

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MS

Sample ID: WJ21072-008MS

Matrix: Aqueous

Batch: 19888

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	46	0.40	47	N	50	239	90-110	10/22/2021 0949

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MSD

Sample ID: WJ21072-008MD

Matrix: Aqueous

Batch: 19888

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	46	0.40	42	N	50	-1050	11	90-110	20	10/22/2021 0950

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MB

Sample ID: WQ19890-001

Matrix: Aqueous

Batch: 19890

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/22/2021 1009

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ19890-002

Matrix: Aqueous

Batch: 19890

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.38		1	95	90-110	10/22/2021 1010

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20673-001

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/29/2021 2335
Benzene	ND		1	1.0	ug/L	10/29/2021 2335
Bromodichloromethane	ND		1	1.0	ug/L	10/29/2021 2335
Bromoform	ND		1	1.0	ug/L	10/29/2021 2335
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/29/2021 2335
2-Butanone (MEK)	ND		1	10	ug/L	10/29/2021 2335
Carbon disulfide	ND		1	1.0	ug/L	10/29/2021 2335
Carbon tetrachloride	ND		1	1.0	ug/L	10/29/2021 2335
Chlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
Chloroethane	ND		1	2.0	ug/L	10/29/2021 2335
Chloroform	ND		1	1.0	ug/L	10/29/2021 2335
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/29/2021 2335
Cyclohexane	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/29/2021 2335
Dibromochloromethane	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/29/2021 2335
1,1-Dichloroethane	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dichloroethane	ND		1	1.0	ug/L	10/29/2021 2335
1,1-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 2335
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 2335
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/29/2021 2335
1,2-Dichloropropane	ND		1	1.0	ug/L	10/29/2021 2335
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/29/2021 2335
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/29/2021 2335
Ethylbenzene	ND		1	1.0	ug/L	10/29/2021 2335
2-Hexanone	ND		1	10	ug/L	10/29/2021 2335
Isopropylbenzene	ND		1	1.0	ug/L	10/29/2021 2335
Methyl acetate	ND		1	1.0	ug/L	10/29/2021 2335
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/29/2021 2335
4-Methyl-2-pentanone	ND		1	10	ug/L	10/29/2021 2335
Methylcyclohexane	ND		1	5.0	ug/L	10/29/2021 2335
Methylene chloride	ND		1	1.0	ug/L	10/29/2021 2335
Styrene	ND		1	1.0	ug/L	10/29/2021 2335
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/29/2021 2335
Tetrachloroethene	ND		1	1.0	ug/L	10/29/2021 2335
Toluene	ND		1	1.0	ug/L	10/29/2021 2335
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/29/2021 2335
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/29/2021 2335
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/29/2021 2335
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/29/2021 2335

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20673-001

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/29/2021 2335
Trichlorofluoromethane	ND		1	1.0	ug/L	10/29/2021 2335
Vinyl chloride	ND		1	1.0	ug/L	10/29/2021 2335
Xylenes (total)	ND		1	1.0	ug/L	10/29/2021 2335
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		95	70-130			
1,2-Dichloroethane-d4		113	70-130			
Toluene-d8		99	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20673-002

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	110		1	105	60-140	10/29/2021 2214
Benzene	50	49		1	99	70-130	10/29/2021 2214
Bromodichloromethane	50	47		1	95	70-130	10/29/2021 2214
Bromoform	50	53		1	106	70-130	10/29/2021 2214
Bromomethane (Methyl bromide)	50	49		1	98	70-130	10/29/2021 2214
2-Butanone (MEK)	100	110		1	111	70-130	10/29/2021 2214
Carbon disulfide	50	49		1	98	70-130	10/29/2021 2214
Carbon tetrachloride	50	47		1	94	70-130	10/29/2021 2214
Chlorobenzene	50	49		1	99	70-130	10/29/2021 2214
Chloroethane	50	48		1	96	70-130	10/29/2021 2214
Chloroform	50	46		1	92	70-130	10/29/2021 2214
Chloromethane (Methyl chloride)	50	56		1	111	60-140	10/29/2021 2214
Cyclohexane	50	47		1	93	70-130	10/29/2021 2214
1,2-Dibromo-3-chloropropane (DBCP)	50	46		1	92	70-130	10/29/2021 2214
Dibromochloromethane	50	51		1	103	70-130	10/29/2021 2214
1,2-Dibromoethane (EDB)	50	50		1	100	70-130	10/29/2021 2214
1,2-Dichlorobenzene	50	50		1	99	70-130	10/29/2021 2214
1,3-Dichlorobenzene	50	49		1	98	70-130	10/29/2021 2214
1,4-Dichlorobenzene	50	47		1	93	70-130	10/29/2021 2214
Dichlorodifluoromethane	50	58		1	117	60-140	10/29/2021 2214
1,1-Dichloroethane	50	47		1	95	70-130	10/29/2021 2214
1,2-Dichloroethane	50	48		1	95	70-130	10/29/2021 2214
1,1-Dichloroethene	50	49		1	98	70-130	10/29/2021 2214
cis-1,2-Dichloroethene	50	48		1	96	70-130	10/29/2021 2214
trans-1,2-Dichloroethene	50	48		1	96	70-130	10/29/2021 2214
1,2-Dichloropropane	50	48		1	97	70-130	10/29/2021 2214
cis-1,3-Dichloropropene	50	53		1	107	70-130	10/29/2021 2214
trans-1,3-Dichloropropene	50	52		1	104	70-130	10/29/2021 2214
Ethylbenzene	50	54		1	108	70-130	10/29/2021 2214
2-Hexanone	100	100		1	102	70-130	10/29/2021 2214
Isopropylbenzene	50	53		1	107	70-130	10/29/2021 2214
Methyl acetate	50	45		1	90	70-130	10/29/2021 2214
Methyl tertiary butyl ether (MTBE)	50	50		1	101	70-130	10/29/2021 2214
4-Methyl-2-pentanone	100	100		1	100	70-130	10/29/2021 2214
Methylcyclohexane	50	52		1	103	70-130	10/29/2021 2214
Methylene chloride	50	46		1	91	70-130	10/29/2021 2214
Styrene	50	53		1	105	70-130	10/29/2021 2214
1,1,2,2-Tetrachloroethane	50	50		1	100	70-130	10/29/2021 2214
Tetrachloroethene	50	50		1	100	70-130	10/29/2021 2214
Toluene	50	52		1	105	70-130	10/29/2021 2214
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	48		1	96	70-130	10/29/2021 2214
1,2,4-Trichlorobenzene	50	48		1	97	70-130	10/29/2021 2214
1,1,1-Trichloroethane	50	47		1	94	70-130	10/29/2021 2214
1,1,2-Trichloroethane	50	50		1	101	70-130	10/29/2021 2214

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20673-002

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	49		1	98	70-130	10/29/2021 2214
Trichlorofluoromethane	50	52		1	105	70-130	10/29/2021 2214
Vinyl chloride	50	54		1	107	70-130	10/29/2021 2214
Xylenes (total)	100	110		1	106	70-130	10/29/2021 2214
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		105			70-130		
1,2-Dichloroethane-d4		94			70-130		
Toluene-d8		100			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ21072-008MS

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	ND	100	130		1	134	60-140	10/30/2021 0800
Benzene	ND	50	55		1	110	70-130	10/30/2021 0800
Bromodichloromethane	ND	50	52		1	104	70-130	10/30/2021 0800
Bromoform	ND	50	56		1	111	70-130	10/30/2021 0800
Bromomethane (Methyl bromide)	ND	50	56		1	113	70-130	10/30/2021 0800
2-Butanone (MEK)	ND	100	120		1	120	70-130	10/30/2021 0800
Carbon disulfide	ND	50	63		1	125	70-130	10/30/2021 0800
Carbon tetrachloride	ND	50	59		1	118	70-130	10/30/2021 0800
Chlorobenzene	ND	50	55		1	109	70-130	10/30/2021 0800
Chloroethane	ND	50	60		1	119	70-130	10/30/2021 0800
Chloroform	ND	50	59		1	118	70-130	10/30/2021 0800
Chloromethane (Methyl chloride)	ND	50	64		1	128	60-140	10/30/2021 0800
Cyclohexane	ND	50	68	N	1	136	70-130	10/30/2021 0800
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	50		1	100	70-130	10/30/2021 0800
Dibromochloromethane	ND	50	55		1	111	70-130	10/30/2021 0800
1,2-Dibromoethane (EDB)	ND	50	53		1	107	70-130	10/30/2021 0800
1,2-Dichlorobenzene	ND	50	56		1	111	70-130	10/30/2021 0800
1,3-Dichlorobenzene	ND	50	55		1	110	70-130	10/30/2021 0800
1,4-Dichlorobenzene	ND	50	53		1	106	70-130	10/30/2021 0800
Dichlorodifluoromethane	ND	50	78	N	1	156	60-140	10/30/2021 0800
1,1-Dichloroethane	ND	50	60		1	121	70-130	10/30/2021 0800
1,2-Dichloroethane	ND	50	52		1	103	70-130	10/30/2021 0800
1,1-Dichloroethene	ND	50	60		1	121	70-130	10/30/2021 0800
cis-1,2-Dichloroethene	4.2	50	61		1	113	70-130	10/30/2021 0800
trans-1,2-Dichloroethene	ND	50	59		1	118	70-130	10/30/2021 0800
1,2-Dichloropropane	ND	50	52		1	104	70-130	10/30/2021 0800
cis-1,3-Dichloropropene	ND	50	51		1	103	70-130	10/30/2021 0800
trans-1,3-Dichloropropene	ND	50	52		1	104	70-130	10/30/2021 0800
Ethylbenzene	ND	50	60		1	120	70-130	10/30/2021 0800
2-Hexanone	ND	100	92		1	92	70-130	10/30/2021 0800
Isopropylbenzene	ND	50	58		1	116	70-130	10/30/2021 0800
Methyl acetate	ND	50	51		1	103	70-130	10/30/2021 0800
Methyl tertiary butyl ether (MTBE)	ND	50	60		1	121	70-130	10/30/2021 0800
4-Methyl-2-pentanone	ND	100	100		1	101	70-130	10/30/2021 0800
Methylcyclohexane	ND	50	60		1	120	70-130	10/30/2021 0800
Methylene chloride	ND	50	56		1	112	70-130	10/30/2021 0800
Styrene	ND	50	57		1	114	70-130	10/30/2021 0800
1,1,2,2-Tetrachloroethane	ND	50	56		1	112	70-130	10/30/2021 0800
Tetrachloroethene	210	50	280	N	1	133	70-130	10/30/2021 0800
Toluene	ND	50	59		1	117	70-130	10/30/2021 0800
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	59		1	117	70-130	10/30/2021 0800
1,2,4-Trichlorobenzene	ND	50	52		1	103	70-130	10/30/2021 0800
1,1,1-Trichloroethane	ND	50	59		1	119	70-130	10/30/2021 0800
1,1,2-Trichloroethane	ND	50	54		1	108	70-130	10/30/2021 0800

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ21072-008MS

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	8.5	50	63		1	109	70-130	10/30/2021 0800
Trichlorofluoromethane	ND	50	67	N	1	133	70-130	10/30/2021 0800
Vinyl chloride	ND	50	63		1	125	70-130	10/30/2021 0800
Xylenes (total)	ND	100	120		1	118	70-130	10/30/2021 0800
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene		112	70-130					
1,2-Dichloroethane-d4		103	70-130					
Toluene-d8		111	70-130					

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ21072-008MD

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	100	98	+	1	98	31	60-140	20	10/30/2021 0825
Benzene	ND	50	57		1	114	3.8	70-130	20	10/30/2021 0825
Bromodichloromethane	ND	50	50		1	101	3.0	70-130	20	10/30/2021 0825
Bromoform	ND	50	52		1	104	6.4	70-130	20	10/30/2021 0825
Bromomethane (Methyl bromide)	ND	50	51		1	103	9.5	70-130	20	10/30/2021 0825
2-Butanone (MEK)	ND	100	110		1	106	12	70-130	20	10/30/2021 0825
Carbon disulfide	ND	50	56		1	111	12	70-130	20	10/30/2021 0825
Carbon tetrachloride	ND	50	57		1	113	4.1	70-130	20	10/30/2021 0825
Chlorobenzene	ND	50	53		1	105	3.5	70-130	20	10/30/2021 0825
Chloroethane	ND	50	53		1	105	12	70-130	20	10/30/2021 0825
Chloroform	ND	50	53		1	106	10	70-130	20	10/30/2021 0825
Chloromethane (Methyl chloride)	ND	50	59		1	119	7.4	60-140	20	10/30/2021 0825
Cyclohexane	ND	50	61		1	121	11	70-130	20	10/30/2021 0825
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	46		1	92	8.7	70-130	20	10/30/2021 0825
Dibromochloromethane	ND	50	52		1	104	6.0	70-130	20	10/30/2021 0825
1,2-Dibromoethane (EDB)	ND	50	51		1	103	3.7	70-130	20	10/30/2021 0825
1,2-Dichlorobenzene	ND	50	52		1	104	6.9	70-130	20	10/30/2021 0825
1,3-Dichlorobenzene	ND	50	52		1	105	4.8	70-130	20	10/30/2021 0825
1,4-Dichlorobenzene	ND	50	49		1	99	6.6	70-130	20	10/30/2021 0825
Dichlorodifluoromethane	ND	50	71	N	1	142	9.8	60-140	20	10/30/2021 0825
1,1-Dichloroethane	ND	50	51		1	103	16	70-130	20	10/30/2021 0825
1,2-Dichloroethane	ND	50	59		1	117	13	70-130	20	10/30/2021 0825
1,1-Dichloroethene	ND	50	56		1	112	7.6	70-130	20	10/30/2021 0825
cis-1,2-Dichloroethene	4.2	50	56		1	104	7.4	70-130	20	10/30/2021 0825
trans-1,2-Dichloroethene	ND	50	54		1	108	8.5	70-130	20	10/30/2021 0825
1,2-Dichloropropane	ND	50	51		1	102	1.8	70-130	20	10/30/2021 0825
cis-1,3-Dichloropropene	ND	50	51		1	102	0.55	70-130	20	10/30/2021 0825
trans-1,3-Dichloropropene	ND	50	49		1	99	5.3	70-130	20	10/30/2021 0825
Ethylbenzene	ND	50	58		1	116	3.1	70-130	20	10/30/2021 0825
2-Hexanone	ND	100	99		1	99	6.9	70-130	20	10/30/2021 0825
Isopropylbenzene	ND	50	55		1	110	4.7	70-130	20	10/30/2021 0825
Methyl acetate	ND	50	38	+	1	76	31	70-130	20	10/30/2021 0825
Methyl tertiary butyl ether (MTBE)	ND	50	53		1	105	13	70-130	20	10/30/2021 0825
4-Methyl-2-pentanone	ND	100	100		1	104	3.1	70-130	20	10/30/2021 0825
Methylcyclohexane	ND	50	60		1	120	0.016	70-130	20	10/30/2021 0825
Methylene chloride	ND	50	50		1	99	13	70-130	20	10/30/2021 0825
Styrene	ND	50	53		1	107	6.1	70-130	20	10/30/2021 0825
1,1,2,2-Tetrachloroethane	ND	50	52		1	105	6.5	70-130	20	10/30/2021 0825
Tetrachloroethene	210	50	250	E	1	85	9.1	70-130	20	10/30/2021 0825
Toluene	ND	50	55		1	111	5.8	70-130	20	10/30/2021 0825
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	53		1	106	10	70-130	20	10/30/2021 0825
1,2,4-Trichlorobenzene	ND	50	48		1	96	7.0	70-130	20	10/30/2021 0825
1,1,1-Trichloroethane	ND	50	56		1	111	6.6	70-130	20	10/30/2021 0825
1,1,2-Trichloroethane	ND	50	52		1	105	3.3	70-130	20	10/30/2021 0825

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ21072-008MD

Matrix: Aqueous

Batch: 20673

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	8.5	50	62		1	106	2.0	70-130	20	10/30/2021 0825
Trichlorofluoromethane	ND	50	60		1	120	11	70-130	20	10/30/2021 0825
Vinyl chloride	ND	50	58		1	116	8.0	70-130	20	10/30/2021 0825
Xylenes (total)	ND	100	110		1	114	3.8	70-130	20	10/30/2021 0825
Surrogate	Q	% Rec	Acceptance Limit							
Bromofluorobenzene		105	70-130							
1,2-Dichloroethane-d4		114	70-130							
Toluene-d8		103	70-130							

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20685-001

Matrix: Aqueous

Batch: 20685

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/30/2021 1156
Benzene	ND		1	1.0	ug/L	10/30/2021 1156
Bromodichloromethane	ND		1	1.0	ug/L	10/30/2021 1156
Bromoform	ND		1	1.0	ug/L	10/30/2021 1156
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/30/2021 1156
2-Butanone (MEK)	ND		1	10	ug/L	10/30/2021 1156
Carbon disulfide	ND		1	1.0	ug/L	10/30/2021 1156
Carbon tetrachloride	ND		1	1.0	ug/L	10/30/2021 1156
Chlorobenzene	ND		1	1.0	ug/L	10/30/2021 1156
Chloroethane	ND		1	2.0	ug/L	10/30/2021 1156
Chloroform	ND		1	1.0	ug/L	10/30/2021 1156
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/30/2021 1156
Cyclohexane	ND		1	1.0	ug/L	10/30/2021 1156
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/30/2021 1156
Dibromochloromethane	ND		1	1.0	ug/L	10/30/2021 1156
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/30/2021 1156
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/30/2021 1156
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/30/2021 1156
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/30/2021 1156
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/30/2021 1156
1,1-Dichloroethane	ND		1	1.0	ug/L	10/30/2021 1156
1,2-Dichloroethane	ND		1	1.0	ug/L	10/30/2021 1156
1,1-Dichloroethene	ND		1	1.0	ug/L	10/30/2021 1156
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/30/2021 1156
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/30/2021 1156
1,2-Dichloropropane	ND		1	1.0	ug/L	10/30/2021 1156
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/30/2021 1156
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/30/2021 1156
Ethylbenzene	ND		1	1.0	ug/L	10/30/2021 1156
2-Hexanone	ND		1	10	ug/L	10/30/2021 1156
Isopropylbenzene	ND		1	1.0	ug/L	10/30/2021 1156
Methyl acetate	ND		1	1.0	ug/L	10/30/2021 1156
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/30/2021 1156
4-Methyl-2-pentanone	ND		1	10	ug/L	10/30/2021 1156
Methylcyclohexane	ND		1	5.0	ug/L	10/30/2021 1156
Methylene chloride	ND		1	1.0	ug/L	10/30/2021 1156
Styrene	ND		1	1.0	ug/L	10/30/2021 1156
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/30/2021 1156
Tetrachloroethene	ND		1	1.0	ug/L	10/30/2021 1156
Toluene	ND		1	1.0	ug/L	10/30/2021 1156
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/30/2021 1156
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/30/2021 1156
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/30/2021 1156
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/30/2021 1156

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20685-001

Matrix: Aqueous

Batch: 20685

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/30/2021 1156
Trichlorofluoromethane	ND		1	1.0	ug/L	10/30/2021 1156
Vinyl chloride	ND		1	1.0	ug/L	10/30/2021 1156
Xylenes (total)	ND		1	1.0	ug/L	10/30/2021 1156
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		94	70-130			
1,2-Dichloroethane-d4		106	70-130			
Toluene-d8		101	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20685-002

Matrix: Aqueous

Batch: 20685

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	140		1	138	60-140	10/30/2021 0941
Benzene	50	54		1	109	70-130	10/30/2021 0941
Bromodichloromethane	50	53		1	107	70-130	10/30/2021 0941
Bromoform	50	53		1	106	70-130	10/30/2021 0941
Bromomethane (Methyl bromide)	50	45		1	90	70-130	10/30/2021 0941
2-Butanone (MEK)	100	110		1	114	70-130	10/30/2021 0941
Carbon disulfide	50	57		1	113	70-130	10/30/2021 0941
Carbon tetrachloride	50	53		1	106	70-130	10/30/2021 0941
Chlorobenzene	50	53		1	105	70-130	10/30/2021 0941
Chloroethane	50	52		1	104	70-130	10/30/2021 0941
Chloroform	50	51		1	101	70-130	10/30/2021 0941
Chloromethane (Methyl chloride)	50	55		1	109	60-140	10/30/2021 0941
Cyclohexane	50	60		1	121	70-130	10/30/2021 0941
1,2-Dibromo-3-chloropropane (DBCP)	50	40		1	80	70-130	10/30/2021 0941
Dibromochloromethane	50	55		1	109	70-130	10/30/2021 0941
1,2-Dibromoethane (EDB)	50	53		1	107	70-130	10/30/2021 0941
1,2-Dichlorobenzene	50	51		1	102	70-130	10/30/2021 0941
1,3-Dichlorobenzene	50	51		1	102	70-130	10/30/2021 0941
1,4-Dichlorobenzene	50	49		1	99	70-130	10/30/2021 0941
Dichlorodifluoromethane	50	54		1	107	60-140	10/30/2021 0941
1,1-Dichloroethane	50	52		1	103	70-130	10/30/2021 0941
1,2-Dichloroethane	50	54		1	107	70-130	10/30/2021 0941
1,1-Dichloroethene	50	56		1	111	70-130	10/30/2021 0941
cis-1,2-Dichloroethene	50	52		1	104	70-130	10/30/2021 0941
trans-1,2-Dichloroethene	50	54		1	108	70-130	10/30/2021 0941
1,2-Dichloropropane	50	54		1	108	70-130	10/30/2021 0941
cis-1,3-Dichloropropene	50	54		1	109	70-130	10/30/2021 0941
trans-1,3-Dichloropropene	50	56		1	111	70-130	10/30/2021 0941
Ethylbenzene	50	56		1	112	70-130	10/30/2021 0941
2-Hexanone	100	110		1	115	70-130	10/30/2021 0941
Isopropylbenzene	50	57		1	115	70-130	10/30/2021 0941
Methyl acetate	50	57		1	114	70-130	10/30/2021 0941
Methyl tertiary butyl ether (MTBE)	50	54		1	108	70-130	10/30/2021 0941
4-Methyl-2-pentanone	100	120		1	116	70-130	10/30/2021 0941
Methylcyclohexane	50	57		1	114	70-130	10/30/2021 0941
Methylene chloride	50	51		1	101	70-130	10/30/2021 0941
Styrene	50	58		1	116	70-130	10/30/2021 0941
1,1,2,2-Tetrachloroethane	50	50		1	101	70-130	10/30/2021 0941
Tetrachloroethene	50	54		1	108	70-130	10/30/2021 0941
Toluene	50	56		1	111	70-130	10/30/2021 0941
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	55		1	109	70-130	10/30/2021 0941
1,2,4-Trichlorobenzene	50	38		1	77	70-130	10/30/2021 0941
1,1,1-Trichloroethane	50	52		1	104	70-130	10/30/2021 0941
1,1,2-Trichloroethane	50	53		1	105	70-130	10/30/2021 0941

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20685-002

Matrix: Aqueous

Batch: 20685

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	51		1	102	70-130	10/30/2021 0941
Trichlorofluoromethane	50	53		1	106	70-130	10/30/2021 0941
Vinyl chloride	50	54		1	108	70-130	10/30/2021 0941
Xylenes (total)	100	110		1	113	70-130	10/30/2021 0941
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		104			70-130		
1,2-Dichloroethane-d4		106			70-130		
Toluene-d8		106			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ21134-001

Matrix: Aqueous

Batch: 21134

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Tetrachloroethene	ND		1	1.0	ug/L	11/03/2021 1051
Surrogate	Q % Rec		Acceptance Limit			
Bromofluorobenzene	94		70-130			
1,2-Dichloroethane-d4	104		70-130			
Toluene-d8	102		70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ21134-002

Matrix: Aqueous

Batch: 21134

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Tetrachloroethene	50	51		1	101	70-130	11/03/2021 0947
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		97			70-130		
1,2-Dichloroethane-d4		93			70-130		
Toluene-d8		97			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ21072-008MS

Matrix: Aqueous

Batch: 21134

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Tetrachloroethene	160	250	420		5	103	70-130	11/03/2021 1826
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene		100	70-130					
1,2-Dichloroethane-d4		96	70-130					
Toluene-d8		103	70-130					

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ21072-008MD

Matrix: Aqueous

Batch: 21134

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Tetrachloroethene	160	250	430		5	107	2.4	70-130	20	11/03/2021 1851
Surrogate	Q	% Rec	Acceptance Limit							
Bromofluorobenzene		97	70-130							
1,2-Dichloroethane-d4		94	70-130							
Toluene-d8		101	70-130							

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

## Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ20359-001

Matrix: Aqueous

Batch: 20359

Prep Method: 3520C

Analytical Method: 8270E

Prep Date: 10/27/2021 1500

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acenaphthene	ND		1	0.16	ug/L	11/04/2021 1246
Acenaphthylene	ND		1	0.16	ug/L	11/04/2021 1246
Acetophenone	ND		1	0.80	ug/L	11/04/2021 1246
Anthracene	ND		1	0.16	ug/L	11/04/2021 1246
Atrazine	ND		1	0.80	ug/L	11/04/2021 1246
Benzaldehyde	ND		1	4.0	ug/L	11/04/2021 1246
Benzo(a)anthracene	ND		1	0.16	ug/L	11/04/2021 1246
Benzo(a)pyrene	ND		1	0.16	ug/L	11/04/2021 1246
Benzo(b)fluoranthene	ND		1	0.16	ug/L	11/04/2021 1246
Benzo(g,h,i)perylene	ND		1	0.16	ug/L	11/04/2021 1246
Benzo(k)fluoranthene	ND		1	0.16	ug/L	11/04/2021 1246
1,1'-Biphenyl	ND		1	0.80	ug/L	11/04/2021 1246
4-Bromophenyl phenyl ether	ND		1	0.80	ug/L	11/04/2021 1246
Butyl benzyl phthalate	ND		1	4.0	ug/L	11/04/2021 1246
Caprolactam	ND		1	4.0	ug/L	11/04/2021 1246
Carbazole	ND		1	0.80	ug/L	11/04/2021 1246
bis (2-Chloro-1-methylethyl) ether	ND		1	0.80	ug/L	11/04/2021 1246
4-Chloro-3-methyl phenol	ND		1	0.80	ug/L	11/04/2021 1246
4-Chloroaniline	ND		1	0.80	ug/L	11/04/2021 1246
bis(2-Chloroethoxy)methane	ND		1	0.80	ug/L	11/04/2021 1246
bis(2-Chloroethyl)ether	ND		1	0.80	ug/L	11/04/2021 1246
2-Chloronaphthalene	ND		1	0.80	ug/L	11/04/2021 1246
2-Chlorophenol	ND		1	0.80	ug/L	11/04/2021 1246
4-Chlorophenyl phenyl ether	ND		1	0.80	ug/L	11/04/2021 1246
Chrysene	ND		1	0.16	ug/L	11/04/2021 1246
Dibenzo(a,h)anthracene	ND		1	0.16	ug/L	11/04/2021 1246
Dibenzofuran	ND		1	0.80	ug/L	11/04/2021 1246
3,3'-Dichlorobenzidine	ND		1	4.0	ug/L	11/04/2021 1246
2,4-Dichlorophenol	ND		1	0.80	ug/L	11/04/2021 1246
Diethylphthalate	ND		1	4.0	ug/L	11/04/2021 1246
Dimethyl phthalate	ND		1	4.0	ug/L	11/04/2021 1246
2,4-Dimethylphenol	ND		1	0.80	ug/L	11/04/2021 1246
Di-n-butyl phthalate	ND		1	4.0	ug/L	11/04/2021 1246
4,6-Dinitro-2-methylphenol	ND		1	4.0	ug/L	11/04/2021 1246
2,4-Dinitrophenol	ND		1	4.0	ug/L	11/04/2021 1246
2,4-Dinitrotoluene	ND		1	1.6	ug/L	11/04/2021 1246
2,6-Dinitrotoluene	ND		1	1.6	ug/L	11/04/2021 1246
Di-n-octylphthalate	ND		1	4.0	ug/L	11/04/2021 1246
bis(2-Ethylhexyl)phthalate	ND		1	4.0	ug/L	11/04/2021 1246
Fluoranthene	ND		1	0.16	ug/L	11/04/2021 1246
Fluorene	ND		1	0.16	ug/L	11/04/2021 1246
Hexachlorobenzene	ND		1	0.80	ug/L	11/04/2021 1246
Hexachlorobutadiene	ND		1	0.80	ug/L	11/04/2021 1246
Hexachlorocyclopentadiene	ND		1	4.0	ug/L	11/04/2021 1246

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Semivolatile Organic Compounds by GC/MS - MB

Sample ID: WQ20359-001

Matrix: Aqueous

Batch: 20359

Prep Method: 3520C

Analytical Method: 8270E

Prep Date: 10/27/2021 1500

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Hexachloroethane	ND		1	0.80	ug/L	11/04/2021 1246
Indeno(1,2,3-c,d)pyrene	ND		1	0.16	ug/L	11/04/2021 1246
Isophorone	ND		1	0.80	ug/L	11/04/2021 1246
2-Methylnaphthalene	ND		1	0.16	ug/L	11/04/2021 1246
2-Methylphenol	ND		1	0.80	ug/L	11/04/2021 1246
3+4-Methylphenol	ND		1	1.6	ug/L	11/04/2021 1246
Naphthalene	ND		1	0.16	ug/L	11/04/2021 1246
2-Nitroaniline	ND		1	1.6	ug/L	11/04/2021 1246
3-Nitroaniline	ND		1	1.6	ug/L	11/04/2021 1246
4-Nitroaniline	ND		1	1.6	ug/L	11/04/2021 1246
Nitrobenzene	ND		1	0.80	ug/L	11/04/2021 1246
2-Nitrophenol	ND		1	1.6	ug/L	11/04/2021 1246
4-Nitrophenol	ND		1	4.0	ug/L	11/04/2021 1246
N-Nitrosodi-n-propylamine	ND		1	0.80	ug/L	11/04/2021 1246
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	0.80	ug/L	11/04/2021 1246
Pentachlorophenol	ND		1	4.0	ug/L	11/04/2021 1246
Phenanthrene	ND		1	0.16	ug/L	11/04/2021 1246
Phenol	ND		1	0.80	ug/L	11/04/2021 1246
Pyrene	ND		1	0.16	ug/L	11/04/2021 1246
2,4,5-Trichlorophenol	ND		1	0.80	ug/L	11/04/2021 1246
2,4,6-Trichlorophenol	ND		1	0.80	ug/L	11/04/2021 1246

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		76	37-129
2-Fluorophenol		56	24-127
Nitrobenzene-d5		80	38-127
Phenol-d5		70	28-128
Terphenyl-d14		95	10-148
2,4,6-Tribromophenol		73	35-144

LOQ = Limit of Quantitation

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N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20359-002

Matrix: Aqueous

Batch: 20359

Prep Method: 3520C

Analytical Method: 8270E

Prep Date: 10/27/2021 1500

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acenaphthene	8.0	5.9		1	74	30-122	11/04/2021 1310
Acenaphthylene	8.0	6.2		1	78	30-130	11/04/2021 1310
Acetophenone	8.0	6.8		1	85	52-125	11/04/2021 1310
Anthracene	8.0	6.1		1	76	30-123	11/04/2021 1310
Atrazine	8.0	5.2		1	65	25-121	11/04/2021 1310
Benzaldehyde	8.0	4.2		1	52	20-115	11/04/2021 1310
Benzo(a)anthracene	8.0	6.2		1	78	40-125	11/04/2021 1310
Benzo(a)pyrene	8.0	6.0		1	75	40-128	11/04/2021 1310
Benzo(b)fluoranthene	8.0	6.3		1	79	30-130	11/04/2021 1310
Benzo(g,h,i)perylene	8.0	5.9		1	73	30-130	11/04/2021 1310
Benzo(k)fluoranthene	8.0	6.4		1	80	30-130	11/04/2021 1310
1,1'-Biphenyl	8.0	5.9		1	73	42-120	11/04/2021 1310
4-Bromophenyl phenyl ether	8.0	5.8		1	73	30-124	11/04/2021 1310
Butyl benzyl phthalate	8.0	5.8		1	73	54-135	11/04/2021 1310
Caprolactam	8.0	4.4		1	55	44-152	11/04/2021 1310
Carbazole	8.0	5.0		1	63	45-101	11/04/2021 1310
bis (2-Chloro-1-methylethyl) ether	8.0	5.5		1	68	42-124	11/04/2021 1310
4-Chloro-3-methyl phenol	8.0	6.2		1	77	30-123	11/04/2021 1310
4-Chloroaniline	8.0	3.3		1	41	12-157	11/04/2021 1310
bis(2-Chloroethoxy)methane	8.0	5.5		1	69	44-127	11/04/2021 1310
bis(2-Chloroethyl)ether	8.0	6.3		1	79	46-120	11/04/2021 1310
2-Chloronaphthalene	8.0	5.7		1	72	46-100	11/04/2021 1310
2-Chlorophenol	8.0	6.6		1	83	50-117	11/04/2021 1310
4-Chlorophenyl phenyl ether	8.0	6.4		1	80	30-121	11/04/2021 1310
Chrysene	8.0	6.5		1	82	30-130	11/04/2021 1310
Dibenzo(a,h)anthracene	8.0	5.9		1	74	30-130	11/04/2021 1310
Dibenzofuran	8.0	6.0		1	75	30-118	11/04/2021 1310
3,3'-Dichlorobenzidine	8.0	2.7		1	33	10-126	11/04/2021 1310
2,4-Dichlorophenol	8.0	6.5		1	81	30-121	11/04/2021 1310
Diethylphthalate	8.0	6.5		1	81	40-125	11/04/2021 1310
Dimethyl phthalate	8.0	6.4		1	80	40-127	11/04/2021 1310
2,4-Dimethylphenol	8.0	8.6		1	108	20-125	11/04/2021 1310
Di-n-butyl phthalate	8.0	6.1		1	76	40-127	11/04/2021 1310
4,6-Dinitro-2-methylphenol	8.0	5.7		1	71	56-128	11/04/2021 1310
2,4-Dinitrophenol	16	8.9		1	56	11-126	11/04/2021 1310
2,4-Dinitrotoluene	8.0	6.1		1	76	59-127	11/04/2021 1310
2,6-Dinitrotoluene	8.0	5.7		1	71	59-126	11/04/2021 1310
Di-n-octylphthalate	8.0	5.1		1	64	50-136	11/04/2021 1310
bis(2-Ethylhexyl)phthalate	8.0	5.5		1	68	56-128	11/04/2021 1310
Fluoranthene	8.0	6.3		1	78	40-128	11/04/2021 1310
Fluorene	8.0	5.8		1	72	30-124	11/04/2021 1310
Hexachlorobenzene	8.0	5.9		1	74	30-125	11/04/2021 1310
Hexachlorobutadiene	8.0	6.3		1	79	24-110	11/04/2021 1310
Hexachlorocyclopentadiene	40	30		1	74	16-96	11/04/2021 1310

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20359-002

Matrix: Aqueous

Batch: 20359

Prep Method: 3520C

Analytical Method: 8270E

Prep Date: 10/27/2021 1500

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Hexachloroethane	8.0	5.8		1	72	31-110	11/04/2021 1310
Indeno(1,2,3-c,d)pyrene	8.0	6.0		1	75	30-130	11/04/2021 1310
Isophorone	8.0	6.0		1	75	57-123	11/04/2021 1310
2-Methylnaphthalene	8.0	6.3		1	79	40-132	11/04/2021 1310
2-Methylphenol	8.0	6.7		1	84	56-119	11/04/2021 1310
3+4-Methylphenol	8.0	6.7		1	84	53-119	11/04/2021 1310
Naphthalene	8.0	6.2		1	78	30-130	11/04/2021 1310
2-Nitroaniline	8.0	5.3		1	67	60-124	11/04/2021 1310
3-Nitroaniline	8.0	3.9		1	48	43-123	11/04/2021 1310
4-Nitroaniline	8.0	5.1		1	64	30-135	11/04/2021 1310
Nitrobenzene	8.0	6.9		1	86	51-122	11/04/2021 1310
2-Nitrophenol	8.0	6.4		1	79	51-118	11/04/2021 1310
4-Nitrophenol	16	13		1	82	53-130	11/04/2021 1310
N-Nitrosodi-n-propylamine	8.0	6.5		1	81	54-127	11/04/2021 1310
N-Nitrosodiphenylamine (Diphenylamine)	8.0	5.9		1	74	30-123	11/04/2021 1310
Pentachlorophenol	16	10		1	63	42-131	11/04/2021 1310
Phenanthrene	8.0	5.9		1	74	40-123	11/04/2021 1310
Phenol	8.0	6.3		1	79	49-117	11/04/2021 1310
Pyrene	8.0	6.4		1	80	40-126	11/04/2021 1310
2,4,5-Trichlorophenol	8.0	6.5		1	81	30-123	11/04/2021 1310
2,4,6-Trichlorophenol	8.0	6.6		1	83	30-125	11/04/2021 1310

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		81	37-129
2-Fluorophenol		78	24-127
Nitrobenzene-d5		82	38-127
Phenol-d5		88	28-128
Terphenyl-d14		86	10-148
2,4,6-Tribromophenol		75	35-144

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Semivolatile Organic Compounds by GC/MS - MS

Sample ID: WJ21072-008MS

Matrix: Aqueous

Batch: 20359

Prep Method: 3520C

Analytical Method: 8270E

Prep Date: 10/27/2021 1500

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acenaphthene	ND	16	13		1	82	30-122	11/04/2021 1446
Acenaphthylene	ND	16	13		1	84	30-130	11/04/2021 1446
Acetophenone	ND	16	13		1	81	52-125	11/04/2021 1446
Anthracene	ND	16	13		1	82	30-123	11/04/2021 1446
Atrazine	ND	16	10		1	64	25-121	11/04/2021 1446
Benzaldehyde	ND	16	5.0		1	31	20-115	11/04/2021 1446
Benzo(a)anthracene	ND	16	14		1	85	40-125	11/04/2021 1446
Benzo(a)pyrene	ND	16	14		1	85	40-128	11/04/2021 1446
Benzo(b)fluoranthene	ND	16	14		1	86	30-130	11/04/2021 1446
Benzo(g,h,i)perylene	ND	16	13		1	84	30-130	11/04/2021 1446
Benzo(k)fluoranthene	ND	16	14		1	86	30-130	11/04/2021 1446
1,1'-Biphenyl	ND	16	12		1	77	42-120	11/04/2021 1446
4-Bromophenyl phenyl ether	ND	16	12		1	78	30-124	11/04/2021 1446
Butyl benzyl phthalate	ND	16	13		1	78	54-135	11/04/2021 1446
Caprolactam	ND	16	12		1	76	44-152	11/04/2021 1446
Carbazole	ND	16	11		1	70	45-101	11/04/2021 1446
bis (2-Chloro-1-methylethyl) ether	ND	16	10		1	65	42-124	11/04/2021 1446
4-Chloro-3-methyl phenol	ND	16	12		1	75	30-123	11/04/2021 1446
4-Chloroaniline	ND	16	3.3	N	1	21	30-130	11/04/2021 1446
bis(2-Chloroethoxy)methane	ND	16	11		1	71	44-127	11/04/2021 1446
bis(2-Chloroethyl)ether	ND	16	12		1	76	46-120	11/04/2021 1446
2-Chloronaphthalene	ND	16	12		1	75	46-100	11/04/2021 1446
2-Chlorophenol	ND	16	11		1	69	50-117	11/04/2021 1446
4-Chlorophenyl phenyl ether	ND	16	14		1	90	30-121	11/04/2021 1446
Chrysene	ND	16	14		1	88	30-130	11/04/2021 1446
Dibenzo(a,h)anthracene	ND	16	13		1	84	30-130	11/04/2021 1446
Dibenzofuran	ND	16	13		1	83	30-118	11/04/2021 1446
3,3'-Dichlorobenzidine	ND	16	3.8		1	24	10-126	11/04/2021 1446
2,4-Dichlorophenol	ND	16	13		1	81	30-121	11/04/2021 1446
Diethylphthalate	ND	16	14		1	90	40-125	11/04/2021 1446
Dimethyl phthalate	ND	16	14		1	88	40-127	11/04/2021 1446
2,4-Dimethylphenol	ND	16	20	N	1	127	20-125	11/04/2021 1446
Di-n-butyl phthalate	ND	16	13		1	83	40-127	11/04/2021 1446
4,6-Dinitro-2-methylphenol	ND	16	13		1	80	56-128	11/04/2021 1446
2,4-Dinitrophenol	ND	32	22		1	70	30-130	11/04/2021 1446
2,4-Dinitrotoluene	ND	16	14		1	86	59-127	11/04/2021 1446
2,6-Dinitrotoluene	ND	16	13		1	80	59-126	11/04/2021 1446
Di-n-octylphthalate	ND	16	12		1	76	50-136	11/04/2021 1446
bis(2-Ethylhexyl)phthalate	ND	16	13		1	81	56-128	11/04/2021 1446
Fluoranthene	ND	16	13		1	83	40-128	11/04/2021 1446
Fluorene	ND	16	13		1	80	30-124	11/04/2021 1446
Hexachlorobenzene	ND	16	13		1	79	30-125	11/04/2021 1446
Hexachlorobutadiene	ND	16	13		1	81	30-130	11/04/2021 1446
Hexachlorocyclopentadiene	ND	80	74		1	92	16-96	11/04/2021 1446

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Semivolatile Organic Compounds by GC/MS - MS

Sample ID: WJ21072-008MS

Matrix: Aqueous

Batch: 20359

Prep Method: 3520C

Analytical Method: 8270E

Prep Date: 10/27/2021 1500

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Hexachloroethane	ND	16	12		1	73	31-110	11/04/2021 1446
Indeno(1,2,3-c,d)pyrene	ND	16	14		1	86	30-130	11/04/2021 1446
Isophorone	ND	16	12		1	77	57-123	11/04/2021 1446
2-Methylnaphthalene	ND	16	13		1	80	40-132	11/04/2021 1446
2-Methylphenol	ND	16	13		1	80	56-119	11/04/2021 1446
3+4-Methylphenol	ND	16	12		1	77	53-119	11/04/2021 1446
Naphthalene	ND	16	13		1	78	30-130	11/04/2021 1446
2-Nitroaniline	ND	16	11		1	68	60-124	11/04/2021 1446
3-Nitroaniline	ND	16	6.7	N	1	42	43-123	11/04/2021 1446
4-Nitroaniline	ND	16	10		1	63	30-135	11/04/2021 1446
Nitrobenzene	ND	16	14		1	90	51-122	11/04/2021 1446
2-Nitrophenol	ND	16	13		1	82	51-118	11/04/2021 1446
4-Nitrophenol	ND	32	32		1	101	53-130	11/04/2021 1446
N-Nitrosodi-n-propylamine	ND	16	12		1	78	54-127	11/04/2021 1446
N-Nitrosodiphenylamine (Diphenylamine)	ND	16	12		1	73	30-123	11/04/2021 1446
Pentachlorophenol	ND	32	24		1	73	42-131	11/04/2021 1446
Phenanthrene	ND	16	12		1	78	40-123	11/04/2021 1446
Phenol	ND	16	11		1	69	49-117	11/04/2021 1446
Pyrene	ND	16	13		1	83	40-126	11/04/2021 1446
2,4,5-Trichlorophenol	ND	16	14		1	85	30-123	11/04/2021 1446
2,4,6-Trichlorophenol	ND	16	14		1	87	30-125	11/04/2021 1446

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		83	37-129
2-Fluorophenol		63	24-127
Nitrobenzene-d5		82	38-127
Phenol-d5		73	28-128
Terphenyl-d14		86	10-148
2,4,6-Tribromophenol		76	35-144

LOQ = Limit of Quantitation

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P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: WJ21072-008MD

Matrix: Aqueous

Batch: 20359

Prep Method: 3520C

Analytical Method: 8270E

Prep Date: 10/27/2021 1500

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	16	9.9		1	62	28	30-122	40	11/04/2021 1510
Acenaphthylene	ND	16	10		1	64	26	30-130	40	11/04/2021 1510
Acetophenone	ND	16	11		1	66	20	52-125	40	11/04/2021 1510
Anthracene	ND	16	10		1	65	23	30-123	40	11/04/2021 1510
Atrazine	ND	16	9.0		1	56	14	25-121	40	11/04/2021 1510
Benzaldehyde	ND	16	8.2	+	1	51	48	20-115	40	11/04/2021 1510
Benzo(a)anthracene	ND	16	11		1	69	21	40-125	40	11/04/2021 1510
Benzo(a)pyrene	ND	16	11		1	69	21	40-128	40	11/04/2021 1510
Benzo(b)fluoranthene	ND	16	11		1	70	21	30-130	40	11/04/2021 1510
Benzo(g,h,i)perylene	ND	16	11		1	70	18	30-130	40	11/04/2021 1510
Benzo(k)fluoranthene	ND	16	12		1	73	16	30-130	40	11/04/2021 1510
1,1'-Biphenyl	ND	16	9.4		1	59	26	42-120	40	11/04/2021 1510
4-Bromophenyl phenyl ether	ND	16	10		1	64	20	30-124	40	11/04/2021 1510
Butyl benzyl phthalate	ND	16	11		1	66	17	54-135	40	11/04/2021 1510
Caprolactam	ND	16	9.4		1	59	26	44-152	40	11/04/2021 1510
Carbazole	ND	16	9.1		1	57	20	45-101	40	11/04/2021 1510
bis (2-Chloro-1-methylethyl) ether	ND	16	8.2		1	51	23	42-124	40	11/04/2021 1510
4-Chloro-3-methyl phenol	ND	16	10		1	64	16	30-123	40	11/04/2021 1510
4-Chloroaniline	ND	16	5.3	+	1	33	47	30-130	40	11/04/2021 1510
bis(2-Chloroethoxy)methane	ND	16	8.6		1	54	27	44-127	40	11/04/2021 1510
bis(2-Chloroethyl)ether	ND	16	8.9		1	56	31	46-120	40	11/04/2021 1510
2-Chloronaphthalene	ND	16	9.1		1	57	27	46-100	40	11/04/2021 1510
2-Chlorophenol	ND	16	9.9		1	62	11	50-117	40	11/04/2021 1510
4-Chlorophenyl phenyl ether	ND	16	11		1	68	27	30-121	40	11/04/2021 1510
Chrysene	ND	16	12		1	72	19	30-130	40	11/04/2021 1510
Dibenzo(a,h)anthracene	ND	16	11		1	69	19	30-130	40	11/04/2021 1510
Dibenzofuran	ND	16	10		1	62	28	30-118	40	11/04/2021 1510
3,3'-Dichlorobenzidine	ND	16	5.0		1	31	28	10-126	40	11/04/2021 1510
2,4-Dichlorophenol	ND	16	10		1	65	22	30-121	40	11/04/2021 1510
Diethylphthalate	ND	16	12		1	72	23	40-125	40	11/04/2021 1510
Dimethyl phthalate	ND	16	11		1	69	24	40-127	40	11/04/2021 1510
2,4-Dimethylphenol	ND	16	14		1	89	36	20-125	40	11/04/2021 1510
Di-n-butyl phthalate	ND	16	11		1	66	23	40-127	40	11/04/2021 1510
4,6-Dinitro-2-methylphenol	ND	16	10		1	65	22	56-128	40	11/04/2021 1510
2,4-Dinitrophenol	ND	32	17		1	53	28	30-130	40	11/04/2021 1510
2,4-Dinitrotoluene	ND	16	11		1	67	24	59-127	40	11/04/2021 1510
2,6-Dinitrotoluene	ND	16	9.8		1	61	26	59-126	40	11/04/2021 1510
Di-n-octylphthalate	ND	16	9.7		1	61	23	50-136	40	11/04/2021 1510
bis(2-Ethylhexyl)phthalate	ND	16	9.7		1	61	28	56-128	40	11/04/2021 1510
Fluoranthene	ND	16	11		1	67	21	40-128	40	11/04/2021 1510
Fluorene	ND	16	9.8		1	61	27	30-124	40	11/04/2021 1510
Hexachlorobenzene	ND	16	10		1	64	21	30-125	40	11/04/2021 1510
Hexachlorobutadiene	ND	16	10		1	62	26	30-130	40	11/04/2021 1510
Hexachlorocyclopentadiene	ND	80	54		1	68	30	16-96	40	11/04/2021 1510

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+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: WJ21072-008MD

Matrix: Aqueous

Batch: 20359

Prep Method: 3520C

Analytical Method: 8270E

Prep Date: 10/27/2021 1500

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Hexachloroethane	ND	16	9.0		1	56	27	31-110	40	11/04/2021 1510
Indeno(1,2,3-c,d)pyrene	ND	16	11		1	71	19	30-130	40	11/04/2021 1510
Isophorone	ND	16	9.9		1	62	22	57-123	40	11/04/2021 1510
2-Methylnaphthalene	ND	16	10		1	63	24	40-132	40	11/04/2021 1510
2-Methylphenol	ND	16	11		1	66	19	56-119	40	11/04/2021 1510
3+4-Methylphenol	ND	16	10		1	65	17	53-119	40	11/04/2021 1510
Naphthalene	ND	16	9.9		1	62	24	30-130	40	11/04/2021 1510
2-Nitroaniline	ND	16	8.8	N	1	55	21	60-124	40	11/04/2021 1510
3-Nitroaniline	ND	16	6.9		1	43	3.3	43-123	40	11/04/2021 1510
4-Nitroaniline	ND	16	9.1		1	57	10	30-135	40	11/04/2021 1510
Nitrobenzene	ND	16	11		1	70	25	51-122	40	11/04/2021 1510
2-Nitrophenol	ND	16	10		1	63	26	51-118	40	11/04/2021 1510
4-Nitrophenol	ND	32	24		1	74	31	53-130	40	11/04/2021 1510
N-Nitrosodi-n-propylamine	ND	16	11		1	68	14	54-127	40	11/04/2021 1510
N-Nitrosodiphenylamine (Diphenylamine)	ND	16	9.9		1	62	16	30-123	40	11/04/2021 1510
Pentachlorophenol	ND	32	18		1	57	26	42-131	40	11/04/2021 1510
Phenanthrene	ND	16	10		1	64	20	40-123	40	11/04/2021 1510
Phenol	ND	16	9.7		1	61	13	49-117	40	11/04/2021 1510
Pyrene	ND	16	11		1	67	21	40-126	40	11/04/2021 1510
2,4,5-Trichlorophenol	ND	16	11		1	67	23	30-123	40	11/04/2021 1510
2,4,6-Trichlorophenol	ND	16	11		1	69	24	30-125	40	11/04/2021 1510

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		64	37-129
2-Fluorophenol		57	24-127
Nitrobenzene-d5		64	38-127
Phenol-d5		66	28-128
Terphenyl-d14		71	10-148
2,4,6-Tribromophenol		65	35-144

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Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents



**PACE ANALYTICAL SERVICES, LLC**  
 106 Vantage Point Drive • West Columbia, SC 29172  
 Telephone No. 803-791-0700 Fax No. 803-791-9111  
 www.pacelabs.com

**Number 126223**

Client: WESTINGHOUSE  
 Address: 5801 BUFF RD  
 City: HICKORY State: SC Zip Code: 29061  
 Project Name: Q4 2021 Sampling  
 Project No.: P.O. No.:  
 Report to Contact: Diana Jayar  
 Sampler's Signature: [Signature]  
 Printer's Name: James Langhat  
 Telephone No. / E-mail: 803 647 1720  
 Analysis (Attach list if number space is required): JOY WERTZ@WESTINGHOUSE.COM  
 Barcode: WJ21072  
 Page 1 of 2

Sample ID / Description (Containers for each sample may be combined on one line.)	Collection Date (Military)	Collection Time (Military)	Matrix				No. of Containers by Preservation Type				Remarks / Cooler I.D.	
			Water	Soil	Sludge	Other	Refrigerated	Frozen	Other	None		
W-46-2021-Q4	10-21-21	0903	G	X				1	3			
W-RW2-2021-Q4		1003	G	X				3	3			
W-70-2021-Q4		1127	G	X				1	3			
W-69-2021-Q4		1223	G	X				1	3			
W-71-2021-Q4		1324	G	X				1	3			
W-71-2021-Q4-DUP		1324	G	X				1	3			
TB-01-102121				X					2			

Turn Around Time Required (Prior lab approval required for expedited TAT.)  
 Standard  Rush (Specify)  Flash (Specify)  
 1. Refiniquished by: [Signature] Date: 10-21-21 Time: 1650  
 2. Refiniquished by: [Signature] Date: Time:  
 3. Refiniquished by: Date: Time:  
 4. Refiniquished by: Date: Time:

Sample Disposal:  
 Return to Client  Dispose by 1st  
 1. Recycled by: Date: Time:  
 2. Recycled by: Date: Time:  
 3. Recycled by: Date: Time:  
 4. Laboratory retained for 90 days: [Signature] Date: 10/21/21 Time: 1650

Possible Hazard Identification:  
 Non-Hazard  Flammable  Skin Irritant  Poison  Unknown  
 OC Requirements (Specify):  
 Date: Time:  
 Date: Time:  
 Date: Time:  
 Date: Time: 10/21/21 Time: 1650  
 Receipt Temp. 4.5 °C

LAB USE ONLY  
 Received on ice (Circle) Yes No  
 Note: All samples are retained for four weeks from receipt unless other arrangements are made.

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s), PINK-Field/Client Copy Document Number: WJ21072



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

**Number 126224**

Client <b>WESTINGHOUSE</b>		Report to Contact <b>DIANA JOYNER</b>		Telephone No. / Email <b>803 647 1920</b>		Quote No.											
Address <b>5801 BUFF RD</b>		Sampler's Signature <i>[Signature]</i>		Analyst (attach list if more space is needed) <b>JOHNNARD WESTINGHOUSE.COM</b>		Page <b>2</b> of <b>2</b>											
City <b>Hartkins</b>		Printed Name <b>JAMES LEIGHTON</b>		Barcode <b>VJ21072</b>		Remarks / Cooler I.D.											
State <b>SC</b>		Zip Code <b>29061</b>		Project Name <b>04 2021 Samples</b>		S.N.C.											
Project No.		P.O. No.		Analog		Remarks / Cooler I.D.											
Sample ID / Description (Statistics by each sample may be combined on one line.)	Collection Date(s)	Collection Time (Military)	Matrix				An of Containers by Preservative Type				Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown	OC Requirements (Specify)					
			Water	Soil	Sludge	Other	100%	50%	25%	10%			Date	Time			
W-41R-2021-Q4	10-21-21	0906	✓					3									
W-8E-2021-Q4		1112	✓					1									
W-89-2021-Q4		1208	✓					1									
W-24-2021-Q4		1415	✓					1									
W-41R-2021-Q4-MS		0906	✓					3									
W-41R-2021-Q4-MSD		0906	✓					3									
EB-01-102121		1233	✓					1									

Turn Around Time Required (Prior lab approval required for expedited (RUSH))	Sample Disposed?	Sample Hazard Identification
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify)	<input checked="" type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Discard by Lab	<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown
1. Relinquished by <i>[Signature]</i>	Date 10-21-21	Time 1450
2. Relinquished by	Date	Time
3. Relinquished by	Date	Time
4. Relinquished by	Date	Time

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Samples; PINK-Field/Client Copy  
 Document Number: MEM03042-01



**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: KDRW / 10/21/2021

Lot #: WJ21072

Means of receipt: <input checked="" type="checkbox"/> Pace <input type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: <u>NA</u> Chlorine Strip ID: <u>NA</u> Tested by: <u>NA</u>	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: <u>NA</u> <u>4.5 / 4.5</u> °C <u>NA / NA</u> °C <u>NA / NA</u> °C <u>NA / NA</u> °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: <u>3</u> IR Gun Correction Factor: <u>0</u> °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: <u>phone / email / face-to-face</u> (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # _____
<b>Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)</b>	
Sample(s) <u>NA</u> were received incorrectly preserved and were adjusted accordingly in sample receiving with <u>NA</u> mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # <u>NA</u>	
Time of preservation <u>NA</u> . If more than one preservative is needed, please note in the comments below.	
Sample(s) <u>NA</u> were received with bubbles >6 mm in diameter.	
Sample(s) <u>NA</u> were received with TRC > 0.5 mg/L (If #19 is <i>no</i> ) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) with Shealy ID: <u>NA</u>	
SR barcode labels applied by: <u>KDRW</u> Date: <u>10/21/2021</u>	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Q4 2021 Sampling

Lot Number: **WJ22038**

Date Completed: 11/07/2021

11/09/2021 3:47 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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# 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: WJ22038

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

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

The continuing calibration verification (CCV) associated with analytical batch 21142 had Methyl Acetate recovered below acceptance limits. There were no detections for this compound in the associated samples. A LOQ standard was analyzed and the compound was detected, demonstrating there was adequate sensitivity to identify the analyte if it were present

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ22038  
Project Name: Q4 2021 Sampling  
Project Number:

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Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-92-2021-Q4	Aqueous	10/22/2021 1201	10/22/2021
002	W-27-2021-Q4	Aqueous	10/22/2021 1303	10/22/2021
003	W-86-2021-Q4	Aqueous	10/22/2021 0923	10/22/2021
004	W-85-2021-Q4	Aqueous	10/22/2021 1113	10/22/2021
005	TB-01-102201	Aqueous	10/22/2021	10/22/2021

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(5 samples)

# PACE ANALYTICAL SERVICES, LLC

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Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ22038  
Project Name: Q4 2021 Sampling  
Project Number:

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Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
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(0 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-001
Description: W-92-2021-Q4	Matrix: Aqueous
Date Sampled: 10/22/2021 1201	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/23/2021 1308	AAB		19947

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-001
Description: W-92-2021-Q4	Matrix: Aqueous
Date Sampled: 10/22/2021 1201	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/03/2021 1302	BWS		21142

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-001
Description: W-92-2021-Q4	Matrix: Aqueous
Date Sampled: 10/22/2021 1201	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/03/2021 1302	BWS		21142

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		83	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		95	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-002
Description: W-27-2021-Q4	Matrix: Aqueous
Date Sampled: 10/22/2021 1303	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/23/2021 1310	AAB		19947

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-002
Description: W-27-2021-Q4	Matrix: Aqueous
Date Sampled: 10/22/2021 1303	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/03/2021 1327	BWS		21142

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-002
Description: W-27-2021-Q4	Matrix: Aqueous
Date Sampled: 10/22/2021 1303	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/03/2021 1327	BWS		21142

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		81	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		92	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-003
Description: W-86-2021-Q4	Matrix: Aqueous
Date Sampled: 10/22/2021 0923	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/23/2021 1311	AAB		19947

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-003
Description: W-86-2021-Q4	Matrix: Aqueous
Date Sampled: 10/22/2021 0923	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/03/2021 1352	BWS		21142

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-003
Description: W-86-2021-Q4	Matrix: Aqueous
Date Sampled: 10/22/2021 0923	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/03/2021 1352	BWS		21142

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		86	70-130
1,2-Dichloroethane-d4		129	70-130
Toluene-d8		99	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-004
Description: W-85-2021-Q4	Matrix: Aqueous
Date Sampled: 10/22/2021 1113	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/23/2021 1313	AAB		19947

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-004
Description: W-85-2021-Q4	Matrix: Aqueous
Date Sampled: 10/22/2021 1113	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/03/2021 1418	BWS		21142

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-004
Description: W-85-2021-Q4	Matrix: Aqueous
Date Sampled: 10/22/2021 1113	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/03/2021 1418	BWS		21142

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		86	70-130
1,2-Dichloroethane-d4		127	70-130
Toluene-d8		101	70-130

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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-005
Description: TB-01-102201	Matrix: Aqueous
Date Sampled: 10/22/2021	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/03/2021 1147	BWS		21142

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ22038-005
Description: TB-01-102201	Matrix: Aqueous
Date Sampled: 10/22/2021	Project Name: Q4 2021 Sampling
Date Received: 10/22/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/03/2021 1147	BWS		21142

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		88	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		98	70-130

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

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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ19947-001

Matrix: Aqueous

Batch: 19947

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/23/2021 1305

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ19947-002

Matrix: Aqueous

Batch: 19947

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.40		1	100	90-110	10/23/2021 1306

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ21142-001

Matrix: Aqueous

Batch: 21142

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	11/03/2021 0957
Benzene	ND		1	1.0	ug/L	11/03/2021 0957
Bromodichloromethane	ND		1	1.0	ug/L	11/03/2021 0957
Bromoform	ND		1	1.0	ug/L	11/03/2021 0957
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	11/03/2021 0957
2-Butanone (MEK)	ND		1	10	ug/L	11/03/2021 0957
Carbon disulfide	ND		1	1.0	ug/L	11/03/2021 0957
Carbon tetrachloride	ND		1	1.0	ug/L	11/03/2021 0957
Chlorobenzene	ND		1	1.0	ug/L	11/03/2021 0957
Chloroethane	ND		1	2.0	ug/L	11/03/2021 0957
Chloroform	ND		1	1.0	ug/L	11/03/2021 0957
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	11/03/2021 0957
Cyclohexane	ND		1	1.0	ug/L	11/03/2021 0957
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	11/03/2021 0957
Dibromochloromethane	ND		1	1.0	ug/L	11/03/2021 0957
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	11/03/2021 0957
1,2-Dichlorobenzene	ND		1	1.0	ug/L	11/03/2021 0957
1,3-Dichlorobenzene	ND		1	1.0	ug/L	11/03/2021 0957
1,4-Dichlorobenzene	ND		1	1.0	ug/L	11/03/2021 0957
Dichlorodifluoromethane	ND		1	2.0	ug/L	11/03/2021 0957
1,1-Dichloroethane	ND		1	1.0	ug/L	11/03/2021 0957
1,2-Dichloroethane	ND		1	1.0	ug/L	11/03/2021 0957
1,1-Dichloroethene	ND		1	1.0	ug/L	11/03/2021 0957
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	11/03/2021 0957
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	11/03/2021 0957
1,2-Dichloropropane	ND		1	1.0	ug/L	11/03/2021 0957
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	11/03/2021 0957
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	11/03/2021 0957
Ethylbenzene	ND		1	1.0	ug/L	11/03/2021 0957
2-Hexanone	ND		1	10	ug/L	11/03/2021 0957
Isopropylbenzene	ND		1	1.0	ug/L	11/03/2021 0957
Methyl acetate	ND		1	1.0	ug/L	11/03/2021 0957
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	11/03/2021 0957
4-Methyl-2-pentanone	ND		1	10	ug/L	11/03/2021 0957
Methylcyclohexane	ND		1	5.0	ug/L	11/03/2021 0957
Methylene chloride	ND		1	1.0	ug/L	11/03/2021 0957
Styrene	ND		1	1.0	ug/L	11/03/2021 0957
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	11/03/2021 0957
Tetrachloroethene	ND		1	1.0	ug/L	11/03/2021 0957
Toluene	ND		1	1.0	ug/L	11/03/2021 0957
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	11/03/2021 0957
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	11/03/2021 0957
1,1,1-Trichloroethane	ND		1	1.0	ug/L	11/03/2021 0957
1,1,2-Trichloroethane	ND		1	1.0	ug/L	11/03/2021 0957

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ21142-001

Matrix: Aqueous

Batch: 21142

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	11/03/2021 0957
Trichlorofluoromethane	ND		1	1.0	ug/L	11/03/2021 0957
Vinyl chloride	ND		1	1.0	ug/L	11/03/2021 0957
Xylenes (total)	ND		1	1.0	ug/L	11/03/2021 0957
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		87	70-130			
1,2-Dichloroethane-d4		101	70-130			
Toluene-d8		94	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ21142-002

Matrix: Aqueous

Batch: 21142

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	85		1	85	60-140	11/03/2021 0857
Benzene	50	48		1	96	70-130	11/03/2021 0857
Bromodichloromethane	50	47		1	94	70-130	11/03/2021 0857
Bromoform	50	56		1	112	70-130	11/03/2021 0857
Bromomethane (Methyl bromide)	50	46		1	93	70-130	11/03/2021 0857
2-Butanone (MEK)	100	95		1	95	70-130	11/03/2021 0857
Carbon disulfide	50	47		1	94	70-130	11/03/2021 0857
Carbon tetrachloride	50	46		1	92	70-130	11/03/2021 0857
Chlorobenzene	50	52		1	104	70-130	11/03/2021 0857
Chloroethane	50	51		1	102	70-130	11/03/2021 0857
Chloroform	50	44		1	89	70-130	11/03/2021 0857
Chloromethane (Methyl chloride)	50	51		1	102	60-140	11/03/2021 0857
Cyclohexane	50	41		1	81	70-130	11/03/2021 0857
1,2-Dibromo-3-chloropropane (DBCP)	50	47		1	94	70-130	11/03/2021 0857
Dibromochloromethane	50	55		1	109	70-130	11/03/2021 0857
1,2-Dibromoethane (EDB)	50	52		1	105	70-130	11/03/2021 0857
1,2-Dichlorobenzene	50	53		1	106	70-130	11/03/2021 0857
1,3-Dichlorobenzene	50	52		1	105	70-130	11/03/2021 0857
1,4-Dichlorobenzene	50	50		1	101	70-130	11/03/2021 0857
Dichlorodifluoromethane	50	55		1	111	60-140	11/03/2021 0857
1,1-Dichloroethane	50	44		1	87	70-130	11/03/2021 0857
1,2-Dichloroethane	50	46		1	92	70-130	11/03/2021 0857
1,1-Dichloroethene	50	48		1	96	70-130	11/03/2021 0857
cis-1,2-Dichloroethene	50	46		1	93	70-130	11/03/2021 0857
trans-1,2-Dichloroethene	50	47		1	95	70-130	11/03/2021 0857
1,2-Dichloropropane	50	45		1	90	70-130	11/03/2021 0857
cis-1,3-Dichloropropene	50	50		1	101	70-130	11/03/2021 0857
trans-1,3-Dichloropropene	50	57		1	114	70-130	11/03/2021 0857
Ethylbenzene	50	55		1	110	70-130	11/03/2021 0857
2-Hexanone	100	94		1	94	70-130	11/03/2021 0857
Isopropylbenzene	50	52		1	104	70-130	11/03/2021 0857
Methyl acetate	50	35		1	71	70-130	11/03/2021 0857
Methyl tertiary butyl ether (MTBE)	50	47		1	94	70-130	11/03/2021 0857
4-Methyl-2-pentanone	100	82		1	82	70-130	11/03/2021 0857
Methylcyclohexane	50	52		1	104	70-130	11/03/2021 0857
Methylene chloride	50	44		1	89	70-130	11/03/2021 0857
Styrene	50	52		1	103	70-130	11/03/2021 0857
1,1,2,2-Tetrachloroethane	50	51		1	102	70-130	11/03/2021 0857
Tetrachloroethene	50	52		1	104	70-130	11/03/2021 0857
Toluene	50	51		1	103	70-130	11/03/2021 0857
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	47		1	93	70-130	11/03/2021 0857
1,2,4-Trichlorobenzene	50	51		1	102	70-130	11/03/2021 0857
1,1,1-Trichloroethane	50	45		1	90	70-130	11/03/2021 0857
1,1,2-Trichloroethane	50	53		1	106	70-130	11/03/2021 0857

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ21142-002

Matrix: Aqueous

Batch: 21142

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	50		1	100	70-130	11/03/2021 0857
Trichlorofluoromethane	50	51		1	101	70-130	11/03/2021 0857
Vinyl chloride	50	50		1	100	70-130	11/03/2021 0857
Xylenes (total)	100	110		1	107	70-130	11/03/2021 0857
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		100			70-130		
1,2-Dichloroethane-d4		89			70-130		
Toluene-d8		97			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents





Samples Receipt Checklist (SRC) (ME0018C-15)  
Issuing Authority: Pace ENV - WCOL

Revised: 0/29/2020  
Page 1 of 1

Sample Receipt Checklist (SRC)

Client: Westinghouse

Cooler Inspected by/date: KDRW / 10/22/2021

Lot #: WJ22038

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA 2.8 / 2.8 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Pucks <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)</b>	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA ml. 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.	
Sample(s) NA were received with TRC > 0.5 mg/L (If #19 is <i>no</i> ) and were adjusted accordingly in sample 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: KDRW Date: 10/22/2021	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Q4 2021 Sampling

Lot Number: **WJ25047**

Date Completed: 11/07/2021

11/10/2021 2:59 PM

Approved and released by:

Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)  
106 Vantage Point Drive West Columbia, SC 29172  
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# 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: WJ25047

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

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

The continuing calibration verification (CCV) associated with batch 21308 had Cyclohexane recovered below acceptance limits. There were no detections for this compound in the associated samples. A LOQ standard was analyzed and the compound was detected, demonstrating there was adequate sensitivity to identify the analyte if it were present.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ25047  
Project Name: Q4 2021 Sampling  
Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-4R-2021-Q4	Aqueous	10/25/2021 0903	10/25/2021
002	W-3A-2021-Q4	Aqueous	10/25/2021 0957	10/25/2021
003	W-105-2021-Q4	Aqueous	10/25/2021 1126	10/25/2021
004	W-125-2021-Q4	Aqueous	10/25/2021 1215	10/25/2021
005	W-108-2021-Q4	Aqueous	10/25/2021 1320	10/25/2021
006	W-108-2021-Q4-Dup	Aqueous	10/25/2021 1320	10/25/2021
007	TB-01-102521	Aqueous	10/25/2021	10/25/2021
008	W-96-2021-Q4	Aqueous	10/25/2021 0855	10/25/2021
009	W-126-2021-Q4	Aqueous	10/25/2021 1016	10/25/2021
010	W-104-2021-Q4	Aqueous	10/25/2021 1146	10/25/2021
011	W-124-2021-Q4	Aqueous	10/25/2021 1255	10/25/2021
012	W-97-2021-Q4	Aqueous	10/25/2021 1350	10/25/2021
013	W-97-2021-Q4-Dup	Aqueous	10/25/2021 1350	10/25/2021

(13 samples)

# PACE ANALYTICAL SERVICES, LLC

Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ25047  
Project Name: Q4 2021 Sampling  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
003	W-105-2021-Q4	Aqueous	Nitrate - N	353.2	0.089		mg/L	12
004	W-125-2021-Q4	Aqueous	Nitrate - N	353.2	0.073		mg/L	15
005	W-108-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	1.5		ug/L	19
006	W-108-2021-Q4-Dup	Aqueous	cis-1,2-Dichloroethene	8260D	1.6		ug/L	22
006	W-108-2021-Q4-Dup	Aqueous	Vinyl chloride	8260D	1.0		ug/L	23
008	W-96-2021-Q4	Aqueous	Tetrachloroethene	8260D	1.3		ug/L	27
008	W-96-2021-Q4	Aqueous	Trichloroethene	8260D	2.0		ug/L	28
009	W-126-2021-Q4	Aqueous	Nitrate - N	353.2	0.060		mg/L	29
010	W-104-2021-Q4	Aqueous	Nitrate - N	353.2	6.4		mg/L	32
010	W-104-2021-Q4	Aqueous	Tetrachloroethene	8260D	3.1		ug/L	33
010	W-104-2021-Q4	Aqueous	Trichloroethene	8260D	1.9		ug/L	34
012	W-97-2021-Q4	Aqueous	Nitrate - N	353.2	4.5		mg/L	38
012	W-97-2021-Q4	Aqueous	Tetrachloroethene	8260D	5.6		ug/L	39
012	W-97-2021-Q4	Aqueous	Trichloroethene	8260D	1.7		ug/L	40
013	W-97-2021-Q4-Dup	Aqueous	Nitrate - N	353.2	4.2		mg/L	41
013	W-97-2021-Q4-Dup	Aqueous	Tetrachloroethene	8260D	5.9		ug/L	42
013	W-97-2021-Q4-Dup	Aqueous	Trichloroethene	8260D	1.7		ug/L	43

(17 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-001
Description: W-4R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 0903	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/26/2021 1628	MSG		20202

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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 106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-001
Description: W-4R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 0903	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1128	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-001
Description: W-4R-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 0903	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1128	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		81	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		87	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-002
Description: W-3A-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 0957	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/26/2021 1629	MSG		20202

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-002
Description: W-3A-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 0957	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/31/2021 0541	BBW		20709

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND	S	2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-002
Description: W-3A-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 0957	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	10/31/2021 0541	BBW		20709

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		96	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		102	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-003
Description: W-105-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1126	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/26/2021 1713	MSG		20202

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.089	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-003
Description: W-105-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1126	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1152	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-003
Description: W-105-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1126	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1152	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		96	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-004
Description: W-125-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1215	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/26/2021 1715	MSG		20202

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-004
Description: W-125-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1215	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1217	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-004
Description: W-125-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1215	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1217	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		88	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		108	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-005
Description: W-108-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1320	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/26/2021 1643	MSG		20202

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-005
Description: W-108-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1320	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1242	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	1.5		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-005
Description: W-108-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1320	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1242	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		77	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		88	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-006
Description: W-108-2021-Q4-Dup	Matrix: Aqueous
Date Sampled: 10/25/2021 1320	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/26/2021 1644	MSG		20202

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-006
Description: W-108-2021-Q4-Dup	Matrix: Aqueous
Date Sampled: 10/25/2021 1320	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1307	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	1.6		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-006
Description: W-108-2021-Q4-Dup	Matrix: Aqueous
Date Sampled: 10/25/2021 1320	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1307	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	1.0		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		88	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		99	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-007
Description: TB-01-102521	Matrix: Aqueous
Date Sampled: 10/25/2021	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1103	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-007
Description: TB-01-102521	Matrix: Aqueous
Date Sampled: 10/25/2021	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1103	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		83	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		93	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-008
Description: W-96-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 0855	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/26/2021 1646	MSG		20202

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	ND	S	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-008
Description: W-96-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 0855	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1332	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND	S	1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	1.3		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-008
Description: W-96-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 0855	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1332	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	2.0		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		106	70-130
Toluene-d8		97	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-009
Description: W-126-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1016	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/26/2021 1716	MSG		20202

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.060	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-009
Description: W-126-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1016	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1356	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,1,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-009
Description: W-126-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1016	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1356	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		80	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		93	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-010
Description: W-104-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1146	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	10/26/2021 1653	MSG		20202

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	6.4	0.20	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-010
Description: W-104-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1146	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1421	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	3.1		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-010
Description: W-104-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1146	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1421	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	1.9		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		84	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		90	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-011
Description: W-124-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1255	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/26/2021 1654	MSG		20202

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-011
Description: W-124-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1255	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1446	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,1,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-011
Description: W-124-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1255	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1446	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		79	70-130
1,2-Dichloroethane-d4		102	70-130
Toluene-d8		86	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-012
Description: W-97-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1350	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/26/2021 1743	MSG		20202

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	4.5	0.10	mg/L	1

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  
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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-012
Description: W-97-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1350	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1510	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	5.6		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-012
Description: W-97-2021-Q4	Matrix: Aqueous
Date Sampled: 10/25/2021 1350	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1510	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	1.7		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		85	70-130
1,2-Dichloroethane-d4		105	70-130
Toluene-d8		90	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-013
Description: W-97-2021-Q4-Dup	Matrix: Aqueous
Date Sampled: 10/25/2021 1350	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	10/26/2021 1745	MSG		20202

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	4.2	0.10	mg/L	1

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-013
Description: W-97-2021-Q4-Dup	Matrix: Aqueous
Date Sampled: 10/25/2021 1350	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1535	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	5.9		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ25047-013
Description: W-97-2021-Q4-Dup	Matrix: Aqueous
Date Sampled: 10/25/2021 1350	Project Name: Q4 2021 Sampling
Date Received: 10/25/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1535	BWS		21308

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	1.7		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		87	70-130
1,2-Dichloroethane-d4		103	70-130
Toluene-d8		92	70-130

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

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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ20202-001

Matrix: Aqueous

Batch: 20202

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/26/2021 1624

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ20202-002

Matrix: Aqueous

Batch: 20202

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.42		1	104	90-110	10/26/2021 1626

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MS

Sample ID: WJ25047-002MS

Matrix: Aqueous

Batch: 20202

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	ND	0.40	0.38		1	94	90-110	10/26/2021 1631

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MSD

Sample ID: WJ25047-002MD

Matrix: Aqueous

Batch: 20202

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	ND	0.40	0.37		1	93	0.75	90-110	20	10/26/2021 1633

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MS

Sample ID: WJ25047-008MS

Matrix: Aqueous

Batch: 20202

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	ND	0.40	ND	N	1	0.00	90-110	10/26/2021 1648

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MSD

Sample ID: WJ25047-008MD

Matrix: Aqueous

Batch: 20202

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	ND	0.40	ND	N	1	0.00	0.00	90-110	20	10/26/2021 1649

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20709-001

Matrix: Aqueous

Batch: 20709

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	10/30/2021 2124
Benzene	ND		1	1.0	ug/L	10/30/2021 2124
Bromodichloromethane	ND		1	1.0	ug/L	10/30/2021 2124
Bromoform	ND		1	1.0	ug/L	10/30/2021 2124
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	10/30/2021 2124
2-Butanone (MEK)	ND		1	10	ug/L	10/30/2021 2124
Carbon disulfide	ND		1	1.0	ug/L	10/30/2021 2124
Carbon tetrachloride	ND		1	1.0	ug/L	10/30/2021 2124
Chlorobenzene	ND		1	1.0	ug/L	10/30/2021 2124
Chloroethane	ND		1	2.0	ug/L	10/30/2021 2124
Chloroform	ND		1	1.0	ug/L	10/30/2021 2124
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	10/30/2021 2124
Cyclohexane	ND		1	1.0	ug/L	10/30/2021 2124
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	10/30/2021 2124
Dibromochloromethane	ND		1	1.0	ug/L	10/30/2021 2124
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	10/30/2021 2124
1,2-Dichlorobenzene	ND		1	1.0	ug/L	10/30/2021 2124
1,3-Dichlorobenzene	ND		1	1.0	ug/L	10/30/2021 2124
1,4-Dichlorobenzene	ND		1	1.0	ug/L	10/30/2021 2124
Dichlorodifluoromethane	ND		1	2.0	ug/L	10/30/2021 2124
1,1-Dichloroethane	ND		1	1.0	ug/L	10/30/2021 2124
1,2-Dichloroethane	ND		1	1.0	ug/L	10/30/2021 2124
1,1-Dichloroethene	ND		1	1.0	ug/L	10/30/2021 2124
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	10/30/2021 2124
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	10/30/2021 2124
1,2-Dichloropropane	ND		1	1.0	ug/L	10/30/2021 2124
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	10/30/2021 2124
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	10/30/2021 2124
Ethylbenzene	ND		1	1.0	ug/L	10/30/2021 2124
2-Hexanone	ND		1	10	ug/L	10/30/2021 2124
Isopropylbenzene	ND		1	1.0	ug/L	10/30/2021 2124
Methyl acetate	ND		1	1.0	ug/L	10/30/2021 2124
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	10/30/2021 2124
4-Methyl-2-pentanone	ND		1	10	ug/L	10/30/2021 2124
Methylcyclohexane	ND		1	5.0	ug/L	10/30/2021 2124
Methylene chloride	ND		1	1.0	ug/L	10/30/2021 2124
Styrene	ND		1	1.0	ug/L	10/30/2021 2124
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	10/30/2021 2124
Tetrachloroethene	ND		1	1.0	ug/L	10/30/2021 2124
Toluene	ND		1	1.0	ug/L	10/30/2021 2124
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	10/30/2021 2124
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	10/30/2021 2124
1,1,1-Trichloroethane	ND		1	1.0	ug/L	10/30/2021 2124
1,1,2-Trichloroethane	ND		1	1.0	ug/L	10/30/2021 2124

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ20709-001

Matrix: Aqueous

Batch: 20709

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	10/30/2021 2124
Trichlorofluoromethane	ND		1	1.0	ug/L	10/30/2021 2124
Vinyl chloride	ND		1	1.0	ug/L	10/30/2021 2124
Xylenes (total)	ND		1	1.0	ug/L	10/30/2021 2124
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		94	70-130			
1,2-Dichloroethane-d4		102	70-130			
Toluene-d8		101	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20709-002

Matrix: Aqueous

Batch: 20709

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	98		1	98	60-140	10/30/2021 2010
Benzene	50	49		1	99	70-130	10/30/2021 2010
Bromodichloromethane	50	53		1	106	70-130	10/30/2021 2010
Bromoform	50	59		1	118	70-130	10/30/2021 2010
Bromomethane (Methyl bromide)	50	49		1	98	70-130	10/30/2021 2010
2-Butanone (MEK)	100	110		1	109	70-130	10/30/2021 2010
Carbon disulfide	50	54		1	109	70-130	10/30/2021 2010
Carbon tetrachloride	50	52		1	104	70-130	10/30/2021 2010
Chlorobenzene	50	51		1	102	70-130	10/30/2021 2010
Chloroethane	50	47		1	94	70-130	10/30/2021 2010
Chloroform	50	47		1	95	70-130	10/30/2021 2010
Chloromethane (Methyl chloride)	50	47		1	95	60-140	10/30/2021 2010
Cyclohexane	50	51		1	102	70-130	10/30/2021 2010
1,2-Dibromo-3-chloropropane (DBCP)	50	53		1	106	70-130	10/30/2021 2010
Dibromochloromethane	50	55		1	110	70-130	10/30/2021 2010
1,2-Dibromoethane (EDB)	50	54		1	108	70-130	10/30/2021 2010
1,2-Dichlorobenzene	50	51		1	103	70-130	10/30/2021 2010
1,3-Dichlorobenzene	50	51		1	103	70-130	10/30/2021 2010
1,4-Dichlorobenzene	50	49		1	98	70-130	10/30/2021 2010
Dichlorodifluoromethane	50	54		1	108	60-140	10/30/2021 2010
1,1-Dichloroethane	50	48		1	96	70-130	10/30/2021 2010
1,2-Dichloroethane	50	50		1	100	70-130	10/30/2021 2010
1,1-Dichloroethene	50	50		1	100	70-130	10/30/2021 2010
cis-1,2-Dichloroethene	50	46		1	93	70-130	10/30/2021 2010
trans-1,2-Dichloroethene	50	49		1	98	70-130	10/30/2021 2010
1,2-Dichloropropane	50	53		1	106	70-130	10/30/2021 2010
cis-1,3-Dichloropropene	50	59		1	118	70-130	10/30/2021 2010
trans-1,3-Dichloropropene	50	52		1	104	70-130	10/30/2021 2010
Ethylbenzene	50	53		1	106	70-130	10/30/2021 2010
2-Hexanone	100	120		1	121	70-130	10/30/2021 2010
Isopropylbenzene	50	55		1	109	70-130	10/30/2021 2010
Methyl acetate	50	50		1	99	70-130	10/30/2021 2010
Methyl tertiary butyl ether (MTBE)	50	55		1	109	70-130	10/30/2021 2010
4-Methyl-2-pentanone	100	120		1	119	70-130	10/30/2021 2010
Methylcyclohexane	50	51		1	101	70-130	10/30/2021 2010
Methylene chloride	50	53		1	105	70-130	10/30/2021 2010
Styrene	50	57		1	115	70-130	10/30/2021 2010
1,1,2,2-Tetrachloroethane	50	50		1	99	70-130	10/30/2021 2010
Tetrachloroethene	50	51		1	101	70-130	10/30/2021 2010
Toluene	50	52		1	103	70-130	10/30/2021 2010
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	50		1	100	70-130	10/30/2021 2010
1,2,4-Trichlorobenzene	50	51		1	101	70-130	10/30/2021 2010
1,1,1-Trichloroethane	50	51		1	102	70-130	10/30/2021 2010
1,1,2-Trichloroethane	50	51		1	102	70-130	10/30/2021 2010

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ20709-002

Matrix: Aqueous

Batch: 20709

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	49		1	98	70-130	10/30/2021 2010
Trichlorofluoromethane	50	50		1	100	70-130	10/30/2021 2010
Vinyl chloride	50	47		1	94	70-130	10/30/2021 2010
Xylenes (total)	100	110		1	108	70-130	10/30/2021 2010
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		98			70-130		
1,2-Dichloroethane-d4		96			70-130		
Toluene-d8		99			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ25047-002MS

Matrix: Aqueous

Batch: 20709

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	ND	100	86		1	86	60-140	10/31/2021 0605
Benzene	ND	50	53		1	106	70-130	10/31/2021 0605
Bromodichloromethane	ND	50	54		1	108	70-130	10/31/2021 0605
Bromoform	ND	50	53		1	105	70-130	10/31/2021 0605
Bromomethane (Methyl bromide)	ND	50	56		1	111	70-130	10/31/2021 0605
2-Butanone (MEK)	ND	100	91		1	91	70-130	10/31/2021 0605
Carbon disulfide	ND	50	59		1	119	70-130	10/31/2021 0605
Carbon tetrachloride	ND	50	57		1	114	70-130	10/31/2021 0605
Chlorobenzene	ND	50	52		1	104	70-130	10/31/2021 0605
Chloroethane	ND	50	56		1	111	70-130	10/31/2021 0605
Chloroform	ND	50	53		1	105	70-130	10/31/2021 0605
Chloromethane (Methyl chloride)	ND	50	55		1	110	60-140	10/31/2021 0605
Cyclohexane	ND	50	58		1	116	70-130	10/31/2021 0605
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	52		1	103	70-130	10/31/2021 0605
Dibromochloromethane	ND	50	54		1	107	70-130	10/31/2021 0605
1,2-Dibromoethane (EDB)	ND	50	52		1	104	70-130	10/31/2021 0605
1,2-Dichlorobenzene	ND	50	52		1	103	70-130	10/31/2021 0605
1,3-Dichlorobenzene	ND	50	51		1	102	70-130	10/31/2021 0605
1,4-Dichlorobenzene	ND	50	48		1	95	70-130	10/31/2021 0605
Dichlorodifluoromethane	ND	50	71	N	1	141	60-140	10/31/2021 0605
1,1-Dichloroethane	ND	50	54		1	107	70-130	10/31/2021 0605
1,2-Dichloroethane	ND	50	52		1	105	70-130	10/31/2021 0605
1,1-Dichloroethene	ND	50	57		1	114	70-130	10/31/2021 0605
cis-1,2-Dichloroethene	ND	50	51		1	102	70-130	10/31/2021 0605
trans-1,2-Dichloroethene	ND	50	54		1	109	70-130	10/31/2021 0605
1,2-Dichloropropane	ND	50	54		1	108	70-130	10/31/2021 0605
cis-1,3-Dichloropropene	ND	50	53		1	107	70-130	10/31/2021 0605
trans-1,3-Dichloropropene	ND	50	48		1	96	70-130	10/31/2021 0605
Ethylbenzene	ND	50	54		1	108	70-130	10/31/2021 0605
2-Hexanone	ND	100	100		1	102	70-130	10/31/2021 0605
Isopropylbenzene	ND	50	58		1	116	70-130	10/31/2021 0605
Methyl acetate	ND	50	39		1	77	70-130	10/31/2021 0605
Methyl tertiary butyl ether (MTBE)	ND	50	54		1	109	70-130	10/31/2021 0605
4-Methyl-2-pentanone	ND	100	100		1	105	70-130	10/31/2021 0605
Methylcyclohexane	ND	50	56		1	111	70-130	10/31/2021 0605
Methylene chloride	ND	50	57		1	114	70-130	10/31/2021 0605
Styrene	ND	50	58		1	116	70-130	10/31/2021 0605
1,1,2,2-Tetrachloroethane	ND	50	48		1	96	70-130	10/31/2021 0605
Tetrachloroethene	ND	50	54		1	107	70-130	10/31/2021 0605
Toluene	ND	50	53		1	107	70-130	10/31/2021 0605
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	57		1	114	70-130	10/31/2021 0605
1,2,4-Trichlorobenzene	ND	50	53		1	106	70-130	10/31/2021 0605
1,1,1-Trichloroethane	ND	50	56		1	112	70-130	10/31/2021 0605
1,1,2-Trichloroethane	ND	50	50		1	100	70-130	10/31/2021 0605

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ25047-002MS

Matrix: Aqueous

Batch: 20709

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	ND	50	52		1	105	70-130	10/31/2021 0605
Trichlorofluoromethane	ND	50	62		1	124	70-130	10/31/2021 0605
Vinyl chloride	ND	50	57		1	115	70-130	10/31/2021 0605
Xylenes (total)	ND	100	110		1	111	70-130	10/31/2021 0605
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene		100	70-130					
1,2-Dichloroethane-d4		101	70-130					
Toluene-d8		105	70-130					

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ25047-002MD

Matrix: Aqueous

Batch: 20709

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	100	86		1	86	0.54	60-140	20	10/31/2021 0630
Benzene	ND	50	53		1	105	0.22	70-130	20	10/31/2021 0630
Bromodichloromethane	ND	50	54		1	108	0.44	70-130	20	10/31/2021 0630
Bromoform	ND	50	53		1	105	0.0053	70-130	20	10/31/2021 0630
Bromomethane (Methyl bromide)	ND	50	57		1	114	2.9	70-130	20	10/31/2021 0630
2-Butanone (MEK)	ND	100	93		1	93	1.9	70-130	20	10/31/2021 0630
Carbon disulfide	ND	50	59		1	118	0.10	70-130	20	10/31/2021 0630
Carbon tetrachloride	ND	50	57		1	115	0.50	70-130	20	10/31/2021 0630
Chlorobenzene	ND	50	52		1	104	0.18	70-130	20	10/31/2021 0630
Chloroethane	ND	50	55		1	109	1.7	70-130	20	10/31/2021 0630
Chloroform	ND	50	52		1	103	2.0	70-130	20	10/31/2021 0630
Chloromethane (Methyl chloride)	ND	50	55		1	110	0.42	60-140	20	10/31/2021 0630
Cyclohexane	ND	50	59		1	119	1.9	70-130	20	10/31/2021 0630
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	52		1	104	0.61	70-130	20	10/31/2021 0630
Dibromochloromethane	ND	50	53		1	107	0.63	70-130	20	10/31/2021 0630
1,2-Dibromoethane (EDB)	ND	50	52		1	103	0.61	70-130	20	10/31/2021 0630
1,2-Dichlorobenzene	ND	50	53		1	105	1.9	70-130	20	10/31/2021 0630
1,3-Dichlorobenzene	ND	50	52		1	105	2.6	70-130	20	10/31/2021 0630
1,4-Dichlorobenzene	ND	50	49		1	99	3.4	70-130	20	10/31/2021 0630
Dichlorodifluoromethane	ND	50	70		1	139	1.3	60-140	20	10/31/2021 0630
1,1-Dichloroethane	ND	50	53		1	106	1.0	70-130	20	10/31/2021 0630
1,2-Dichloroethane	ND	50	51		1	103	1.8	70-130	20	10/31/2021 0630
1,1-Dichloroethene	ND	50	56		1	113	0.71	70-130	20	10/31/2021 0630
cis-1,2-Dichloroethene	ND	50	52		1	103	1.3	70-130	20	10/31/2021 0630
trans-1,2-Dichloroethene	ND	50	54		1	108	0.54	70-130	20	10/31/2021 0630
1,2-Dichloropropane	ND	50	53		1	106	2.5	70-130	20	10/31/2021 0630
cis-1,3-Dichloropropene	ND	50	55		1	110	2.8	70-130	20	10/31/2021 0630
trans-1,3-Dichloropropene	ND	50	48		1	96	0.25	70-130	20	10/31/2021 0630
Ethylbenzene	ND	50	53		1	107	0.71	70-130	20	10/31/2021 0630
2-Hexanone	ND	100	100		1	101	0.86	70-130	20	10/31/2021 0630
Isopropylbenzene	ND	50	58		1	116	0.0067	70-130	20	10/31/2021 0630
Methyl acetate	ND	50	39		1	77	0.13	70-130	20	10/31/2021 0630
Methyl tertiary butyl ether (MTBE)	ND	50	54		1	109	0.0048	70-130	20	10/31/2021 0630
4-Methyl-2-pentanone	ND	100	100		1	105	0.14	70-130	20	10/31/2021 0630
Methylcyclohexane	ND	50	57		1	113	1.6	70-130	20	10/31/2021 0630
Methylene chloride	ND	50	56		1	113	0.85	70-130	20	10/31/2021 0630
Styrene	ND	50	58		1	116	0.20	70-130	20	10/31/2021 0630
1,1,2,2-Tetrachloroethane	ND	50	48		1	96	0.0083	70-130	20	10/31/2021 0630
Tetrachloroethene	ND	50	53		1	106	1.7	70-130	20	10/31/2021 0630
Toluene	ND	50	53		1	107	0.34	70-130	20	10/31/2021 0630
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	57		1	115	0.46	70-130	20	10/31/2021 0630
1,2,4-Trichlorobenzene	ND	50	57		1	114	7.0	70-130	20	10/31/2021 0630
1,1,1-Trichloroethane	ND	50	56		1	111	0.11	70-130	20	10/31/2021 0630
1,1,2-Trichloroethane	ND	50	49		1	97	2.3	70-130	20	10/31/2021 0630

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ25047-002MD

Matrix: Aqueous

Batch: 20709

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date	
Trichloroethene	ND	50	53		1	105	0.40	70-130	20	10/31/2021 0630	
Trichlorofluoromethane	ND	50	60		1	121	2.5	70-130	20	10/31/2021 0630	
Vinyl chloride	ND	50	58		1	116	1.5	70-130	20	10/31/2021 0630	
Xylenes (total)	ND	100	110		1	111	0.022	70-130	20	10/31/2021 0630	
Surrogate	Q	% Rec	Acceptance Limit								
Bromofluorobenzene		99	70-130								
1,2-Dichloroethane-d4		98	70-130								
Toluene-d8		104	70-130								

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ21308-001

Matrix: Aqueous

Batch: 21308

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	11/04/2021 1005
Benzene	ND		1	1.0	ug/L	11/04/2021 1005
Bromodichloromethane	ND		1	1.0	ug/L	11/04/2021 1005
Bromoform	ND		1	1.0	ug/L	11/04/2021 1005
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	11/04/2021 1005
2-Butanone (MEK)	ND		1	10	ug/L	11/04/2021 1005
Carbon disulfide	ND		1	1.0	ug/L	11/04/2021 1005
Carbon tetrachloride	ND		1	1.0	ug/L	11/04/2021 1005
Chlorobenzene	ND		1	1.0	ug/L	11/04/2021 1005
Chloroethane	ND		1	2.0	ug/L	11/04/2021 1005
Chloroform	ND		1	1.0	ug/L	11/04/2021 1005
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	11/04/2021 1005
Cyclohexane	ND		1	1.0	ug/L	11/04/2021 1005
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	11/04/2021 1005
Dibromochloromethane	ND		1	1.0	ug/L	11/04/2021 1005
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	11/04/2021 1005
1,2-Dichlorobenzene	ND		1	1.0	ug/L	11/04/2021 1005
1,3-Dichlorobenzene	ND		1	1.0	ug/L	11/04/2021 1005
1,4-Dichlorobenzene	ND		1	1.0	ug/L	11/04/2021 1005
Dichlorodifluoromethane	ND		1	2.0	ug/L	11/04/2021 1005
1,1-Dichloroethane	ND		1	1.0	ug/L	11/04/2021 1005
1,2-Dichloroethane	ND		1	1.0	ug/L	11/04/2021 1005
1,1-Dichloroethene	ND		1	1.0	ug/L	11/04/2021 1005
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	11/04/2021 1005
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	11/04/2021 1005
1,2-Dichloropropane	ND		1	1.0	ug/L	11/04/2021 1005
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	11/04/2021 1005
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	11/04/2021 1005
Ethylbenzene	ND		1	1.0	ug/L	11/04/2021 1005
2-Hexanone	ND		1	10	ug/L	11/04/2021 1005
Isopropylbenzene	ND		1	1.0	ug/L	11/04/2021 1005
Methyl acetate	ND		1	1.0	ug/L	11/04/2021 1005
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	11/04/2021 1005
4-Methyl-2-pentanone	ND		1	10	ug/L	11/04/2021 1005
Methylcyclohexane	ND		1	5.0	ug/L	11/04/2021 1005
Methylene chloride	ND		1	1.0	ug/L	11/04/2021 1005
Styrene	ND		1	1.0	ug/L	11/04/2021 1005
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	11/04/2021 1005
Tetrachloroethene	ND		1	1.0	ug/L	11/04/2021 1005
Toluene	ND		1	1.0	ug/L	11/04/2021 1005
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	11/04/2021 1005
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	11/04/2021 1005
1,1,1-Trichloroethane	ND		1	1.0	ug/L	11/04/2021 1005
1,1,2-Trichloroethane	ND		1	1.0	ug/L	11/04/2021 1005

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ21308-001

Matrix: Aqueous

Batch: 21308

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	11/04/2021 1005
Trichlorofluoromethane	ND		1	1.0	ug/L	11/04/2021 1005
Vinyl chloride	ND		1	1.0	ug/L	11/04/2021 1005
Xylenes (total)	ND		1	1.0	ug/L	11/04/2021 1005
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		87	70-130			
1,2-Dichloroethane-d4		106	70-130			
Toluene-d8		93	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ21308-002

Matrix: Aqueous

Batch: 21308

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	110		1	106	60-140	11/04/2021 0906
Benzene	50	47		1	94	70-130	11/04/2021 0906
Bromodichloromethane	50	56		1	112	70-130	11/04/2021 0906
Bromoform	50	62		1	125	70-130	11/04/2021 0906
Bromomethane (Methyl bromide)	50	43		1	86	70-130	11/04/2021 0906
2-Butanone (MEK)	100	83		1	83	70-130	11/04/2021 0906
Carbon disulfide	50	54		1	109	70-130	11/04/2021 0906
Carbon tetrachloride	50	45		1	91	70-130	11/04/2021 0906
Chlorobenzene	50	51		1	102	70-130	11/04/2021 0906
Chloroethane	50	49		1	98	70-130	11/04/2021 0906
Chloroform	50	43		1	85	70-130	11/04/2021 0906
Chloromethane (Methyl chloride)	50	45		1	89	60-140	11/04/2021 0906
Cyclohexane	50	36		1	72	70-130	11/04/2021 0906
1,2-Dibromo-3-chloropropane (DBCP)	50	53		1	106	70-130	11/04/2021 0906
Dibromochloromethane	50	59		1	117	70-130	11/04/2021 0906
1,2-Dibromoethane (EDB)	50	54		1	108	70-130	11/04/2021 0906
1,2-Dichlorobenzene	50	52		1	104	70-130	11/04/2021 0906
1,3-Dichlorobenzene	50	52		1	103	70-130	11/04/2021 0906
1,4-Dichlorobenzene	50	49		1	99	70-130	11/04/2021 0906
Dichlorodifluoromethane	50	53		1	105	60-140	11/04/2021 0906
1,1-Dichloroethane	50	41		1	82	70-130	11/04/2021 0906
1,2-Dichloroethane	50	45		1	89	70-130	11/04/2021 0906
1,1-Dichloroethene	50	52		1	105	70-130	11/04/2021 0906
cis-1,2-Dichloroethene	50	44		1	89	70-130	11/04/2021 0906
trans-1,2-Dichloroethene	50	46		1	92	70-130	11/04/2021 0906
1,2-Dichloropropane	50	43		1	86	70-130	11/04/2021 0906
cis-1,3-Dichloropropene	50	58		1	117	70-130	11/04/2021 0906
trans-1,3-Dichloropropene	50	57		1	114	70-130	11/04/2021 0906
Ethylbenzene	50	54		1	107	70-130	11/04/2021 0906
2-Hexanone	100	88		1	88	70-130	11/04/2021 0906
Isopropylbenzene	50	52		1	104	70-130	11/04/2021 0906
Methyl acetate	50	47		1	94	70-130	11/04/2021 0906
Methyl tertiary butyl ether (MTBE)	50	45		1	90	70-130	11/04/2021 0906
4-Methyl-2-pentanone	100	110		1	108	70-130	11/04/2021 0906
Methylcyclohexane	50	49		1	97	70-130	11/04/2021 0906
Methylene chloride	50	49		1	98	70-130	11/04/2021 0906
Styrene	50	53		1	106	70-130	11/04/2021 0906
1,1,2,2-Tetrachloroethane	50	50		1	99	70-130	11/04/2021 0906
Tetrachloroethene	50	56		1	111	70-130	11/04/2021 0906
Toluene	50	59		1	118	70-130	11/04/2021 0906
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	48		1	97	70-130	11/04/2021 0906
1,2,4-Trichlorobenzene	50	47		1	94	70-130	11/04/2021 0906
1,1,1-Trichloroethane	50	44		1	87	70-130	11/04/2021 0906
1,1,2-Trichloroethane	50	55		1	110	70-130	11/04/2021 0906

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ21308-002

Matrix: Aqueous

Batch: 21308

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	50		1	100	70-130	11/04/2021 0906
Trichlorofluoromethane	50	54		1	109	70-130	11/04/2021 0906
Vinyl chloride	50	43		1	86	70-130	11/04/2021 0906
Xylenes (total)	100	110		1	107	70-130	11/04/2021 0906
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		100			70-130		
1,2-Dichloroethane-d4		87			70-130		
Toluene-d8		110			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ25047-008MS

Matrix: Aqueous

Batch: 21308

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	ND	100	91		1	91	60-140	11/04/2021 1919
Benzene	ND	50	50		1	101	70-130	11/04/2021 1919
Bromodichloromethane	ND	50	49		1	98	70-130	11/04/2021 1919
Bromoform	ND	50	57		1	115	70-130	11/04/2021 1919
Bromomethane (Methyl bromide)	ND	50	46		1	92	70-130	11/04/2021 1919
2-Butanone (MEK)	ND	100	87		1	87	70-130	11/04/2021 1919
Carbon disulfide	ND	50	45		1	90	70-130	11/04/2021 1919
Carbon tetrachloride	ND	50	48		1	95	70-130	11/04/2021 1919
Chlorobenzene	ND	50	55		1	110	70-130	11/04/2021 1919
Chloroethane	ND	50	56		1	111	70-130	11/04/2021 1919
Chloroform	ND	50	42		1	85	70-130	11/04/2021 1919
Chloromethane (Methyl chloride)	ND	50	47		1	95	60-140	11/04/2021 1919
Cyclohexane	ND	50	38		1	76	70-130	11/04/2021 1919
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	44		1	88	70-130	11/04/2021 1919
Dibromochloromethane	ND	50	58		1	116	70-130	11/04/2021 1919
1,2-Dibromoethane (EDB)	ND	50	56		1	112	70-130	11/04/2021 1919
1,2-Dichlorobenzene	ND	50	54		1	107	70-130	11/04/2021 1919
1,3-Dichlorobenzene	ND	50	53		1	105	70-130	11/04/2021 1919
1,4-Dichlorobenzene	ND	50	51		1	102	70-130	11/04/2021 1919
Dichlorodifluoromethane	ND	50	49		1	98	60-140	11/04/2021 1919
1,1-Dichloroethane	ND	50	40		1	80	70-130	11/04/2021 1919
1,2-Dichloroethane	ND	50	45		1	90	70-130	11/04/2021 1919
1,1-Dichloroethene	ND	50	55		1	109	70-130	11/04/2021 1919
cis-1,2-Dichloroethene	ND	50	44		1	88	70-130	11/04/2021 1919
trans-1,2-Dichloroethene	ND	50	45		1	91	70-130	11/04/2021 1919
1,2-Dichloropropane	ND	50	46		1	93	70-130	11/04/2021 1919
cis-1,3-Dichloropropene	ND	50	46		1	93	70-130	11/04/2021 1919
trans-1,3-Dichloropropene	ND	50	51		1	103	70-130	11/04/2021 1919
Ethylbenzene	ND	50	59		1	119	70-130	11/04/2021 1919
2-Hexanone	ND	100	100		1	102	70-130	11/04/2021 1919
Isopropylbenzene	ND	50	55		1	110	70-130	11/04/2021 1919
Methyl acetate	ND	50	29	N	1	59	70-130	11/04/2021 1919
Methyl tertiary butyl ether (MTBE)	ND	50	40		1	81	70-130	11/04/2021 1919
4-Methyl-2-pentanone	ND	100	84		1	84	70-130	11/04/2021 1919
Methylcyclohexane	ND	50	53		1	107	70-130	11/04/2021 1919
Methylene chloride	ND	50	41		1	81	70-130	11/04/2021 1919
Styrene	ND	50	56		1	113	70-130	11/04/2021 1919
1,1,2,2-Tetrachloroethane	ND	50	50		1	99	70-130	11/04/2021 1919
Tetrachloroethene	1.3	50	59		1	116	70-130	11/04/2021 1919
Toluene	ND	50	52		1	104	70-130	11/04/2021 1919
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	56		1	111	70-130	11/04/2021 1919
1,2,4-Trichlorobenzene	ND	50	49		1	98	70-130	11/04/2021 1919
1,1,1-Trichloroethane	ND	50	46		1	91	70-130	11/04/2021 1919
1,1,2-Trichloroethane	ND	50	56		1	113	70-130	11/04/2021 1919

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MS

Sample ID: WJ25047-008MS

Matrix: Aqueous

Batch: 21308

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	2.0	50	55		1	106	70-130	11/04/2021 1919
Trichlorofluoromethane	ND	50	63		1	126	70-130	11/04/2021 1919
Vinyl chloride	ND	50	50		1	101	70-130	11/04/2021 1919
Xylenes (total)	ND	100	110		1	114	70-130	11/04/2021 1919
Surrogate	Q	% Rec	Acceptance Limit					
Bromofluorobenzene		102	70-130					
1,2-Dichloroethane-d4		86	70-130					
Toluene-d8		95	70-130					

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ25047-008MD

Matrix: Aqueous

Batch: 21308

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	100	120	+	1	115	24	60-140	20	11/04/2021 1943
Benzene	ND	50	55		1	110	9.2	70-130	20	11/04/2021 1943
Bromodichloromethane	ND	50	45		1	90	9.0	70-130	20	11/04/2021 1943
Bromoform	ND	50	59		1	118	2.8	70-130	20	11/04/2021 1943
Bromomethane (Methyl bromide)	ND	50	42		1	85	8.0	70-130	20	11/04/2021 1943
2-Butanone (MEK)	ND	100	120	+	1	115	28	70-130	20	11/04/2021 1943
Carbon disulfide	ND	50	57	+	1	114	23	70-130	20	11/04/2021 1943
Carbon tetrachloride	ND	50	54		1	108	13	70-130	20	11/04/2021 1943
Chlorobenzene	ND	50	54		1	107	2.6	70-130	20	11/04/2021 1943
Chloroethane	ND	50	51		1	102	9.0	70-130	20	11/04/2021 1943
Chloroform	ND	50	52		1	104	20	70-130	20	11/04/2021 1943
Chloromethane (Methyl chloride)	ND	50	43		1	86	9.7	60-140	20	11/04/2021 1943
Cyclohexane	ND	50	55	+	1	110	36	70-130	20	11/04/2021 1943
1,2-Dibromo-3-chloropropane (DBCP)	ND	50	45		1	90	2.4	70-130	20	11/04/2021 1943
Dibromochloromethane	ND	50	56		1	111	3.9	70-130	20	11/04/2021 1943
1,2-Dibromoethane (EDB)	ND	50	53		1	106	5.6	70-130	20	11/04/2021 1943
1,2-Dichlorobenzene	ND	50	54		1	108	1.1	70-130	20	11/04/2021 1943
1,3-Dichlorobenzene	ND	50	53		1	107	1.3	70-130	20	11/04/2021 1943
1,4-Dichlorobenzene	ND	50	52		1	104	1.8	70-130	20	11/04/2021 1943
Dichlorodifluoromethane	ND	50	49		1	97	0.56	60-140	20	11/04/2021 1943
1,1-Dichloroethane	ND	50	54	+	1	108	29	70-130	20	11/04/2021 1943
1,2-Dichloroethane	ND	50	54		1	109	19	70-130	20	11/04/2021 1943
1,1-Dichloroethene	ND	50	55		1	111	1.4	70-130	20	11/04/2021 1943
cis-1,2-Dichloroethene	ND	50	53		1	105	18	70-130	20	11/04/2021 1943
trans-1,2-Dichloroethene	ND	50	54		1	107	17	70-130	20	11/04/2021 1943
1,2-Dichloropropane	ND	50	42		1	84	9.6	70-130	20	11/04/2021 1943
cis-1,3-Dichloropropene	ND	50	43		1	86	7.5	70-130	20	11/04/2021 1943
trans-1,3-Dichloropropene	ND	50	48		1	96	6.3	70-130	20	11/04/2021 1943
Ethylbenzene	ND	50	58		1	117	1.7	70-130	20	11/04/2021 1943
2-Hexanone	ND	100	80	+	1	80	24	70-130	20	11/04/2021 1943
Isopropylbenzene	ND	50	56		1	112	1.1	70-130	20	11/04/2021 1943
Methyl acetate	ND	50	49	+	1	98	50	70-130	20	11/04/2021 1943
Methyl tertiary butyl ether (MTBE)	ND	50	55	+	1	109	30	70-130	20	11/04/2021 1943
4-Methyl-2-pentanone	ND	100	79		1	79	5.3	70-130	20	11/04/2021 1943
Methylcyclohexane	ND	50	53		1	106	0.82	70-130	20	11/04/2021 1943
Methylene chloride	ND	50	50	+	1	100	21	70-130	20	11/04/2021 1943
Styrene	ND	50	57		1	113	0.14	70-130	20	11/04/2021 1943
1,1,2,2-Tetrachloroethane	ND	50	51		1	103	3.5	70-130	20	11/04/2021 1943
Tetrachloroethene	1.3	50	62		1	122	5.3	70-130	20	11/04/2021 1943
Toluene	ND	50	56		1	111	6.7	70-130	20	11/04/2021 1943
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	54		1	107	3.5	70-130	20	11/04/2021 1943
1,2,4-Trichlorobenzene	ND	50	51		1	102	3.9	70-130	20	11/04/2021 1943
1,1,1-Trichloroethane	ND	50	53		1	107	16	70-130	20	11/04/2021 1943
1,1,2-Trichloroethane	ND	50	52		1	103	8.7	70-130	20	11/04/2021 1943

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MSD

Sample ID: WJ25047-008MD

Matrix: Aqueous

Batch: 21308

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date	
Trichloroethene	2.0	50	54		1	105	1.1	70-130	20	11/04/2021 1943	
Trichlorofluoromethane	ND	50	60		1	120	5.0	70-130	20	11/04/2021 1943	
Vinyl chloride	ND	50	46		1	91	9.8	70-130	20	11/04/2021 1943	
Xylenes (total)	ND	100	110		1	114	0.022	70-130	20	11/04/2021 1943	
Surrogate	Q	% Rec	Acceptance Limit								
Bromofluorobenzene		103	70-130								
1,2-Dichloroethane-d4		103	70-130								
Toluene-d8		103	70-130								

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents





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

Number 126226

Client: WESTINGHOUSE  
 Address: 5801 BOWNE RD  
 City: HOPKINS  
 State: SC Zip Code: 29061  
 Project Name: Q4 2021 Sample  
 Report to Contact: DIANA JOYNER  
 Sample's Signature: [Signature]  
 Printed Name: JAMES KEMPTER  
 Telephone No. / E-mail: 803 647 1920  
 J. JOYNER@WESTINGHOUSE.COM  
 Analysis (Attach list if more space is needed)

Barcode: WJ25047  
 EVID  
 Remarks / Cooler I.D.

Project No.	P.O. No.	Sample ID / Description (Conditions for each sample may be combined on one line)	Collection Date(s)	Collection Time (M:SS)	Matrix				No. of Containers by Preservation Type				SVID	Remarks / Cooler I.D.
					Asph	Soil	Water	Other	Other	Other	Other	Other		
		W-96-2021-Q4	10-25-21	0855	0	0	0	0	1	3	0	0	0	
		W-96-2021-Q4-MS		0855	0	0	0	0	1	3	0	0	0	
		W-96-2021-Q4-MSD		0855	0	0	0	0	1	3	0	0	0	
		W-126-2021-Q4		1016	0	0	0	0	1	3	0	0	0	
		W-104-2021-Q4		1146	0	0	0	0	1	3	0	0	0	
		W-124-2021-Q4		1255	0	0	0	0	1	3	0	0	0	
		W-97-2021-Q4		1350	0	0	0	0	1	3	0	0	0	
		W-97-2021-Q4-DP		1350	0	0	0	0	1	3	0	0	0	

Turn Around Time Required (After lab approval, required for expedited RT.)	Standard	Push (Specify)	Sample Disposal		Possible Hazard Identification				QC Requirements (Specify)					
			Return to Client	Disposal by Lab	Non-Hazard	Harmful	Skin Irritant	Poison	Unknown	Date	Time	Date	Time	
			10-25-21	1540	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10-25-21	1540	
1. Relinquished by	[Signature]													
2. Relinquished by														
3. Relinquished by														
4. Relinquished by														

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

# PACE ANALYTICAL SERVICES, LLC



**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: KDRW / 10/25/2021

Lot #: WJ25047

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA	
2.1 / 2.1 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input type="checkbox"/> Temperature Blank <input checked="" type="checkbox"/> Against Bottles IR Gun ID: 6 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None:	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #
<b>Sample Preservation</b> (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 mg/L (If #19 is no) and were adjusted accordingly in sample 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: KDRW Date: 10/25/2021	

Comments:

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## Report of Analysis

**Westinghouse Electric Company**  
5801 Bluff Rd.  
Hopkins, SC 29061  
Attention: Diana Joyner

Project Name: Westinghouse RI

Lot Number: **WJ26032**

Date Completed: 11/17/2021

11/17/2021 3:42 PM

Approved and released by:  
Project Manager I: **Blaire M. Gagne**



The electronic signature above is the equivalent of a handwritten signature.  
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# 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: WJ26032

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.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation:

Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, Fecal Coliform SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, Solid Chemical Material: TOC Walkley-Black.

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

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

The continuing calibration verification (CCV) associated with batch 21308 had Cyclohexane recovered below acceptance limits. There were no detections for this compound in the associated samples. A LOQ standard was analyzed and the compound was detected, demonstrating there was adequate sensitivity to identify the analyte if it were present.

The sample WJ26032-001 was reanalyzed outside of analytical hold for 1,2 Dichlorobenzene, 1,4-Dichlorobenzene, cis-1,2-Dichloroethene and Chlorobenzene due to carryover.

The samples WJ26032-002, -003 were reanalyzed outside of analytical hold for cis-1,2-Dichloroethene and Chlorobenzene due to carryover.

# PACE ANALYTICAL SERVICES, LLC

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Sample Summary  
Westinghouse Electric Company  
Lot Number: WJ26032  
Project Name: Westinghouse RI  
Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	W-112-2021-Q4	Aqueous	10/26/2021 0930	10/26/2021
002	W-94-2021-Q4	Aqueous	10/26/2021 1024	10/26/2021
003	W-95-2021-Q4	Aqueous	10/26/2021 1113	10/26/2021
004	W-111-2021-Q4	Aqueous	10/26/2021 1159	10/26/2021
005	W-107-2021-Q4	Aqueous	10/26/2021 1255	10/26/2021
006	W-20-2021-Q4	Aqueous	10/26/2021 1103	10/26/2021
007	W-25-2021-Q4	Aqueous	10/26/2021 1209	10/26/2021
008	W-109-2021-Q4	Aqueous	10/26/2021 0957	10/26/2021
009	W-110-2021-Q4	Aqueous	10/26/2021 1323	10/26/2021
010	EB-01-102621	Aqueous	10/26/2021 1344	10/26/2021
011	TB-01-102621	Aqueous	10/26/2021	10/26/2021

(11 samples)

# PACE ANALYTICAL SERVICES, LLC

Detection Summary  
Westinghouse Electric Company  
Lot Number: WJ26032  
Project Name: Westinghouse RI  
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	W-112-2021-Q4	Aqueous	Nitrate - N	353.2	0.077		mg/L	5
002	W-94-2021-Q4	Aqueous	Nitrate - N	353.2	0.089		mg/L	8
002	W-94-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	5.8	H	ug/L	9
003	W-95-2021-Q4	Aqueous	Nitrate - N	353.2	0.076		mg/L	11
003	W-95-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	2.4	H	ug/L	12
003	W-95-2021-Q4	Aqueous	Vinyl chloride	8260D	4.2		ug/L	13
005	W-107-2021-Q4	Aqueous	Nitrate - N	353.2	0.089		mg/L	17
005	W-107-2021-Q4	Aqueous	Vinyl chloride	8260D	3.7		ug/L	19
006	W-20-2021-Q4	Aqueous	Nitrate - N	353.2	0.042		mg/L	20
007	W-25-2021-Q4	Aqueous	Nitrate - N	353.2	0.10	S	mg/L	23
008	W-109-2021-Q4	Aqueous	cis-1,2-Dichloroethene	8260D	1.5		ug/L	27
010	EB-01-102621	Aqueous	Nitrate - N	353.2	0.30		mg/L	32
010	EB-01-102621	Aqueous	Bromodichloromethane	8260D	1.6		ug/L	33
010	EB-01-102621	Aqueous	Chloroform	8260D	7.3		ug/L	33
010	EB-01-102621	Aqueous	Dibromochloromethane	8260D	1.0		ug/L	33

(15 detections)

# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-001
Description: W-112-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 0930	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/28/2021 0926	AAB		20487

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.077	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-001
Description: W-112-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 0930	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1740	BWS		21308
2	5030B	8260D	1	11/13/2021 0017	JWO		22391

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND	H	1.0	ug/L	2
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND	H	1.0	ug/L	2
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND	H	1.0	ug/L	2
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	H	1.0	ug/L	2
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-001
Description: W-112-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 0930	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1740	BWS		21308
2	5030B	8260D	1	11/13/2021 0017	JWO		22391

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		84	70-130	H	84	70-130
1,2-Dichloroethane-d4		98	70-130	H	101	70-130
Toluene-d8		99	70-130	H	96	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-002
Description: W-94-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1024	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/28/2021 0929	AAB		20487

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2		0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-002
Description: W-94-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1024	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1805	BWS		21308
2	5030B	8260D	1	11/13/2021 0042	JWO		22391

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND	H	1.0	ug/L	2
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	5.8	H	1.0	ug/L	2
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-002
Description: W-94-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1024	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1805	BWS		21308
2	5030B	8260D	1	11/13/2021 0042	JWO		22391

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		86	70-130	H	84	70-130
1,2-Dichloroethane-d4		102	70-130	H	102	70-130
Toluene-d8		100	70-130	H	94	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-003
Description: W-95-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1113	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/28/2021 0931	AAB		20487

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.076	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-003
Description: W-95-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1113	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1829	BWS		21308
2	5030B	8260D	1	11/13/2021 0106	JWO		22391

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	2.4	H	1.0	ug/L	2
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-003
Description: W-95-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1113	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1829	BWS		21308
2	5030B	8260D	1	11/13/2021 0106	JWO		22391

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	4.2		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
Bromofluorobenzene		82	70-130	H	81	70-130
1,2-Dichloroethane-d4		101	70-130	H	101	70-130
Toluene-d8		104	70-130	H	96	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-004
Description: W-111-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1159	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/28/2021 0933	AAB		20487

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	ND		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-004
Description: W-111-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1159	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1258	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-004
Description: W-111-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1159	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1258	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		103	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-005
Description: W-107-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1255	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/28/2021 0939	AAB		20487

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	0.089		0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-005
Description: W-107-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1255	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1323	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-005
Description: W-107-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1255	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1323	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	3.7		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		88	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		99	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-006
Description: W-20-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1103	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/28/2021 0941	AAB		20487

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.042	0.020	mg/L	1

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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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-006
Description: W-20-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1103	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1348	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-006
Description: W-20-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1103	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1348	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		90	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		100	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-007
Description: W-25-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1209	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/28/2021 0943	AAB		20487

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	0.10	S	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-007
Description: W-25-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1209	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1412	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-007
Description: W-25-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1209	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1412	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		104	70-130
Toluene-d8		102	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-008
Description: W-109-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 0957	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/28/2021 0928	AAB		20487

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-008
Description: W-109-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 0957	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1437	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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	1.5		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-008
Description: W-109-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 0957	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1437	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		86	70-130
1,2-Dichloroethane-d4		100	70-130
Toluene-d8		97	70-130

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

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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-009
Description: W-110-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1323	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/28/2021 0948	AAB		20487

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	ND	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-009
Description: W-110-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1323	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1502	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-009
Description: W-110-2021-Q4	Matrix: Aqueous
Date Sampled: 10/26/2021 1323	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1502	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		88	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		97	70-130

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  
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# Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-010
Description: EB-01-102621	Matrix: Aqueous
Date Sampled: 10/26/2021 1344	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	10/28/2021 0953	AAB		20487

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N			353.2	0.30	0.020	mg/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-010
Description: EB-01-102621	Matrix: Aqueous
Date Sampled: 10/26/2021 1344	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1055	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	1.6		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	7.3		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	1.0		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-010
Description: EB-01-102621	Matrix: Aqueous
Date Sampled: 10/26/2021 1344	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1055	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		107	70-130
Toluene-d8		104	70-130

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

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# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-011
Description: TB-01-102621	Matrix: Aqueous
Date Sampled: 10/26/2021	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1120	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260D	ND		20	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260D	ND		1.0	ug/L	1
Bromoform	75-25-2	8260D	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260D	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260D	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260D	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260D	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260D	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260D	ND		2.0	ug/L	1
Chloroform	67-66-3	8260D	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260D	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260D	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260D	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260D	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260D	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260D	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260D	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260D	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260D	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260D	ND		1.0	ug/L	1
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
1,2-Dichloropropane	78-87-5	8260D	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260D	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260D	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260D	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260D	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260D	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260D	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260D	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260D	ND		1.0	ug/L	1
Styrene	100-42-5	8260D	ND		1.0	ug/L	1
1,1,2,2-Tetrachloroethane	79-34-5	8260D	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND		1.0	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260D	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260D	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260D	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260D	ND		1.0	ug/L	1

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

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

# Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: WJ26032-011
Description: TB-01-102621	Matrix: Aqueous
Date Sampled: 10/26/2021	Project Name: Westinghouse RI
Date Received: 10/26/2021	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	11/04/2021 1120	BWS		21306

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260D	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260D	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		93	70-130
1,2-Dichloroethane-d4		110	70-130
Toluene-d8		104	70-130

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

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## QC Summary

# Inorganic non-metals - MB

Sample ID: WQ20487-001

Matrix: Aqueous

Batch: 20487

Analytical Method: 353.2

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	10/28/2021 0923

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - LCS

Sample ID: WQ20487-002

Matrix: Aqueous

Batch: 20487

Analytical Method: 353.2

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.40	0.40		1	100	90-110	10/28/2021 0924

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MS

Sample ID: WJ26032-007MS

Matrix: Aqueous

Batch: 20487

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	0.10	0.40	0.12	N	1	5.3	90-110	10/28/2021 0944

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MSD

Sample ID: WJ26032-007MD

Matrix: Aqueous

Batch: 20487

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	0.10	0.40	0.15	N	1	12	19	90-110	20	10/28/2021 0946

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MS

Sample ID: WJ26032-009MS

Matrix: Aqueous

Batch: 20487

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Nitrate - N	ND	0.40	0.25	N	1	63	90-110	10/28/2021 0949

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Inorganic non-metals - MSD

Sample ID: WJ26032-009MD

Matrix: Aqueous

Batch: 20487

Analytical Method: 353.2

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	ND	0.40	0.26	N	1	64	1.1	90-110	20	10/28/2021 0951

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ21306-001

Matrix: Aqueous

Batch: 21306

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	11/04/2021 0957
Benzene	ND		1	1.0	ug/L	11/04/2021 0957
Bromodichloromethane	ND		1	1.0	ug/L	11/04/2021 0957
Bromoform	ND		1	1.0	ug/L	11/04/2021 0957
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	11/04/2021 0957
2-Butanone (MEK)	ND		1	10	ug/L	11/04/2021 0957
Carbon disulfide	ND		1	1.0	ug/L	11/04/2021 0957
Carbon tetrachloride	ND		1	1.0	ug/L	11/04/2021 0957
Chlorobenzene	ND		1	1.0	ug/L	11/04/2021 0957
Chloroethane	ND		1	2.0	ug/L	11/04/2021 0957
Chloroform	ND		1	1.0	ug/L	11/04/2021 0957
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	11/04/2021 0957
Cyclohexane	ND		1	1.0	ug/L	11/04/2021 0957
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	11/04/2021 0957
Dibromochloromethane	ND		1	1.0	ug/L	11/04/2021 0957
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	11/04/2021 0957
1,2-Dichlorobenzene	ND		1	1.0	ug/L	11/04/2021 0957
1,3-Dichlorobenzene	ND		1	1.0	ug/L	11/04/2021 0957
1,4-Dichlorobenzene	ND		1	1.0	ug/L	11/04/2021 0957
Dichlorodifluoromethane	ND		1	2.0	ug/L	11/04/2021 0957
1,1-Dichloroethane	ND		1	1.0	ug/L	11/04/2021 0957
1,2-Dichloroethane	ND		1	1.0	ug/L	11/04/2021 0957
1,1-Dichloroethene	ND		1	1.0	ug/L	11/04/2021 0957
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	11/04/2021 0957
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	11/04/2021 0957
1,2-Dichloropropane	ND		1	1.0	ug/L	11/04/2021 0957
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	11/04/2021 0957
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	11/04/2021 0957
Ethylbenzene	ND		1	1.0	ug/L	11/04/2021 0957
2-Hexanone	ND		1	10	ug/L	11/04/2021 0957
Isopropylbenzene	ND		1	1.0	ug/L	11/04/2021 0957
Methyl acetate	ND		1	1.0	ug/L	11/04/2021 0957
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	11/04/2021 0957
4-Methyl-2-pentanone	ND		1	10	ug/L	11/04/2021 0957
Methylcyclohexane	ND		1	5.0	ug/L	11/04/2021 0957
Methylene chloride	ND		1	1.0	ug/L	11/04/2021 0957
Styrene	ND		1	1.0	ug/L	11/04/2021 0957
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	11/04/2021 0957
Tetrachloroethene	ND		1	1.0	ug/L	11/04/2021 0957
Toluene	ND		1	1.0	ug/L	11/04/2021 0957
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	11/04/2021 0957
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	11/04/2021 0957
1,1,1-Trichloroethane	ND		1	1.0	ug/L	11/04/2021 0957
1,1,2-Trichloroethane	ND		1	1.0	ug/L	11/04/2021 0957

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ21306-001

Matrix: Aqueous

Batch: 21306

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	11/04/2021 0957
Trichlorofluoromethane	ND		1	1.0	ug/L	11/04/2021 0957
Vinyl chloride	ND		1	1.0	ug/L	11/04/2021 0957
Xylenes (total)	ND		1	1.0	ug/L	11/04/2021 0957
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		95	70-130			
1,2-Dichloroethane-d4		109	70-130			
Toluene-d8		104	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ21306-002

Matrix: Aqueous

Batch: 21306

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	83		1	83	60-140	11/04/2021 0859
Benzene	50	50		1	101	70-130	11/04/2021 0859
Bromodichloromethane	50	54		1	108	70-130	11/04/2021 0859
Bromoform	50	58		1	115	70-130	11/04/2021 0859
Bromomethane (Methyl bromide)	50	46		1	93	70-130	11/04/2021 0859
2-Butanone (MEK)	100	99		1	99	70-130	11/04/2021 0859
Carbon disulfide	50	54		1	107	70-130	11/04/2021 0859
Carbon tetrachloride	50	52		1	103	70-130	11/04/2021 0859
Chlorobenzene	50	52		1	103	70-130	11/04/2021 0859
Chloroethane	50	46		1	92	70-130	11/04/2021 0859
Chloroform	50	48		1	96	70-130	11/04/2021 0859
Chloromethane (Methyl chloride)	50	43		1	86	60-140	11/04/2021 0859
Cyclohexane	50	49		1	98	70-130	11/04/2021 0859
1,2-Dibromo-3-chloropropane (DBCP)	50	53		1	105	70-130	11/04/2021 0859
Dibromochloromethane	50	55		1	109	70-130	11/04/2021 0859
1,2-Dibromoethane (EDB)	50	53		1	107	70-130	11/04/2021 0859
1,2-Dichlorobenzene	50	52		1	104	70-130	11/04/2021 0859
1,3-Dichlorobenzene	50	52		1	103	70-130	11/04/2021 0859
1,4-Dichlorobenzene	50	49		1	99	70-130	11/04/2021 0859
Dichlorodifluoromethane	50	50		1	101	60-140	11/04/2021 0859
1,1-Dichloroethane	50	48		1	96	70-130	11/04/2021 0859
1,2-Dichloroethane	50	50		1	101	70-130	11/04/2021 0859
1,1-Dichloroethene	50	51		1	101	70-130	11/04/2021 0859
cis-1,2-Dichloroethene	50	47		1	93	70-130	11/04/2021 0859
trans-1,2-Dichloroethene	50	49		1	97	70-130	11/04/2021 0859
1,2-Dichloropropane	50	53		1	106	70-130	11/04/2021 0859
cis-1,3-Dichloropropene	50	58		1	117	70-130	11/04/2021 0859
trans-1,3-Dichloropropene	50	51		1	103	70-130	11/04/2021 0859
Ethylbenzene	50	53		1	105	70-130	11/04/2021 0859
2-Hexanone	100	110		1	111	70-130	11/04/2021 0859
Isopropylbenzene	50	55		1	110	70-130	11/04/2021 0859
Methyl acetate	50	47		1	94	70-130	11/04/2021 0859
Methyl tertiary butyl ether (MTBE)	50	52		1	104	70-130	11/04/2021 0859
4-Methyl-2-pentanone	100	110		1	112	70-130	11/04/2021 0859
Methylcyclohexane	50	50		1	99	70-130	11/04/2021 0859
Methylene chloride	50	53		1	106	70-130	11/04/2021 0859
Styrene	50	58		1	115	70-130	11/04/2021 0859
1,1,2,2-Tetrachloroethane	50	50		1	100	70-130	11/04/2021 0859
Tetrachloroethene	50	51		1	102	70-130	11/04/2021 0859
Toluene	50	52		1	103	70-130	11/04/2021 0859
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	49		1	99	70-130	11/04/2021 0859
1,2,4-Trichlorobenzene	50	53		1	107	70-130	11/04/2021 0859
1,1,1-Trichloroethane	50	51		1	101	70-130	11/04/2021 0859
1,1,2-Trichloroethane	50	51		1	102	70-130	11/04/2021 0859

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ21306-002

Matrix: Aqueous

Batch: 21306

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichloroethene	50	50		1	99	70-130	11/04/2021 0859
Trichlorofluoromethane	50	51		1	102	70-130	11/04/2021 0859
Vinyl chloride	50	45		1	91	70-130	11/04/2021 0859
Xylenes (total)	100	110		1	109	70-130	11/04/2021 0859
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		97			70-130		
1,2-Dichloroethane-d4		95			70-130		
Toluene-d8		99			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ21308-001

Matrix: Aqueous

Batch: 21308

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	11/04/2021 1005
Benzene	ND		1	1.0	ug/L	11/04/2021 1005
Bromodichloromethane	ND		1	1.0	ug/L	11/04/2021 1005
Bromoform	ND		1	1.0	ug/L	11/04/2021 1005
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	11/04/2021 1005
2-Butanone (MEK)	ND		1	10	ug/L	11/04/2021 1005
Carbon disulfide	ND		1	1.0	ug/L	11/04/2021 1005
Carbon tetrachloride	ND		1	1.0	ug/L	11/04/2021 1005
Chlorobenzene	ND		1	1.0	ug/L	11/04/2021 1005
Chloroethane	ND		1	2.0	ug/L	11/04/2021 1005
Chloroform	ND		1	1.0	ug/L	11/04/2021 1005
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	11/04/2021 1005
Cyclohexane	ND		1	1.0	ug/L	11/04/2021 1005
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	11/04/2021 1005
Dibromochloromethane	ND		1	1.0	ug/L	11/04/2021 1005
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	11/04/2021 1005
1,2-Dichlorobenzene	ND		1	1.0	ug/L	11/04/2021 1005
1,3-Dichlorobenzene	ND		1	1.0	ug/L	11/04/2021 1005
1,4-Dichlorobenzene	ND		1	1.0	ug/L	11/04/2021 1005
Dichlorodifluoromethane	ND		1	2.0	ug/L	11/04/2021 1005
1,1-Dichloroethane	ND		1	1.0	ug/L	11/04/2021 1005
1,2-Dichloroethane	ND		1	1.0	ug/L	11/04/2021 1005
1,1-Dichloroethene	ND		1	1.0	ug/L	11/04/2021 1005
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	11/04/2021 1005
1,2-Dichloropropane	ND		1	1.0	ug/L	11/04/2021 1005
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	11/04/2021 1005
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	11/04/2021 1005
Ethylbenzene	ND		1	1.0	ug/L	11/04/2021 1005
2-Hexanone	ND		1	10	ug/L	11/04/2021 1005
Isopropylbenzene	ND		1	1.0	ug/L	11/04/2021 1005
Methyl acetate	ND		1	1.0	ug/L	11/04/2021 1005
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	11/04/2021 1005
4-Methyl-2-pentanone	ND		1	10	ug/L	11/04/2021 1005
Methylcyclohexane	ND		1	5.0	ug/L	11/04/2021 1005
Methylene chloride	ND		1	1.0	ug/L	11/04/2021 1005
Styrene	ND		1	1.0	ug/L	11/04/2021 1005
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	11/04/2021 1005
Tetrachloroethene	ND		1	1.0	ug/L	11/04/2021 1005
Toluene	ND		1	1.0	ug/L	11/04/2021 1005
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	11/04/2021 1005
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	11/04/2021 1005
1,1,1-Trichloroethane	ND		1	1.0	ug/L	11/04/2021 1005
1,1,2-Trichloroethane	ND		1	1.0	ug/L	11/04/2021 1005
Trichloroethene	ND		1	1.0	ug/L	11/04/2021 1005

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ21308-001

Matrix: Aqueous

Batch: 21308

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichlorofluoromethane	ND		1	1.0	ug/L	11/04/2021 1005
Vinyl chloride	ND		1	1.0	ug/L	11/04/2021 1005
Xylenes (total)	ND		1	1.0	ug/L	11/04/2021 1005
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		87	70-130			
1,2-Dichloroethane-d4		106	70-130			
Toluene-d8		93	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ21308-002

Matrix: Aqueous

Batch: 21308

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Acetone	100	110		1	106	60-140	11/04/2021 0906
Benzene	50	47		1	94	70-130	11/04/2021 0906
Bromodichloromethane	50	56		1	112	70-130	11/04/2021 0906
Bromoform	50	62		1	125	70-130	11/04/2021 0906
Bromomethane (Methyl bromide)	50	43		1	86	70-130	11/04/2021 0906
2-Butanone (MEK)	100	83		1	83	70-130	11/04/2021 0906
Carbon disulfide	50	54		1	109	70-130	11/04/2021 0906
Carbon tetrachloride	50	45		1	91	70-130	11/04/2021 0906
Chlorobenzene	50	51		1	102	70-130	11/04/2021 0906
Chloroethane	50	49		1	98	70-130	11/04/2021 0906
Chloroform	50	43		1	85	70-130	11/04/2021 0906
Chloromethane (Methyl chloride)	50	45		1	89	60-140	11/04/2021 0906
Cyclohexane	50	36		1	72	70-130	11/04/2021 0906
1,2-Dibromo-3-chloropropane (DBCP)	50	53		1	106	70-130	11/04/2021 0906
Dibromochloromethane	50	59		1	117	70-130	11/04/2021 0906
1,2-Dibromoethane (EDB)	50	54		1	108	70-130	11/04/2021 0906
1,2-Dichlorobenzene	50	52		1	104	70-130	11/04/2021 0906
1,3-Dichlorobenzene	50	52		1	103	70-130	11/04/2021 0906
1,4-Dichlorobenzene	50	49		1	99	70-130	11/04/2021 0906
Dichlorodifluoromethane	50	53		1	105	60-140	11/04/2021 0906
1,1-Dichloroethane	50	41		1	82	70-130	11/04/2021 0906
1,2-Dichloroethane	50	45		1	89	70-130	11/04/2021 0906
1,1-Dichloroethene	50	52		1	105	70-130	11/04/2021 0906
trans-1,2-Dichloroethene	50	46		1	92	70-130	11/04/2021 0906
1,2-Dichloropropane	50	43		1	86	70-130	11/04/2021 0906
cis-1,3-Dichloropropene	50	58		1	117	70-130	11/04/2021 0906
trans-1,3-Dichloropropene	50	57		1	114	70-130	11/04/2021 0906
Ethylbenzene	50	54		1	107	70-130	11/04/2021 0906
2-Hexanone	100	88		1	88	70-130	11/04/2021 0906
Isopropylbenzene	50	52		1	104	70-130	11/04/2021 0906
Methyl acetate	50	47		1	94	70-130	11/04/2021 0906
Methyl tertiary butyl ether (MTBE)	50	45		1	90	70-130	11/04/2021 0906
4-Methyl-2-pentanone	100	110		1	108	70-130	11/04/2021 0906
Methylcyclohexane	50	49		1	97	70-130	11/04/2021 0906
Methylene chloride	50	49		1	98	70-130	11/04/2021 0906
Styrene	50	53		1	106	70-130	11/04/2021 0906
1,1,2,2-Tetrachloroethane	50	50		1	99	70-130	11/04/2021 0906
Tetrachloroethene	50	56		1	111	70-130	11/04/2021 0906
Toluene	50	59		1	118	70-130	11/04/2021 0906
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	48		1	97	70-130	11/04/2021 0906
1,2,4-Trichlorobenzene	50	47		1	94	70-130	11/04/2021 0906
1,1,1-Trichloroethane	50	44		1	87	70-130	11/04/2021 0906
1,1,2-Trichloroethane	50	55		1	110	70-130	11/04/2021 0906
Trichloroethene	50	50		1	100	70-130	11/04/2021 0906

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ21308-002

Matrix: Aqueous

Batch: 21308

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Trichlorofluoromethane	50	54		1	109	70-130	11/04/2021 0906
Vinyl chloride	50	43		1	86	70-130	11/04/2021 0906
Xylenes (total)	100	110		1	107	70-130	11/04/2021 0906
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		100			70-130		
1,2-Dichloroethane-d4		87			70-130		
Toluene-d8		110			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ22391-001

Matrix: Aqueous

Batch: 22391

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Chlorobenzene	ND		1	1.0	ug/L	11/12/2021 2205
1,2-Dichlorobenzene	ND		1	1.0	ug/L	11/12/2021 2205
1,4-Dichlorobenzene	ND		1	1.0	ug/L	11/12/2021 2205
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	11/12/2021 2205
Surrogate	Q	% Rec	Acceptance Limit			
Bromofluorobenzene		92	70-130			
1,2-Dichloroethane-d4		98	70-130			
Toluene-d8		103	70-130			

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

# Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ22391-002

Matrix: Aqueous

Batch: 22391

Prep Method: 5030B

Analytical Method: 8260D

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Chlorobenzene	50	44		1	89	70-130	11/12/2021 2101
1,2-Dichlorobenzene	50	44		1	88	70-130	11/12/2021 2101
1,4-Dichlorobenzene	50	43		1	86	70-130	11/12/2021 2101
cis-1,2-Dichloroethene	50	43		1	85	70-130	11/12/2021 2101
Surrogate	Q	% Rec			Acceptance Limit		
Bromofluorobenzene		97			70-130		
1,2-Dichloroethane-d4		80			70-130		
Toluene-d8		95			70-130		

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

\* = RSD is out of criteria

+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody  
and  
Miscellaneous Documents



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

**Number 125826**

Client: <b>WESTINGHOUSE</b>		Report to Contact: <b>Diana Joyner</b>		Telephone No. / E-mail: <b>803 647 1920</b>		Quote No.	
Address: <b>5801 Bluff Rd</b>		Sampler's Signature: <i>[Signature]</i>		Analysis (Attach list if more space is needed)		Page <b>1</b> of <b>1</b>	
City: <b>Hopkins</b>		Printer's Name: <b>James Leightner Randy Carraway</b>		Barcode: <b>MJ26032</b>		Remarks / Center ID:	
State: <b>SC</b>		Zip Code: <b>29061</b>		Project Name: <b>Q4 2021 Sampling</b>		EMG: <b>TB-01-102221</b>	
Project No.:		F.C. No.:		Collection Time (Military):		Remarks / Center ID:	
Sample ID / Description (Containers for each sample may be combined on one line.)		Collection Date/Time		Matrix		Remarks / Center ID:	
W-112-2021-Q4		10-26-21 0930		G		X	
W-94-2021-Q4		10-24		G		X	
W-95-2021-Q4		11-3		G		X	
W-111-2021-Q4		11-9		G		X	
W-107-2021-Q4		12-5		G		X	
W-20-2021-Q4		11-03		G		X	
W-25-2021-Q4		12-09		G		X	
W-109-2021-Q4		09-27		G		X	
W-110-2021-Q4		13-23		G		X	
TB-01-102221		13-44		G		X	

Turn Around Time Required (Prior lab approval required for expedited TAT.)		Sample Disposal		Possible Hazard Identification		OC Requirements (Specify)	
X Standard Rush (Specify)		Return to client		Lab		Date	
1. Requisitioned by: <i>[Signature]</i>		Date: 10-25-21		Time: 1448		Time	
2. Requisitioned by:		Date:		Time:		Time	
3. Requisitioned by:		Date:		Time:		Time	
4. Requisitioned by:		Date:		Time:		Time	

LAB USE ONLY		Receipt Temp.:	
Received on Ice (Circle) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		3.0 °C	
4. Laboratory received by: <i>[Signature]</i>		Date: 10/26/21	
Time: 1448		Temp Blank: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

Document Number: ME00094-01

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

# PACE ANALYTICAL SERVICES, LLC



**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 / 10/26/2021      Lot #: WJ26032

Means of receipt: <input type="checkbox"/> Pace <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other: _____	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA      Chlorine Strip ID: NA      Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt      %Solid Snap-Cup ID: NA	
3.6 / 3.6 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles      IR Gun ID: 5      IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one)
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote #

**Sample Preservation** (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL 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 mg/L (If #19 is #0) and were adjusted accordingly in sample 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: JRG2      Date: 10/26/2021

**Comments:**

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October 29, 2021

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

Re: Ground Water Well Liquid Analysis  
Work Order: 558784

Dear Ms. Teague:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 13, 2021. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

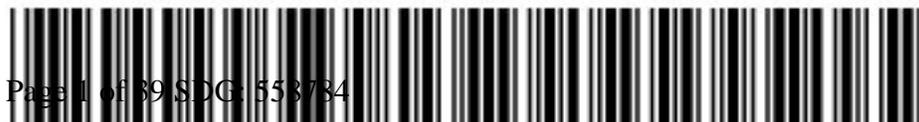
Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at [www.gel.com](http://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. 4523.

Sincerely,

Samuel Hogan  
Project Manager

Purchase Order: 4500822910 Line 2  
Enclosures



**GEL LABORATORIES LLC**

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

**Certificate of Analysis Report  
for**

WNUC010 Westinghouse Electric Company PO (4500822910)

Client SDG: 558784 GEL Work Order: 558784

**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
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy—Uncertain identification

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, Samuel Hogan.



Reviewed by \_\_\_\_\_



# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-11-2021-Q4  
Sample ID: 558784002  
Matrix: Ground Water  
Collect Date: 05-OCT-21 10:45  
Receive Date: 13-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	10/28/21	1736	2186870	1
Uranium-238	J	0.0947	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	10/29/21	0223	2186870	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.0947	0.0670	0.200	ug/L			PRB	10/29/21	1211	2191631	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	10/20/21	0900	2186868

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-13R-2021-Q4      Project: WNUC01022  
Sample ID: 558784003      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 05-OCT-21 10:51  
Receive Date: 13-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	10/28/21	1738	2186870	1
Uranium-238	J	0.158	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	10/29/21	0225	2186870	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.158	0.0670	0.200	ug/L			PRB	10/29/21	1211	2191631	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	10/20/21	0900	2186868

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-28-2021-Q4  
Sample ID: 558784004  
Matrix: Ground Water  
Collect Date: 06-OCT-21 11:58  
Receive Date: 13-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	J	0.0411	0.0100	0.0700	ug/L	1.00	1	PRB	10/28/21	1740	2186870	1
Uranium-238		2.04	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	10/29/21	0227	2186870	2
Calculation for Total U "See Parent Products"												
Total Uranium		2.08	0.0670	0.200	ug/L			PRB	10/29/21	1211	2191631	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	10/20/21	0900	2186868

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-77-2021-Q4  
Sample ID: 558784005  
Matrix: Ground Water  
Collect Date: 06-OCT-21 10:45  
Receive Date: 13-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235		5.52	0.100	0.700	ug/L	1.00	10	PRB	10/29/21	0834	2186870	1
Uranium-238		128	0.670	2.00	ug/L	1.00	10					
Uranium-234	J	0.0470	0.0100	0.0500	ug/L	1.00	1	PRB	10/29/21	0228	2186870	2
Calculation for Total U "See Parent Products"												
Total Uranium		133	0.670	2.00	ug/L			PRB	10/29/21	1211	2191631	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	10/20/21	0900	2186868

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit





# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-123-2021-Q4      Project: WNUC01022  
Sample ID: 558784008      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 05-OCT-21 12:02  
Receive Date: 13-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	J	0.0118	0.0100	0.0700	ug/L	1.00	1	PRB	10/28/21	1747	2186870	1
Uranium-238		1.60	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	10/29/21	0234	2186870	2
Calculation for Total U "See Parent Products"												
Total Uranium		1.61	0.0670	0.200	ug/L			PRB	10/29/21	1211	2191631	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	10/20/21	0900	2186868

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-6-2021-Q4	Project: WNUC01022
Sample ID: 558784001	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 08-OCT-21 10:28	
Receive Date: 13-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MP2	10/19/21	1314	2185750	1
Uranium-233/234		0.255	+/-0.182	0.253	0.500	pCi/L							
Uranium-235/236	U	0.152	+/-0.134	0.154	0.500	pCi/L							
Uranium-238		0.167	+/-0.117	0.104	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		16.9	+/-6.66	4.64	5.00	pCi/L			JXK3	10/20/21	0735	2186232	2
Beta		1270	+/-27.4	3.96	5.00	pCi/L							
Alpha		10.1	+/-4.89	4.67	5.00	pCi/L			JXK3	10/20/21	1126	2186232	3
Beta		1300	+/-25.0	4.46	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		2500	+/-48.6	6.35	5.00	pCi/L			JJ3	10/19/21	0629	2185792	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	EPA 900.0/SW846 9310	
4	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			95	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.1	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-11-2021-Q4	Project: WNUC01022
Sample ID: 558784002	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 05-OCT-21 10:45	
Receive Date: 13-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MP2	10/19/21	1314	2185750	1
Uranium-233/234	U	0.0982	+/-0.105	0.157	0.500	pCi/L							
Uranium-235/236	U	0.0430	+/-0.0833	0.138	0.500	pCi/L							
Uranium-238	U	0.0347	+/-0.0754	0.132	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.13	+/-4.37	3.77	5.00	pCi/L			JXK3	10/20/21	0810	2186232	2
Beta		633	+/-19.5	3.61	5.00	pCi/L							
Alpha	U	0.502	+/-1.67	3.33	5.00	pCi/L			JXK3	10/20/21	1127	2186232	3
Beta		620	+/-19.3	3.98	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		1230	+/-24.1	4.93	5.00	pCi/L			JJ3	10/19/21	0638	2185792	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	EPA 900.0/SW846 9310	
4	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			99.1	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-13R-2021-Q4	Project: WNUC01022
Sample ID: 558784003	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 05-OCT-21 10:51	
Receive Date: 13-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235		16.1				percent			MP2	10/19/21	1314	2185750	1
Uranium-233/234	U	0.195	+/-0.145	0.204	0.500	pCi/L							
Uranium-235/236		0.151	+/-0.113	0.104	0.500	pCi/L							
Uranium-238		0.122	+/-0.0977	0.115	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammascpec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	45.8	+/-49.0	72.1		pCi/L			MXR1	10/15/21	1156	2185785	2
Bismuth-211	UI	0.000	+/-60.1	37.5		pCi/L							
Bismuth-212	U	-69.8	+/-81.9	127		pCi/L							
Bismuth-214		38.2	+/-25.0	20.8		pCi/L							
Lead-210	U	-89.0	+/-100	191		pCi/L							
Lead-211	U	-11.7	+/-116	213		pCi/L							
Lead-212	U	-6.66	+/-9.93	17.0		pCi/L							
Lead-214	U	27.5	+/-21.8	28.9		pCi/L							
Potassium-40	U	13.8	+/-98.1	193		pCi/L							
Protactinium-231	U	-21.8	+/-62.0	113		pCi/L							
Protactinium-234	U	13.6	+/-44.5	96.0		pCi/L							
Radium-223	U	65.7	+/-96.1	192		pCi/L							
Radium-226	U	98.7	+/-206	155		pCi/L							
Radium-228	U	45.8	+/-49.0	72.1		pCi/L							
Thallium-208	U	-7.47	+/-7.30	12.0		pCi/L							
Thorium-227	U	5.37	+/-35.0	66.9		pCi/L							
Thorium-234	U	105	+/-144	197		pCi/L							
Uranium-235	U	-33.8	+/-33.1	44.4		pCi/L							
Uranium-238	U	105	+/-144	197		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.526	+/-0.971	3.67	5.00	pCi/L			JXK3	10/20/21	0810	2186232	3
Beta		70.7	+/-6.72	4.88	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	176	+/-331	572	700	pCi/L			AG2	10/20/21	1711	2186102	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		126	+/-6.31	4.15	5.00	pCi/L			JJ3	10/19/21	0654	2185792	5

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## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-13R-2021-Q4  
Sample ID: 558784003

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Te-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			98.2	(15%-125%)
Technetium-99m Tracer	Liquid Scint Te99, Liquid "As Received"			89.9	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-28-2021-Q4	Project: WNUC01022
Sample ID: 558784004	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 06-OCT-21 11:58	
Receive Date: 13-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
<b>Rad Alpha Spec Analysis</b>												
<b>Alphaspec U, Liquid "As Received"</b>												
Pct Uranium-235	U	0.000				percent		MP2	10/19/21	1314	2185750	1
Uranium-233/234		1.89	+/-0.328	0.204	0.500	pCi/L						
Uranium-235/236	U	0.0987	+/-0.0956	0.116	0.500	pCi/L						
Uranium-238		0.472	+/-0.184	0.198	0.500	pCi/L						
<b>Rad Gas Flow Proportional Counting</b>												
<b>GFPC, Gross Alpha Liquid "As Received"</b>												
Alpha		7.01	+/-4.13	4.82	5.00	pCi/L		JXK3	10/20/21	0810	2186232	2
Beta		7.16	+/-2.84	3.84	5.00	pCi/L						
<b>Rad Liquid Scintillation Analysis</b>												
<b>Liquid Scint Tc99, Liquid "As Received"</b>												
Technetium-99	U	2.14	+/-2.43	4.09	5.00	pCi/L		JJ3	10/19/21	0722	2185792	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			107	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			90.6	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-77-2021-Q4	Project: WNUC01022
Sample ID: 558784005	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 06-OCT-21 10:45	
Receive Date: 13-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235		5.61				percent			MP2	10/19/21	1314	2185750	1
Uranium-233/234		268	+/-4.53	0.191	0.500	pCi/L							
Uranium-235/236		17.0	+/-1.27	0.215	0.500	pCi/L							
Uranium-238		44.4	+/-1.85	0.240	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		206	+/-19.0	10.4	5.00	pCi/L			JXK3	10/19/21	1859	2186232	2
Beta		53.1	+/-7.05	9.14	5.00	pCi/L							
Alpha		236	+/-19.1	9.21	5.00	pCi/L			JXK3	10/20/21	1758	2186232	3
Beta		19.7	+/-5.85	8.73	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	2.50	+/-2.55	4.26	5.00	pCi/L			JJ3	10/19/21	0750	2185792	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	EPA 900.0/SW846 9310	
4	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			64.9	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			89.3	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-78-2021-Q4	Project: WNUC01022
Sample ID: 558784006	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 06-OCT-21 13:00	
Receive Date: 13-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235		60.0				percent			MP2	10/19/21	1314	2185750	1
Uranium-233/234		0.195	+/-0.142	0.193	0.500	pCi/L							
Uranium-235/236		0.138	+/-0.111	0.108	0.500	pCi/L							
Uranium-238	U	0.0143	+/-0.0840	0.165	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.919	+/-1.22	3.37	5.00	pCi/L		JXK3	10/20/21	0810	2186232		2
Beta	U	-2.13	+/-2.33	4.68	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.551	+/-2.17	3.90	5.00	pCi/L		JJ3	10/19/21	0817	2185792		3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			87.8	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93.9	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-93-2021-Q4	Project: WNUC01022
Sample ID: 558784007	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 06-OCT-21 09:49	
Receive Date: 13-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent		MP2	10/19/21	1314	2185750		1
Uranium-233/234		0.264	+/-0.149	0.174	0.500	pCi/L							
Uranium-235/236	U	0.101	+/-0.118	0.174	0.500	pCi/L							
Uranium-238	U	0.0520	+/-0.0857	0.141	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.17	+/-2.11	3.11	5.00	pCi/L		JXK3	10/20/21	0810	2186232		2
Beta	U	3.21	+/-2.73	4.36	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.0595	+/-2.46	4.36	5.00	pCi/L		JJ3	10/19/21	0845	2185792		3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			88.2	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			89.4	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: October 29, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-123-2021-Q4	Project: WNUC01022
Sample ID: 558784008	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 05-OCT-21 12:02	
Receive Date: 13-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MP2	10/19/21	1314	2185750	1
Uranium-233/234		0.333	+/-0.211	0.292	0.500	pCi/L							
Uranium-235/236	U	0.0432	+/-0.0929	0.153	0.500	pCi/L							
Uranium-238		0.421	+/-0.197	0.212	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		5.43	+/-4.34	4.72	5.00	pCi/L			JXK3	10/20/21	0810	2186232	2
Beta		234	+/-10.5	4.02	5.00	pCi/L							
Alpha		5.19	+/-3.61	4.66	5.00	pCi/L			JXK3	10/20/21	1127	2186232	3
Beta		243	+/-10.9	3.67	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		424	+/-10.5	3.79	5.00	pCi/L			JJ3	10/19/21	0912	2185792	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	EPA 900.0/SW846 9310	
4	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			101	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## QC Summary

Report Date: October 29, 2021

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Westinghouse Electric Company, LLC

PO Drawer R  
Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 558784

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2186870										
QC1204934256	558784001	DUP									
Uranium-234	U	ND	U	ND	ug/L	N/A			PRB	10/29/21	02:14
Uranium-235	U	ND	U	ND	ug/L	N/A				10/28/21	17:27
Uranium-238		0.321		0.328	ug/L	2.22 ^		(+/-0.200)			
QC1204934255	LCS										
Uranium-235	0.360			0.381	ug/L		106	(85%-115%)		10/28/21	17:24
Uranium-238	49.6			52.1	ug/L		105	(85%-115%)			
QC1204934259	LCS										
Uranium-234	0.550			0.546	ug/L		99.3	(85%-115%)		10/29/21	02:11
QC1204934254	MB										
Uranium-234			U	ND	ug/L					10/29/21	08:30
Uranium-235			U	ND	ug/L					10/28/21	17:22
Uranium-238			U	ND	ug/L						
QC1204934257	558784001	MS									
Uranium-235	0.360	U	ND	0.386	ug/L		106	(75%-125%)		10/28/21	17:29
Uranium-238	49.6		0.321	53.2	ug/L		106	(75%-125%)			
QC1204934260	558784001	MS									
Uranium-234	0.550	U	ND	0.564	ug/L		103	(75%-125%)		10/29/21	02:16

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## QC Summary

Workorder: 558784

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2186870										
QC1204934258	558784001	SDILT									
Uranium-234	U	ND	U	ND	ug/L	N/A		(0%-10%)	PRB	10/29/21	02:18
Uranium-235	U	ND	U	ND	ug/L	N/A		(0%-10%)		10/28/21	17:31
Uranium-238		0.321	J	0.0733	ug/L	14.1		(0%-10%)			

**Notes:**

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated
- N Metals--The Matrix spike sample recovery is not within specified control limits
- N/A RPD or %Recovery limits do not apply.
- N1 See case narrative
- 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
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- 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

# GEL LABORATORIES LLC

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## QC Summary

Workorder: 558784

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<u>Parmname</u>	<u>NOM</u>	<u>Sample Qual</u>	<u>QC</u>	<u>Units</u>	<u>RPD%</u>	<u>REC%</u>	<u>Range</u>	<u>Anlst</u>	<u>Date</u>	<u>Time</u>
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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.

# GEL LABORATORIES LLC

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

## QC Summary

Report Date: October 29, 2021

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Westinghouse Electric Company, LLC

PO Drawer R  
Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 558784

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Alpha Spec</b>											
Batch	2185750										
QC1204932113	558784001	DUP									
Pct Uranium-235	U	0.000	U	0.000	percent	N/A		N/A	MP2	10/19/21	13:14
Uranium-233/234		0.255		0.216	pCi/L	16.6		(0% - 100%)			
	Uncertainty	+/-0.182		+/-0.143							
Uranium-235/236	U	0.152	U	0.00932	pCi/L	N/A		N/A			
	Uncertainty	+/-0.134		+/-0.0584							
Uranium-238		0.167		0.144	pCi/L	14.9		(0% - 100%)			
	Uncertainty	+/-0.117		+/-0.114							
QC1204932114	LCS										
Pct Uranium-235				1.13	percent					10/19/21	13:14
Uranium-233/234				11.4	pCi/L						
	Uncertainty			+/-0.738							
Uranium-235/236				0.906	pCi/L						
	Uncertainty			+/-0.234							
Uranium-238	13.6			12.4	pCi/L		91.2	(75%-125%)			
	Uncertainty			+/-0.766							
QC1204932112	MB										
Pct Uranium-235			U	0.000	percent					10/19/21	13:14
Uranium-233/234			U	0.0803	pCi/L						
	Uncertainty			+/-0.119							
Uranium-235/236			U	-0.00961	pCi/L						
	Uncertainty			+/-0.0459							
Uranium-238			U	0.0845	pCi/L						
	Uncertainty			+/-0.0907							

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## QC Summary

Workorder: 558784

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2185785										
QC1204932182 558784003 DUP											
Actinium-228	U	45.8	U	1.14	pCi/L	N/A		N/A MXR1		10/15/21	16:02
	Uncertainty	+/-49.0		+/-26.6							
Bismuth-211	UI	0.000	U	0.219	pCi/L	N/A		N/A			
	Uncertainty	+/-60.1		+/-34.3							
Bismuth-212	U	-69.8	U	-16.0	pCi/L	N/A		N/A			
	Uncertainty	+/-81.9		+/-64.2							
Bismuth-214		38.2	U	6.96	pCi/L	40.7		(0% - 100%)			
	Uncertainty	+/-25.0		+/-22.9							
Lead-210	U	-89.0	U	-482	pCi/L	N/A		N/A			
	Uncertainty	+/-100		+/-1150							
Lead-211	U	-11.7	U	117	pCi/L	N/A		N/A			
	Uncertainty	+/-116		+/-97.0							
Lead-212	U	-6.66	U	14.4	pCi/L	N/A		N/A			
	Uncertainty	+/-9.93		+/-25.9							
Lead-214	U	27.5	U	3.79	pCi/L	N/A		N/A			
	Uncertainty	+/-21.8		+/-12.8							
Potassium-40	U	13.8	U	-9.60	pCi/L	N/A		N/A			
	Uncertainty	+/-98.1		+/-77.8							
Protactinium-231	U	-21.8	U	-19.2	pCi/L	N/A		N/A			
	Uncertainty	+/-62.0		+/-70.4							
Protactinium-234	U	13.6	U	-13.3	pCi/L	N/A		N/A			
	Uncertainty	+/-44.5		+/-40.2							
Radium-223	U	65.7	U	-60.8	pCi/L	N/A		N/A			
	Uncertainty	+/-96.1		+/-91.7							
Radium-226	U	98.7	U	30.9	pCi/L	N/A		N/A			
	Uncertainty	+/-206		+/-125							
Radium-228	U	45.8	U	1.14	pCi/L	N/A		N/A			
	Uncertainty	+/-49.0		+/-26.6							
Thallium-208	U	-7.47	U	3.74	pCi/L	N/A		N/A			
	Uncertainty	+/-7.30		+/-8.29							

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## QC Summary

Workorder: 558784

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2185785										
Thorium-227	U Uncertainty	5.37 +/-35.0	U	2.21 +/-33.3	pCi/L	N/A		N/A	MXR1	10/15/21	16:02
Thorium-234	U Uncertainty	105 +/-144	U	99.9 +/-300	pCi/L	N/A		N/A			
Uranium-235	U Uncertainty	-33.8 +/-33.1	U	10.2 +/-34.9	pCi/L	N/A		N/A			
Uranium-238	U Uncertainty	105 +/-144	U	99.9 +/-300	pCi/L	N/A		N/A			
QC1204932183	LCS										
Americium-241	1.09E+05 Uncertainty			1.22E+05 +/-2880	pCi/L		113	(75%-125%)		10/15/21	16:48
Cesium-137	37900 Uncertainty			40400 +/-774	pCi/L		107	(75%-125%)			
Cobalt-60	21400 Uncertainty			22200 +/-692	pCi/L		104	(75%-125%)			
Actinium-228	Uncertainty		U	58.4 +/-528	pCi/L						
Bismuth-211	Uncertainty		U	-133 +/-659	pCi/L						
Bismuth-212	Uncertainty		U	-630 +/-1400	pCi/L						
Bismuth-214	Uncertainty		U	32.8 +/-198	pCi/L						
Lead-210	Uncertainty			1.11E+06 +/-98200	pCi/L						
Lead-211	Uncertainty		U	-819 +/-2540	pCi/L						
Lead-212	Uncertainty		U	15.0 +/-173	pCi/L						
Lead-214	Uncertainty		U	-18.0 +/-242	pCi/L						

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## QC Summary

Workorder: 558784

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2185785										
Potassium-40			U	-420	pCi/L				MXR1	10/15/21	16:48
	Uncertainty			+/-444							
Protactinium-231			U	-269	pCi/L						
	Uncertainty			+/-1510							
Protactinium-234			U	353	pCi/L						
	Uncertainty			+/-1180							
Radium-223			U	-625	pCi/L						
	Uncertainty			+/-2030							
Radium-226			U	-339	pCi/L						
	Uncertainty			+/-1890							
Radium-228			U	58.4	pCi/L						
	Uncertainty			+/-528							
Thallium-208			U	-32.6	pCi/L						
	Uncertainty			+/-112							
Thorium-227			U	245	pCi/L						
	Uncertainty			+/-812							
Thorium-234			U	1160	pCi/L						
	Uncertainty			+/-6200							
Uranium-235			U	217	pCi/L						
	Uncertainty			+/-617							
Uranium-238			U	1160	pCi/L						
	Uncertainty			+/-6200							
QC1204932181	MB										
Actinium-228			U	23.3	pCi/L					10/15/21	13:22
	Uncertainty			+/-25.1							
Bismuth-211			U	9.81	pCi/L						
	Uncertainty			+/-54.2							
Bismuth-212			U	18.0	pCi/L						
	Uncertainty			+/-59.4							
Bismuth-214			U	-0.570	pCi/L						
	Uncertainty			+/-12.2							

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## QC Summary

Workorder: 558784

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2185785										
Lead-210			U	-868	pCi/L				MXR1	10/15/21	13:22
	Uncertainty			+/-1980							
Lead-211			U	-15.6	pCi/L						
	Uncertainty			+/-97.2							
Lead-212			U	-9.42	pCi/L						
	Uncertainty			+/-10.3							
Lead-214			U	3.56	pCi/L						
	Uncertainty			+/-19.7							
Potassium-40			U	-16.1	pCi/L						
	Uncertainty			+/-73.4							
Protactinium-231			U	26.6	pCi/L						
	Uncertainty			+/-59.5							
Protactinium-234			U	1.71	pCi/L						
	Uncertainty			+/-41.7							
Radium-223			U	24.7	pCi/L						
	Uncertainty			+/-89.5							
Radium-226			U	-74.4	pCi/L						
	Uncertainty			+/-117							
Radium-228			U	23.3	pCi/L						
	Uncertainty			+/-25.1							
Thallium-208			U	-5.40	pCi/L						
	Uncertainty			+/-6.79							
Thorium-227			U	-12.6	pCi/L						
	Uncertainty			+/-33.4							
Thorium-234			U	-253	pCi/L						
	Uncertainty			+/-358							
Uranium-235			U	-31.1	pCi/L						
	Uncertainty			+/-31.3							
Uranium-238			U	-253	pCi/L						
	Uncertainty			+/-358							

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## QC Summary

Workorder: 558784

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	2186232										
QC1204932913	558784003	DUP									
Alpha	U	-0.526	U	0.341	pCi/L	N/A		N/A	JJK3	10/20/21	08:10
	Uncertainty	+/-0.971		+/-1.39							
Beta		70.7		73.2	pCi/L	3.44		(0%-20%)			
	Uncertainty	+/-6.72		+/-6.39							
QC1204932916	LCS										
Alpha		121		132	pCi/L		109	(75%-125%)		10/20/21	06:26
	Uncertainty			+/-12.5							
Beta		452		482	pCi/L		106	(75%-125%)			
	Uncertainty			+/-16.6							
QC1204932912	MB										
Alpha			U	-0.521	pCi/L					10/20/21	08:09
	Uncertainty			+/-0.847							
Beta			U	-2.35	pCi/L						
	Uncertainty			+/-1.80							
QC1204932914	558784003	MS									
Alpha	253 U	-0.526		264	pCi/L		105	(75%-125%)		10/20/21	06:25
	Uncertainty	+/-0.971		+/-29.4							
Beta	947	70.7		1080	pCi/L		107	(75%-125%)			
	Uncertainty	+/-6.72		+/-35.8							
QC1204932915	558784003	MSD									
Alpha	251 U	-0.526		316	pCi/L	17.8	126*	(0%-20%)		10/20/21	06:25
	Uncertainty	+/-0.971		+/-34.6							
Beta	940	70.7		1070	pCi/L	1.22	106	(0%-20%)			
	Uncertainty	+/-6.72		+/-35.7							
<b>Rad Liquid Scintillation</b>											
Batch	2185792										
QC1204932199	558784001	DUP									
Technetium-99		2500		2670	pCi/L	6.36		(0%-20%)	JJ3	10/19/21	10:08
	Uncertainty	+/-48.6		+/-51.8							
QC1204932200	LCS										
Technetium-99		127		123	pCi/L		96.8	(75%-125%)		10/19/21	10:16
	Uncertainty			+/-5.77							

# GEL LABORATORIES LLC

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## QC Summary

Workorder: 558784

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Liquid Scintillation</b>											
Batch	2185792										
QC1204932198	MB										
Technetium-99			U	-1.69	pCi/L				JJ3	10/19/21	09:39
	Uncertainty			+/-2.14							
<hr/>											
Batch	2186102										
QC1204932745	558784003	DUP									
Tritium	U	176	U	176	pCi/L	N/A		N/A	AG2	10/20/21	17:54
	Uncertainty	+/-331		+/-327							
QC1204932747	LCS										
Tritium	5510			5890	pCi/L		107	(75%-125%)		10/20/21	18:36
	Uncertainty			+/-636							
QC1204932744	MB										
Tritium			U	-25.1	pCi/L					10/20/21	17:32
	Uncertainty			+/-313							
QC1204932746	558784003	MS									
Tritium	5520	U	176	5610	pCi/L		102	(75%-125%)		10/20/21	18:15
	Uncertainty	+/-331		+/-634							

**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.
- N1 See case narrative
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

# GEL LABORATORIES LLC

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

## QC Summary

Workorder: 558784

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Q											
R											
U											
UI											
UJ											
UL											
X											
Y											
^											
h											

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.

**Technical Case Narrative  
Westinghouse Electric Company PO  
SDG #: 558784**

## **Metals**

**Product:** Determination of Metals by ICP-MS

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-MA-E-014 REV# 35

**Analytical Batch:** 2186870

**Preparation Method:** EPA 200.2

**Preparation Procedure:** GL-MA-E-016 REV# 18

**Preparation Batch:** 2186868

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
558784001	W-6-2021-Q4
558784002	W-11-2021-Q4
558784003	W-13R-2021-Q4
558784004	W-28-2021-Q4
558784005	W-77-2021-Q4
558784006	W-78-2021-Q4
558784007	W-93-2021-Q4
558784008	W-123-2021-Q4
1204934254	Method Blank (MB)ICP-MS
1204934255	Laboratory Control Sample (LCS)
1204934259	Laboratory Control Sample (LCS)
1204934258	558784001(W-6-2021-Q4L) Serial Dilution (SD)
1204934256	558784001(W-6-2021-Q4D) Sample Duplicate (DUP)
1204934257	558784001(W-6-2021-Q4S) Matrix Spike (MS)
1204934260	558784001(W-6-2021-Q4S) Matrix Spike (MS)

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

### **Data Summary:**

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, with the following exceptions.

### **Calibration Information**

#### **ICSA/ICSAB Statement**

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

### **Technical Information**

#### **Sample Dilutions**

Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range. Sample 558784005 (W-77-2021-Q4) was diluted

to ensure that the analyte concentration was within the linear calibration range of the instrument.

Analyte	558784
	005
Uranium-235	10X
Uranium-238	10X

**Product: Inorganic Calculations**

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-GC-E-107 REV# 10

**Analytical Batch:** 2191631

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
558784001	W-6-2021-Q4
558784002	W-11-2021-Q4
558784003	W-13R-2021-Q4
558784004	W-28-2021-Q4
558784005	W-77-2021-Q4
558784006	W-78-2021-Q4
558784007	W-93-2021-Q4
558784008	W-123-2021-Q4

**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.

## **Radiochemistry**

**Product: Alphaspec U, Liquid**

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

**Analytical Procedure:** GL-RAD-A-011 REV# 28

**Analytical Batch:** 2185750

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
558784001	W-6-2021-Q4
558784002	W-11-2021-Q4
558784003	W-13R-2021-Q4
558784004	W-28-2021-Q4
558784005	W-77-2021-Q4
558784006	W-78-2021-Q4
558784007	W-93-2021-Q4
558784008	W-123-2021-Q4
1204932112	Method Blank (MB)

1204932113 558784001(W-6-2021-Q4) Sample Duplicate (DUP)  
1204932114 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:** Gammasec, Gamma, Liquid NORM/TENORM

**Analytical Method:** EPA 901.1

**Analytical Procedure:** GL-RAD-A-013 REV# 27

**Analytical Batch:** 2185785

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
558784003	W-13R-2021-Q4
1204932181	Method Blank (MB)
1204932182	558784003(W-13R-2021-Q4) Sample Duplicate (DUP)
1204932183	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.

**Qualifier Information**

<b>Qualifier</b>	<b>Reason</b>	<b>Analyte</b>	<b>Sample</b>	<b>Client Sample</b>
UI	Results are considered a false positive due to interference.	Bismuth-211	558784003	W-13R-2021-Q4

**Product:** GFPC, Gross Alpha Liquid

**Analytical Method:** EPA 900.0/SW846 9310

**Analytical Procedure:** GL-RAD-A-001 REV# 20

**Analytical Batch:** 2186232

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
558784001	W-6-2021-Q4
558784002	W-11-2021-Q4
558784003	W-13R-2021-Q4
558784004	W-28-2021-Q4
558784005	W-77-2021-Q4
558784006	W-78-2021-Q4
558784007	W-93-2021-Q4
558784008	W-123-2021-Q4
1204932912	Method Blank (MB)
1204932913	558784003(W-13R-2021-Q4) Sample Duplicate (DUP)
1204932914	558784003(W-13R-2021-Q4) Matrix Spike (MS)
1204932915	558784003(W-13R-2021-Q4) Matrix Spike Duplicate (MSD)
1204932916	Laboratory Control Sample (LCS)

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

#### **Data Summary:**

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, with the following exceptions.

#### **Preparation Information**

##### **Aliquot Reduced**

558784005 (W-77-2021-Q4) aliquot volume was reduced due to the sample matrix.

#### **Quality Control (QC) Information**

##### **Matrix Spike (MS) Recovery**

Matrix Spike Duplicate did not meet the recovery requirement; however the Matrix Spike did meet the recovery requirement. The Matrix Spike and Matrix Spike Duplicate also meet the relative percent difference requirement.

Sample	Analyte	Value
1204932915 (W-13R-2021-Q4MSD)	Alpha	126* (75%-125%)

#### **Technical Information**

##### **Gross Alpha/Beta Preparation Information**

High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating.

##### **Recounts**

Samples 558784001 (W-6-2021-Q4), 558784002 (W-11-2021-Q4), 558784005 (W-77-2021-Q4) and 558784008 (W-123-2021-Q4) were recounted to verify sample results. Both counts are reported.

#### **Miscellaneous Information**

**Additional Comments**

The matrix spike and matrix spike duplicate, 1204932914 (W-13R-2021-Q4MS) and 1204932915 (W-13R-2021-Q4MSD), aliquots were reduced to conserve sample volume.

**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:** 2185792

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
558784001	W-6-2021-Q4
558784002	W-11-2021-Q4
558784003	W-13R-2021-Q4
558784004	W-28-2021-Q4
558784005	W-77-2021-Q4
558784006	W-78-2021-Q4
558784007	W-93-2021-Q4
558784008	W-123-2021-Q4
1204932198	Method Blank (MB)
1204932199	558784001(W-6-2021-Q4) Sample Duplicate (DUP)
1204932200	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Technical Information**

**Recounts**

Samples 558784003 (W-13R-2021-Q4) and 558784008 (W-123-2021-Q4) were recounted to verify sample results. The recount results are similar to the original results. Original results are reported.

**Product: LSC, Tritium Distillation, Liquid**

**Analytical Method:** EPA 906.0 Modified

**Analytical Procedure:** GL-RAD-A-002 REV# 24

**Analytical Batch:** 2186102

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
------------------------------	--

558784003	W-13R-2021-Q4
1204932744	Method Blank (MB)
1204932745	558784003(W-13R-2021-Q4) Sample Duplicate (DUP)
1204932746	558784003(W-13R-2021-Q4) Matrix Spike (MS)
1204932747	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.

**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.

Page 2 of 3  
 Project # NPDES Groundwater Wells  
 GEL Quote #: 558784  
 Chain of Custody and Analytical Request  
 PO# 4500822910 Line 2  
 Client Name: Westinghouse  
 Phone # 803.647.1920  
 Fax # 803.695.3964  
 Address: 5801 Bluff Road, Hopkins, SC 29061  
 Contact By: Randy Crews *Randy Crews* Send Results To: joynerdp@westinghouse.com  
 GEL Work Order Number: GEL Project Manager: S. Hogan  
 GEL Laboratories, LLC  
 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171  
 Fax: (843) 766-1178

Sample ID <i>* For composites - indicate start and stop date/time</i>	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code <sup>(b)</sup>	Field Filtered <sup>(b)</sup>	Sample Matrix <sup>(b)</sup>	Should this sample be considered:		Sample Analysis Requested <sup>(6)</sup> (Fill in the number of containers for each test)						Comments
						Radioactive (if isotopic info.)	Yes, please supply isotopic info.)	Total number of containers	Individual isotopic, gross alpha	gross beta	Tc-99	Total U (by ICP-MS)	Gamma spectroscopy	
W-6-2021-Q4	10/8/2021	1028	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942
W-11-2021-Q4	10/5/2021	1045	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942
W-13R-2021-Q4	10/5/2021	1051	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942
W-28-2021-Q4	10/6/2021	1158	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942
W-77-2021-Q4	10/6/2021	1045	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942
W-78-2021-Q4	10/6/2021	1300	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942
W-93-2021-Q4	10/6/2021	0949	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942
W-123-2021-Q4	10/5/2021	1202	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942

**Chain of Custody Signatures**

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
<i>[Signature]</i>	10/13/2021	0948	<i>[Signature]</i>	10/13/21	1459
<i>[Signature]</i>	10/13/21	1604	<i>[Signature]</i>	10/13/21	1850
<i>[Signature]</i>	10/13/21	1604	<i>[Signature]</i>	10/13/21	1850

Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4  
 Additional Remarks:  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 4 °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other:

**Chain of Custody Signatures**

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  
 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=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal  
 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

**KNOWN OR POSSIBLE HAZARDS**

RCRA Metals	Characteristic Hazards	Listed Waste	Other
As = Arsenic Ba = Barium Cd = Cadmium Cr = Chromium Pb = Lead	FL = Flammable/Ignitable CO = Corrosive RE = Reactive	LW = Listed Waste (F, K, P and U-listed wastes.) Waste code(s):	OT = Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:

TSCA Regulated  
 PCB = Polychlorinated biphenyls

Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

SA

**SAMPLE RECEIPT & REVIEW FORM**

Client: <u>WNUC</u>		SDG/AR/COC/Work Order: <u>558784</u>			
Received By: <u>BE</u>		Date Received: <u>10/13/21</u>			
Carrier and Tracking Number		FedEx Express   FedEx Ground   UPS   Field Services <u>Courier</u> Other			
Suspected Hazard Information		*If Net Counts > 100cpm on samples not marked "radioactive"; contact the Radiation Safety Group for further investigation.			
A) Shipped as a DOT Hazardous?		Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___			
B) Did the client designate the samples are to be received as radioactive?		COC notation or radioactive stickers on containers equal client designation.			
C) Did the RSO classify the samples as radioactive?		Maximum Net Counts Observed* (Observed Counts - Area Background Counts): _____ CPM / mR/Hr Classified as <u>Rad 1</u> Rad 2 Rad 3			
D) Did the client designate samples are hazardous?		COC notation or hazard labels on containers equal client designation.			
E) Did the RSO identify possible hazards?		If D or E is yes, select Hazards below. PCB's   Flammable   Foreign Soil   RCRA   Asbestos   Beryllium   Other: _____			
Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken   Damaged container   Leaking container   Other (describe)
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC   COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Preservation Method: <u>Wet Ice</u> Ice Packs Dry ice <u>None</u> Other: _____ *all temperatures are recorded in Celsius      TEMP: <u>4</u>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>IR2-21</u> Secondary Temperature Device Serial # (If Applicable): _____
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken   Damaged container   Leaking container   Other (describe)
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: _____ If Preservation added, Lot#: _____
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected: _____
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected: _____
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers   No times on containers   COC missing info   Other (describe)
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC   Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished   Other (describe)
Comments (Use Continuation Form if needed):					

PM (or PMA) review: Initials NRL Date 10/19/21 Page 1 of 1

**List of current GEL Certifications as of 29 October 2021**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
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
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
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	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122021-36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



November 17, 2021

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

Re: Ground Water Well Liquid Analysis  
Work Order: 559504

Dear Ms. Teague:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 20, 2021. 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](http://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. 4523.

Sincerely,

Samuel Hogan  
Project Manager

Purchase Order: 4500822910 Line 2  
Enclosures



**GEL LABORATORIES LLC**

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

**Certificate of Analysis Report  
for**

WNUC010 Westinghouse Electric Company PO (4500822910)

Client SDG: 559504 GEL Work Order: 559504

**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
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy—Uncertain identification

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, Samuel Hogan.



Reviewed by \_\_\_\_\_

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-RW1-2021-Q4      Project: WNUC01022  
Sample ID: 559504001      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 14-OCT-21 09:46  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	1940	2189549	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2155	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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



# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-10-2021-Q4  
Sample ID: 559504003  
Matrix: Ground Water  
Collect Date: 05-OCT-21 13:19  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	1943	2189549	1
Uranium-238	J	0.138	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2158	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.138	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-17-2021-Q4  
Sample ID: 559504004  
Matrix: Ground Water  
Collect Date: 12-OCT-21 12:38  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	1945	2189549	1
Uranium-238	J	0.122	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2200	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.122	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-18R-2021-Q4      Project: WNUC01022  
Sample ID: 559504005      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 08-OCT-21 11:50  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	J	0.0240	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	1956	2189549	1
Uranium-238		2.70	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2211	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium		2.72	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-22-2021-Q4  
Sample ID: 559504006  
Matrix: Ground Water  
Collect Date: 08-OCT-21 09:34  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	J	0.0144	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	1958	2189549	1
Uranium-238		0.793	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2213	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium		0.807	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-29-2021-Q4  
Sample ID: 559504007  
Matrix: Ground Water  
Collect Date: 08-OCT-21 09:05  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	J	0.0145	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	1959	2189549	1
Uranium-238		1.04	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2214	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium		1.05	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-30-2021-Q4  
Sample ID: 559504008  
Matrix: Ground Water  
Collect Date: 08-OCT-21 12:55  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235		0.209	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2007	2189549	1
Uranium-238		8.82	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2221	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium		9.03	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-32-2021-Q4  
Sample ID: 559504009  
Matrix: Ground Water  
Collect Date: 05-OCT-21 11:53  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2008	2189549	1
Uranium-238	J	0.153	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2223	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.153	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-33-2021-Q4  
Sample ID: 559504010  
Matrix: Ground Water  
Collect Date: 14-OCT-21 14:51  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2010	2189549	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2225	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-35-2021-Q4  
Sample ID: 559504011  
Matrix: Ground Water  
Collect Date: 14-OCT-21 13:23  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2015	2189549	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2230	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-36-2021-Q4  
Sample ID: 559504012  
Matrix: Ground Water  
Collect Date: 13-OCT-21 09:55  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2017	2189549	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2232	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-37-2021-Q4  
Sample ID: 559504013  
Matrix: Ground Water  
Collect Date: 11-OCT-21 13:07  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2019	2189549	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2234	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit



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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-40-2021-Q4  
Sample ID: 559504015  
Matrix: Ground Water  
Collect Date: 12-OCT-21 09:20  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2023	2189549	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2237	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-45-2021-Q4  
Sample ID: 559504016  
Matrix: Ground Water  
Collect Date: 14-OCT-21 11:11  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	J	0.0112	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2024	2189549	1
Uranium-238		0.462	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2239	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium		0.473	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-50-2021-Q4  
Sample ID: 559504017  
Matrix: Ground Water  
Collect Date: 12-OCT-21 10:45  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2026	2189549	1
Uranium-238	J	0.180	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2241	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.180	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit



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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-52-2021-Q4  
Sample ID: 559504019  
Matrix: Ground Water  
Collect Date: 13-OCT-21 13:55  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2030	2189549	1
Uranium-238	J	0.0922	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2244	2189549	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.0922	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/09/21	0835	2189547

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit



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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-RW1-2021-Q4	Project: WNUC01022
Sample ID: 559504001	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 14-OCT-21 09:46	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1213	2189102	1
Uranium-233/234	U	0.246	+/-0.251	0.353	0.500	pCi/L							
Uranium-235/236	U	0.135	+/-0.194	0.234	0.500	pCi/L							
Uranium-238	U	0.0601	+/-0.138	0.219	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.13	+/-2.13	3.32	5.00	pCi/L			LXB3	11/15/21	1633	2189101	2
Beta	U	2.32	+/-2.28	3.70	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.0163	+/-2.12	3.76	5.00	pCi/L			JJ3	11/16/21	0443	2189587	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			90.8	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			93.9	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-7A-2021-Q4	Project: WNUC01022
Sample ID: 559504002	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 05-OCT-21 13:52	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1213	2189102	1
Uranium-233/234		0.277	+/-0.208	0.233	0.500	pCi/L							
Uranium-235/236	U	0.0105	+/-0.110	0.229	0.500	pCi/L							
Uranium-238	U	0.101	+/-0.151	0.235	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammascpec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	1.78	+/-39.4	44.5		pCi/L			MXR1	10/29/21	1957	2188306	2
Bismuth-211	U	12.2	+/-62.0	55.3		pCi/L							
Bismuth-212	U	144	+/-122	146		pCi/L							
Bismuth-214	U	4.42	+/-27.5	28.5		pCi/L							
Lead-210	U	-128	+/-982	1500		pCi/L							
Lead-211	U	-15.8	+/-119	203		pCi/L							
Lead-212	U	0.536	+/-15.8	20.0		pCi/L							
Lead-214	U	4.40	+/-22.5	27.4		pCi/L							
Potassium-40	U	-51.4	+/-82.6	152		pCi/L							
Protactinium-231	U	-43.4	+/-72.6	118		pCi/L							
Protactinium-234	U	-5.84	+/-49.1	91.3		pCi/L							
Radium-223	U	57.8	+/-95.1	180		pCi/L							
Radium-226	U	146	+/-188	159		pCi/L							
Radium-228	U	1.78	+/-39.4	44.5		pCi/L							
Thallium-208	U	5.04	+/-11.4	9.54		pCi/L							
Thorium-227	U	-17.8	+/-38.4	64.5		pCi/L							
Thorium-234	U	-132	+/-253	428		pCi/L							
Uranium-235	U	-2.66	+/-35.0	53.6		pCi/L							
Uranium-238	U	-132	+/-253	428		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		8.14	+/-4.28	6.17	5.00	pCi/L			LXB3	11/15/21	1940	2189101	3
Beta		106	+/-4.69	4.48	5.00	pCi/L							
Alpha	U	3.78	+/-4.68	7.88	5.00	pCi/L			LXB3	11/16/21	1904	2189101	4
Beta		103	+/-4.36	3.26	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	141	+/-322	563	700	pCi/L			KXA1	11/15/21	1132	2194907	5
<b>Liquid Scint Tc99, Liquid "As Received"</b>													

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-7A-2021-Q4  
Sample ID: 559504002

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99		193	+/-7.60	4.05	5.00	pCi/L		JJ3	11/16/21	0650	2189587	6

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 900.0/SW846 9310	
5	EPA 906.0 Modified	
6	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			96.2	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94	(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  
DL: Detection Limit                      PF: Prep Factor  
MDA: Minimum Detectable Activity      RL: Reporting Limit  
MDC: Minimum Detectable Concentration      SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-10-2021-Q4	Project: WNUC01022
Sample ID: 559504003	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 05-OCT-21 13:19	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1213	2189102	1
Uranium-233/234		0.291	+/-0.211	0.224	0.500	pCi/L							
Uranium-235/236	U	0.0763	+/-0.131	0.114	0.500	pCi/L							
Uranium-238	U	0.0777	+/-0.124	0.171	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammascpec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	-1.60	+/-25.3	49.4		pCi/L			MXR1	10/29/21	1958	2188306	2
Bismuth-211	U	30.4	+/-58.0	47.4		pCi/L							
Bismuth-212	U	-60.6	+/-72.4	118		pCi/L							
Bismuth-214	U	10.4	+/-16.9	23.9		pCi/L							
Lead-210	U	1710	+/-2450	3100		pCi/L							
Lead-211	U	48.3	+/-92.6	189		pCi/L							
Lead-212	U	-8.80	+/-12.4	21.5		pCi/L							
Lead-214	U	11.0	+/-21.0	22.0		pCi/L							
Potassium-40	U	-103	+/-66.7	112		pCi/L							
Protactinium-231	U	8.42	+/-67.5	130		pCi/L							
Protactinium-234	U	11.1	+/-36.8	76.4		pCi/L							
Radium-223	U	-7.18	+/-86.0	164		pCi/L							
Radium-226	U	15.3	+/-176	151		pCi/L							
Radium-228	U	-1.60	+/-25.3	49.4		pCi/L							
Thallium-208	U	1.59	+/-12.4	10.1		pCi/L							
Thorium-227	U	22.7	+/-38.4	71.2		pCi/L							
Thorium-234	U	-99.6	+/-367	618		pCi/L							
Uranium-235	U	-5.42	+/-35.1	57.5		pCi/L							
Uranium-238	U	-99.6	+/-367	618		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.739	+/-1.28	4.05	5.00	pCi/L			LXB3	11/15/21	1634	2189101	3
Beta		62.8	+/-6.53	4.20	5.00	pCi/L							
Alpha	U	1.00	+/-2.27	4.09	5.00	pCi/L			LXB3	11/16/21	1233	2189101	4
Beta		57.1	+/-5.76	3.88	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	27.5	+/-313	565	700	pCi/L			KXA1	11/15/21	1153	2194907	5
<b>Liquid Scint Tc99, Liquid "As Received"</b>													

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-10-2021-Q4  
Sample ID: 559504003

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99		98.2	+/-5.72	4.14	5.00	pCi/L			JJ3	11/16/21	0718 2189587	6

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 900.0/SW846 9310	
5	EPA 906.0 Modified	
6	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			94.6	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			91.5	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-17-2021-Q4	Project: WNUC01022
Sample ID: 559504004	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 12-OCT-21 12:38	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1213	2189102	1
Uranium-233/234	U	0.222	+/-0.193	0.235	0.500	pCi/L							
Uranium-235/236	U	0.105	+/-0.151	0.183	0.500	pCi/L							
Uranium-238	U	0.117	+/-0.152	0.216	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.55	+/-2.61	3.21	5.00	pCi/L			LXB3	11/15/21	1633	2189101	2
Beta		514	+/-16.4	4.67	5.00	pCi/L							
Alpha	U	1.16	+/-2.84	3.68	5.00	pCi/L			LXB3	11/16/21	1233	2189101	3
Beta		513	+/-17.5	4.37	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		719	+/-14.2	4.03	5.00	pCi/L			JJ3	11/16/21	0746	2189587	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	EPA 900.0/SW846 9310	
4	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			94.4	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-18R-2021-Q4	Project: WNUC01022
Sample ID: 559504005	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 08-OCT-21 11:50	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1213	2189102	1
Uranium-233/234		1.37	+/-0.452	0.342	0.500	pCi/L							
Uranium-235/236	U	-0.00843	+/-0.127	0.296	0.500	pCi/L							
Uranium-238		1.15	+/-0.423	0.362	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammasespec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	5.25	+/-28.4	50.3		pCi/L			MXR1	10/29/21	1959	2188306	2
Bismuth-211	U	-1.84	+/-34.8	61.0		pCi/L							
Bismuth-212	U	-60.6	+/-72.1	112		pCi/L							
Bismuth-214	U	4.96	+/-20.4	26.5		pCi/L							
Lead-210	U	-106	+/-91.4	174		pCi/L							
Lead-211	U	-14.2	+/-118	197		pCi/L							
Lead-212	U	0.0300	+/-13.4	17.1		pCi/L							
Lead-214	U	-4.28	+/-12.2	20.7		pCi/L							
Potassium-40	U	-73.5	+/-77.3	153		pCi/L							
Protactinium-231	U	-33.6	+/-60.0	108		pCi/L							
Protactinium-234	U	-14.3	+/-45.0	74.7		pCi/L							
Radium-223	U	-1.01	+/-80.4	155		pCi/L							
Radium-226	U	71.0	+/-147	116		pCi/L							
Radium-228	U	5.25	+/-28.4	50.3		pCi/L							
Thallium-208	U	7.24	+/-11.1	10.4		pCi/L							
Thorium-227	U	-8.76	+/-30.8	57.6		pCi/L							
Thorium-234	U	-54.5	+/-114	229		pCi/L							
Uranium-235	U	7.02	+/-39.8	39.7		pCi/L							
Uranium-238	U	-54.5	+/-114	229		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		23.9	+/-11.3	17.4	5.00	pCi/L			LXB3	11/15/21	1940	2189101	3
Beta		47.6	+/-4.92	6.49	5.00	pCi/L							
Alpha		17.9	+/-5.49	6.87	5.00	pCi/L			LXB3	11/16/21	1904	2189101	4
Beta		50.9	+/-5.76	7.98	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	148	+/-319	556	700	pCi/L			KXA1	11/15/21	1214	2194907	5
<b>Liquid Scint Tc99, Liquid "As Received"</b>													

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-18R-2021-Q4  
Sample ID: 559504005

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99		143	+/-6.66	4.07	5.00	pCi/L			JJ3	11/16/21	0812 2189587	6

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 900.0/SW846 9310	
5	EPA 906.0 Modified	
6	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			87.1	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93.4	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-22-2021-Q4	Project: WNUC01022
Sample ID: 559504006	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 08-OCT-21 09:34	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1213	2189102	1
Uranium-233/234		0.727	+/-0.332	0.310	0.500	pCi/L							
Uranium-235/236	U	0.220	+/-0.209	0.221	0.500	pCi/L							
Uranium-238		0.302	+/-0.234	0.289	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammascpec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	-3.76	+/-19.7	36.7		pCi/L			MXR1	10/29/21	1959	2188306	2
Bismuth-211	U	19.0	+/-31.0	57.4		pCi/L							
Bismuth-212	U	35.0	+/-50.5	112		pCi/L							
Bismuth-214	U	11.2	+/-14.8	16.7		pCi/L							
Lead-210	U	6.33	+/-139	102		pCi/L							
Lead-211	U	-11.7	+/-85.0	159		pCi/L							
Lead-212	U	8.56	+/-14.1	14.4		pCi/L							
Lead-214	U	8.27	+/-11.5	21.4		pCi/L							
Potassium-40	U	14.1	+/-50.1	108		pCi/L							
Protactinium-231	U	24.3	+/-46.7	95.1		pCi/L							
Protactinium-234	U	-27.1	+/-35.9	56.5		pCi/L							
Radium-223	U	-56.6	+/-73.6	129		pCi/L							
Radium-226	UI	0.000	+/-138	95.1		pCi/L							
Radium-228	U	-3.76	+/-19.7	36.7		pCi/L							
Thallium-208	U	-0.782	+/-5.46	9.71		pCi/L							
Thorium-227	U	-3.56	+/-29.2	49.9		pCi/L							
Thorium-234	U	-58.9	+/-91.8	171		pCi/L							
Uranium-235	U	32.1	+/-36.8	36.1		pCi/L							
Uranium-238	U	-58.9	+/-91.8	171		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		8.55	+/-4.73	4.95	5.00	pCi/L			LXB3	11/15/21	1633	2189101	3
Beta		24.5	+/-4.45	4.03	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	-57.4	+/-307	569	700	pCi/L			KXA1	11/15/21	1236	2194907	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		31.1	+/-3.59	3.88	5.00	pCi/L			JJ3	11/16/21	0840	2189587	5

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-22-2021-Q4  
Sample ID: 559504006

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			96.5	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.9	(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  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-29-2021-Q4	Project: WNUC01022
Sample ID: 559504007	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 08-OCT-21 09:05	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0745	2189104	1
Uranium-233/234	U	0.314	+/-0.255	0.353	0.500	pCi/L							
Uranium-235/236	U	0.0950	+/-0.151	0.209	0.500	pCi/L							
Uranium-238		0.329	+/-0.218	0.214	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammasespec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	-19.0	+/-18.2	34.2		pCi/L			MXR1	10/29/21	2045	2188306	2
Bismuth-211	U	-21.2	+/-32.1	49.7		pCi/L							
Bismuth-212	U	37.8	+/-55.6	117		pCi/L							
Bismuth-214	U	9.09	+/-17.5	21.5		pCi/L							
Lead-210	U	423	+/-573	623		pCi/L							
Lead-211	U	2.31	+/-78.9	151		pCi/L							
Lead-212	U	5.30	+/-13.5	15.8		pCi/L							
Lead-214	U	1.79	+/-11.0	20.0		pCi/L							
Potassium-40	U	6.93	+/-104	106		pCi/L							
Protactinium-231	U	-35.2	+/-45.8	81.2		pCi/L							
Protactinium-234	U	7.18	+/-34.0	70.7		pCi/L							
Radium-223	U	53.9	+/-70.3	145		pCi/L							
Radium-226	U	-134	+/-107	180		pCi/L							
Radium-228	U	-19.0	+/-18.2	34.2		pCi/L							
Thallium-208	U	1.35	+/-7.83	8.20		pCi/L							
Thorium-227	U	-11.5	+/-32.1	53.2		pCi/L							
Thorium-234	U	161	+/-260	235		pCi/L							
Uranium-235	U	12.0	+/-25.8	44.9		pCi/L							
Uranium-238	U	161	+/-260	235		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	3.21	+/-3.04	4.83	5.00	pCi/L			LXB3	11/12/21	1635	2189103	3
Beta		6.80	+/-2.67	3.85	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	27.8	+/-314	566	700	pCi/L			KXA1	11/15/21	1257	2194907	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		8.95	+/-2.71	3.95	5.00	pCi/L			JJ3	11/16/21	0907	2189587	5

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-29-2021-Q4  
Sample ID: 559504007

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			97.9	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93.9	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID:	W-30-2021-Q4	Project:	WNUC01022
Sample ID:	559504008	Client ID:	WNUC010
Matrix:	Ground Water		
Collect Date:	08-OCT-21 12:55		
Receive Date:	20-OCT-21		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235		2.65				percent			MXS2	11/12/21	1213	2189102	1
Uranium-233/234		10.3	+/-1.08	0.293	0.500	pCi/L							
Uranium-235/236		0.446	+/-0.263	0.197	0.500	pCi/L							
Uranium-238		2.54	+/-0.540	0.223	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammasespec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	-0.860	+/-17.2	32.4		pCi/L			MXR1	10/29/21	2046	2188306	2
Bismuth-211	U	-12.8	+/-28.3	47.4		pCi/L							
Bismuth-212	U	6.62	+/-63.3	113		pCi/L							
Bismuth-214	U	1.49	+/-16.1	20.3		pCi/L							
Lead-210	U	148	+/-313	610		pCi/L							
Lead-211	U	37.7	+/-68.7	141		pCi/L							
Lead-212	U	3.68	+/-9.15	9.91		pCi/L							
Lead-214	U	-3.51	+/-10.3	17.4		pCi/L							
Potassium-40	U	37.8	+/-83.7	79.7		pCi/L							
Protactinium-231	U	-12.5	+/-48.0	83.6		pCi/L							
Protactinium-234	U	2.14	+/-35.0	66.8		pCi/L							
Radium-223	U	-12.2	+/-66.0	124		pCi/L							
Radium-226	U	89.3	+/-129	119		pCi/L							
Radium-228	U	-0.860	+/-17.2	32.4		pCi/L							
Thallium-208	UI	0.000	+/-6.44	4.88		pCi/L							
Thorium-227	U	-6.72	+/-26.6	44.9		pCi/L							
Thorium-234	U	164	+/-201	193		pCi/L							
Uranium-235	U	2.42	+/-23.9	40.5		pCi/L							
Uranium-238	U	164	+/-201	193		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		6.37	+/-3.76	4.05	5.00	pCi/L			LXB3	11/15/21	1633	2189101	3
Beta		19.9	+/-3.89	3.29	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	126	+/-320	562	700	pCi/L			KXA1	11/15/21	1318	2194907	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		48.9	+/-4.40	4.19	5.00	pCi/L			JJ3	11/16/21	0935	2189587	5

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-30-2021-Q4  
Sample ID: 559504008

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			95	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			90.1	(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  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-32-2021-Q4	Project: WNUC01022
Sample ID: 559504009	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 05-OCT-21 11:53	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1213	2189102	1
Uranium-233/234	U	0.240	+/-0.216	0.292	0.500	pCi/L							
Uranium-235/236	U	0.0384	+/-0.108	0.115	0.500	pCi/L							
Uranium-238	U	0.0186	+/-0.131	0.269	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammasesc, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	32.4	+/-35.7	50.7		pCi/L			MXR1	10/29/21	2047	2188306	2
Bismuth-211	U	-22.0	+/-32.6	55.2		pCi/L							
Bismuth-212	U	-28.3	+/-88.1	155		pCi/L							
Bismuth-214	U	14.8	+/-18.5	26.1		pCi/L							
Lead-210	U	-269	+/-1600	2640		pCi/L							
Lead-211	U	31.3	+/-95.6	184		pCi/L							
Lead-212	UI	0.000	+/-19.2	18.6		pCi/L							
Lead-214	U	-3.15	+/-12.0	21.4		pCi/L							
Potassium-40	U	87.1	+/-85.2	189		pCi/L							
Protactinium-231	U	-26.5	+/-66.7	118		pCi/L							
Protactinium-234	U	-35.4	+/-42.5	70.1		pCi/L							
Radium-223	U	6.80	+/-75.5	144		pCi/L							
Radium-226	U	-52.6	+/-114	204		pCi/L							
Radium-228	U	32.4	+/-35.7	50.7		pCi/L							
Thallium-208	UI	0.000	+/-7.34	7.46		pCi/L							
Thorium-227	U	-18.0	+/-31.8	56.4		pCi/L							
Thorium-234	U	231	+/-217	520		pCi/L							
Uranium-235	U	-5.69	+/-30.4	50.8		pCi/L							
Uranium-238	U	231	+/-217	520		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		6.06	+/-3.96	4.05	5.00	pCi/L			LXB3	11/15/21	1633	2189101	3
Beta		86.3	+/-7.58	3.43	5.00	pCi/L							
Alpha		5.37	+/-3.55	4.62	5.00	pCi/L			LXB3	11/16/21	1233	2189101	4
Beta		68.1	+/-5.87	3.13	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	-131	+/-300	567	700	pCi/L			KXA1	11/15/21	1339	2194907	5
<b>Liquid Scint Tc99, Liquid "As Received"</b>													

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-32-2021-Q4  
Sample ID: 559504009

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99		231	+/-8.34	4.14	5.00	pCi/L		JJ3	11/16/21	1002	2189587	6

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 900.0/SW846 9310	
5	EPA 906.0 Modified	
6	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			88.5	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			92.5	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Project: Ms. Cynthia Teague  
Ground Water Well Liquid Analysis

Client Sample ID: W-33-2021-Q4	Project: WNUC01022
Sample ID: 559504010	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 14-OCT-21 14:51	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1213	2189102	1
Uranium-233/234	U	0.0523	+/-0.128	0.230	0.500	pCi/L							
Uranium-235/236	U	-0.0253	+/-0.0765	0.215	0.500	pCi/L							
Uranium-238	U	0.0512	+/-0.116	0.200	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammasespec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	22.0	+/-31.4	43.7		pCi/L			MXR1	11/05/21	0634	2188306	2
Bismuth-211	U	20.3	+/-33.9	63.4		pCi/L							
Bismuth-212	U	49.7	+/-75.2	159		pCi/L							
Bismuth-214	U	12.4	+/-26.5	25.1		pCi/L							
Lead-210	U	-341	+/-1130	1870		pCi/L							
Lead-211	U	-50.6	+/-104	178		pCi/L							
Lead-212	U	4.60	+/-17.9	20.6		pCi/L							
Lead-214	U	9.51	+/-22.5	23.9		pCi/L							
Potassium-40	U	-38.6	+/-60.3	116		pCi/L							
Protactinium-231	U	-35.6	+/-61.1	106		pCi/L							
Protactinium-234	U	-22.2	+/-43.9	77.5		pCi/L							
Radium-223	U	-20.8	+/-88.4	160		pCi/L							
Radium-226	U	50.3	+/-179	148		pCi/L							
Radium-228	U	22.0	+/-31.4	43.7		pCi/L							
Thallium-208	U	7.13	+/-12.1	10.1		pCi/L							
Thorium-227	U	-14.5	+/-35.3	63.1		pCi/L							
Thorium-234	U	154	+/-413	515		pCi/L							
Uranium-235	U	3.20	+/-31.8	52.7		pCi/L							
Uranium-238	U	154	+/-413	515		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		5.46	+/-3.74	4.26	5.00	pCi/L			LXB3	11/15/21	1633	2189101	3
Beta		84.8	+/-7.47	3.99	5.00	pCi/L							
Alpha	U	2.67	+/-2.83	4.50	5.00	pCi/L			LXB3	11/16/21	1233	2189101	4
Beta		83.2	+/-6.87	3.41	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	75.1	+/-320	570	700	pCi/L			KXA1	11/15/21	1400	2194907	5
<b>Liquid Scint Tc99, Liquid "As Received"</b>													

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-33-2021-Q4  
Sample ID: 559504010

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis													
Liquid Scint Tc99, Liquid "As Received"													
Technetium-99	U	3.64	+/-2.43	3.93	5.00	pCi/L			JJ3	11/16/21	1030	2189587	6

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 900.0/SW846 9310	
5	EPA 906.0 Modified	
6	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			99.7	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.7	(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  
DL: Detection Limit                      PF: Prep Factor  
MDA: Minimum Detectable Activity      RL: Reporting Limit  
MDC: Minimum Detectable Concentration      SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-35-2021-Q4	Project: WNUC01022
Sample ID: 559504011	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 14-OCT-21 13:23	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1213	2189102	1
Uranium-233/234	U	0.0107	+/-0.151	0.317	0.500	pCi/L							
Uranium-235/236	U	0.0607	+/-0.139	0.221	0.500	pCi/L							
Uranium-238	U	-0.0310	+/-0.0718	0.213	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.639	+/-1.54	2.98	5.00	pCi/L			LXB3	11/15/21	1634	2189101	2
Beta	U	3.23	+/-2.89	4.75	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.125	+/-2.23	3.94	5.00	pCi/L			JJ3	11/16/21	1057	2189587	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			83.4	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95.3	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-36-2021-Q4	Project: WNUC01022
Sample ID: 559504012	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 13-OCT-21 09:55	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1213	2189102	1
Uranium-233/234	U	-0.0498	+/-0.145	0.367	0.500	pCi/L							
Uranium-235/236	U	0.132	+/-0.190	0.230	0.500	pCi/L							
Uranium-238	U	-0.0170	+/-0.118	0.286	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		4.51	+/-2.84	3.68	5.00	pCi/L			LXB3	11/15/21	1634	2189101	2
Beta		8.06	+/-2.76	3.24	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.579	+/-2.25	4.06	5.00	pCi/L			JJ3	11/16/21	1125	2189587	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			79	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.9	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-37-2021-Q4	Project: WNUC01022
Sample ID: 559504013	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 11-OCT-21 13:07	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1213	2189102	1
Uranium-233/234	U	-0.0197	+/-0.178	0.390	0.500	pCi/L							
Uranium-235/236	U	0.0737	+/-0.145	0.201	0.500	pCi/L							
Uranium-238	U	-0.0894	+/-0.0863	0.303	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.502	+/-1.81	3.68	5.00	pCi/L			LXB3	11/15/21	1633	2189101	2
Beta	U	1.58	+/-2.37	4.09	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.0860	+/-2.28	4.03	5.00	pCi/L			JJ3	11/16/21	1152	2189587	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			86.8	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-38-2021-Q4	Project: WNUC01022
Sample ID: 559504014	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 07-OCT-21 14:22	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1214	2189102	1
Uranium-233/234		0.295	+/-0.221	0.229	0.500	pCi/L							
Uranium-235/236	U	0.0217	+/-0.121	0.231	0.500	pCi/L							
Uranium-238	U	0.0851	+/-0.135	0.187	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.12	+/-2.06	3.09	5.00	pCi/L			LXB3	11/15/21	1634	2189101	2
Beta		4.58	+/-2.92	4.43	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.04	+/-2.25	3.88	5.00	pCi/L			JJ3	11/16/21	1220	2189587	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			92.2	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			95.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-40-2021-Q4	Project: WNUC01022
Sample ID: 559504015	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 12-OCT-21 09:20	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1214	2189102	1
Uranium-233/234	U	-0.0774	+/-0.117	0.343	0.500	pCi/L							
Uranium-235/236	U	0.105	+/-0.185	0.280	0.500	pCi/L							
Uranium-238	U	-0.00891	+/-0.0768	0.178	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.307	+/-1.03	2.42	5.00	pCi/L			LXB3	11/15/21	1634	2189101	2
Beta	U	1.86	+/-2.84	4.85	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.0523	+/-2.26	3.99	5.00	pCi/L			JJ3	11/16/21	1247	2189587	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			87.1	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.2	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-45-2021-Q4	Project: WNUC01022
Sample ID: 559504016	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 14-OCT-21 11:11	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1214	2189102	1
Uranium-233/234		0.782	+/-0.336	0.306	0.500	pCi/L							
Uranium-235/236	U	-0.00919	+/-0.0792	0.184	0.500	pCi/L							
Uranium-238		0.225	+/-0.184	0.189	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.49	+/-2.04	3.06	5.00	pCi/L			LXB3	11/15/21	1634	2189101	2
Beta	U	2.22	+/-2.92	4.93	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.47	+/-2.37	4.05	5.00	pCi/L			JJ3	11/16/21	1315	2189587	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			88.9	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-50-2021-Q4	Project: WNUC01022
Sample ID: 559504017	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 12-OCT-21 10:45	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1214	2189102	1
Uranium-233/234	U	-0.0607	+/-0.118	0.334	0.500	pCi/L							
Uranium-235/236	U	0.0722	+/-0.166	0.263	0.500	pCi/L							
Uranium-238	U	0.0400	+/-0.137	0.253	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.966	+/-2.02	3.78	5.00	pCi/L			LXB3	11/15/21	1634	2189101	2
Beta		4.28	+/-2.60	3.88	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.173	+/-2.26	3.99	5.00	pCi/L			JJ3	11/16/21	1342	2189587	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			80.7	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.6	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-51-2021-Q4	Project: WNUC01022
Sample ID: 559504018	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 13-OCT-21 14:50	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1225	2189102	1
Uranium-233/234	U	-0.0598	+/-0.115	0.326	0.500	pCi/L							
Uranium-235/236	U	-0.00927	+/-0.139	0.325	0.500	pCi/L							
Uranium-238	U	-0.00750	+/-0.113	0.263	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.28	+/-2.00	3.58	5.00	pCi/L			LXB3	11/15/21	1634	2189101	2
Beta	U	3.90	+/-2.85	4.49	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.745	+/-2.23	4.03	5.00	pCi/L			JJ3	11/16/21	1410	2189587	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			101	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			96.6	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-52-2021-Q4	Project: WNUC01022
Sample ID: 559504019	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 13-OCT-21 13:55	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1226	2189102	1
Uranium-233/234	U	0.0358	+/-0.204	0.405	0.500	pCi/L							
Uranium-235/236	U	-0.0217	+/-0.0961	0.251	0.500	pCi/L							
Uranium-238	U	-0.0615	+/-0.0868	0.284	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.20	+/-1.63	2.80	5.00	pCi/L			LXB3	11/15/21	1634	2189101	2
Beta	U	1.65	+/-2.80	4.83	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.566	+/-2.27	4.09	5.00	pCi/L			JJ3	11/16/21	1437	2189587	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			101	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			92.6	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-53-2021-Q4	Project: WNUC01022
Sample ID: 559504020	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 12-OCT-21 14:26	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1226	2189102	1
Uranium-233/234	U	-0.0987	+/-0.126	0.379	0.500	pCi/L							
Uranium-235/236	U	-0.0329	+/-0.149	0.374	0.500	pCi/L							
Uranium-238	U	-0.0641	+/-0.126	0.350	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.12	+/-1.73	2.35	5.00	pCi/L			LXB3	11/15/21	1634	2189101	2
Beta	U	1.55	+/-2.80	4.82	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.378	+/-2.25	4.03	5.00	pCi/L			JJ3	11/16/21	1505	2189587	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			95.4	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			92.2	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## QC Summary

Report Date: November 17, 2021

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Westinghouse Electric Company, LLC

PO Drawer R  
Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 559504

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2189549										
QC1204939802	559504004	DUP									
Uranium-234	U	ND	U	ND	ug/L	N/A			PRB	11/13/21	22:02
Uranium-235	U	ND	U	ND	ug/L	N/A				11/13/21	19:47
Uranium-238	J	0.122	J	0.112	ug/L	8.4 ^		(+/-0.200)			
QC1204939805	559504007	DUP									
Uranium-234	U	ND	U	ND	ug/L	N/A				11/13/21	22:16
Uranium-235	J	0.0145	J	0.0124	ug/L	15.6 ^		(+/-0.0700)		11/13/21	20:01
Uranium-238		1.04		0.998	ug/L	3.8 ^		(+/-0.200)			
QC1204939801	LCS										
Uranium-235	0.360			0.374	ug/L		104	(85%-115%)		11/13/21	19:38
Uranium-238	49.6			50.8	ug/L		102	(85%-115%)			
QC1204939896	LCS										
Uranium-234	0.550			0.575	ug/L		105	(85%-115%)		11/13/21	21:53
QC1204939800	MB										
Uranium-234			U	ND	ug/L					11/13/21	21:51
Uranium-235			U	ND	ug/L					11/13/21	19:36
Uranium-238			U	ND	ug/L						

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## QC Summary

Workorder: 559504

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2189549										
QC1204939803	559504004	MS									
Uranium-235	0.360	U	ND	0.374	ug/L		104	(75%-125%)	PRB	11/13/21	19:49
Uranium-238	49.6	J	0.122	51.9	ug/L		104	(75%-125%)			
QC1204939806	559504007	MS									
Uranium-235	0.360	J	0.0145	0.394	ug/L		106	(75%-125%)		11/13/21	20:03
Uranium-238	49.6		1.04	52.9	ug/L		105	(75%-125%)			
QC1204939897	559504004	MS									
Uranium-234	0.550	U	ND	0.557	ug/L		101	(75%-125%)		11/13/21	22:04
QC1204939898	559504007	MS									
Uranium-234	0.550	U	ND	0.576	ug/L		105	(75%-125%)		11/13/21	22:18
QC1204939804	559504004	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/13/21	22:06
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/13/21	19:50
Uranium-238		J	0.122	U	ND	ug/L	N/A	(0%-10%)			
QC1204939807	559504007	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/13/21	22:20
Uranium-235		J	0.0145	U	ND	ug/L	N/A	(0%-10%)		11/13/21	20:05
Uranium-238			1.04	0.208	ug/L	.164		(0%-10%)			

**Notes:**

The Qualifiers in this report are defined as follows:

< Result is less than value reported

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## QC Summary

Workorder: 559504

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
E											
FB											
H											
J											
J											
N											
N/A											
N1											
ND											
NJ											
Q											
R											
U											
X											
Y											
^											
h											

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.

# GEL LABORATORIES LLC

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## QC Summary

Report Date: November 17, 2021

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Westinghouse Electric Company, LLC  
 PO Drawer R  
 Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 559504

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Alpha Spec</b>											
Batch	2189102										
QC1204938693	559504004 DUP										
Pct Uranium-235	U	0.000	U	0.000	percent	N/A		N/A	MXS2	11/12/21	12:26
Uranium-233/234	U	0.222	U	0.0179	pCi/L	N/A		N/A			
	Uncertainty	+/-0.193		+/-0.220							
Uranium-235/236	U	0.105	U	-0.0139	pCi/L	N/A		N/A			
	Uncertainty	+/-0.151		+/-0.120							
Uranium-238	U	0.117	U	-0.00936	pCi/L	N/A		N/A			
	Uncertainty	+/-0.152		+/-0.140							
QC1204938694	LCS										
Pct Uranium-235				0.937	percent					11/12/21	12:26
Uranium-233/234				11.7	pCi/L						
	Uncertainty			+/-1.28							
Uranium-235/236				0.801	pCi/L						
	Uncertainty			+/-0.392							
Uranium-238	13.1			13.2	pCi/L		101	(75%-125%)			
	Uncertainty			+/-1.35							
QC1204938692	MB										
Pct Uranium-235			U	0.000	percent					11/12/21	12:26
Uranium-233/234			U	-0.0901	pCi/L						
	Uncertainty			+/-0.179							
Uranium-235/236			U	-0.0784	pCi/L						
	Uncertainty			+/-0.0987							
Uranium-238			U	-0.0873	pCi/L						
	Uncertainty			+/-0.0842							

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Alpha Spec</b>											
Batch	2189104										
QC1204938701	559504007 DUP										
Pct Uranium-235	U	0.000	U	0.000	percent	N/A		N/A MXS2		11/12/21	08:09
Uranium-233/234	U	0.314		0.648	pCi/L	59		(0% - 100%)			
	Uncertainty	+/-0.255		+/-0.383							
Uranium-235/236	U	0.0950	U	0.0745	pCi/L	N/A		N/A			
	Uncertainty	+/-0.151		+/-0.171							
Uranium-238		0.329	U	0.113	pCi/L	0.983		(0% - 100%)			
	Uncertainty	+/-0.218		+/-0.199							
QC1204938702	LCS										
Pct Uranium-235				0.831	percent					11/12/21	08:09
Uranium-233/234				12.3	pCi/L						
	Uncertainty			+/-1.28							
Uranium-235/236				0.671	pCi/L						
	Uncertainty			+/-0.361							
Uranium-238	13.4			12.4	pCi/L		92.7	(75%-125%)			
	Uncertainty			+/-1.28							
QC1204938700	MB										
Pct Uranium-235			U	0.000	percent					11/12/21	08:09
Uranium-233/234			U	-0.0217	pCi/L						
	Uncertainty			+/-0.142							
Uranium-235/236			U	-0.0576	pCi/L						
	Uncertainty			+/-0.109							
Uranium-238			U	0.0699	pCi/L						
	Uncertainty			+/-0.159							
<b>Rad Gamma Spec</b>											
Batch	2188306										
QC1204937036	559504007 DUP										
Actinium-228	U	-19.0	U	-2.19	pCi/L	N/A		N/A MXR1		11/05/21	07:18
	Uncertainty	+/-18.2		+/-22.0							

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2188306										
Bismuth-211	U Uncertainty	-21.2 +/-32.1	U	10.6 +/-32.0	pCi/L	N/A		N/A	MXR1	11/05/21	07:18
Bismuth-212	U Uncertainty	37.8 +/-55.6	U	75.9 +/-80.8	pCi/L	N/A		N/A			
Bismuth-214	U Uncertainty	9.09 +/-17.5	U	-4.02 +/-12.6	pCi/L	N/A		N/A			
Lead-210	U Uncertainty	423 +/-573	UI	0.000 +/-3440	pCi/L	N/A		N/A			
Lead-211	U Uncertainty	2.31 +/-78.9	U	39.7 +/-87.5	pCi/L	N/A		N/A			
Lead-212	U Uncertainty	5.30 +/-13.5	U	12.4 +/-14.7	pCi/L	N/A		N/A			
Lead-214	U Uncertainty	1.79 +/-11.0	U	2.98 +/-13.8	pCi/L	N/A		N/A			
Potassium-40	U Uncertainty	6.93 +/-104	U	-1.09 +/-68.7	pCi/L	N/A		N/A			
Protactinium-231	U Uncertainty	-35.2 +/-45.8	U	72.0 +/-66.7	pCi/L	N/A		N/A			
Protactinium-234	U Uncertainty	7.18 +/-34.0	U	-49.1 +/-45.6	pCi/L	N/A		N/A			
Radium-223	U Uncertainty	53.9 +/-70.3	U	-4.20 +/-90.9	pCi/L	N/A		N/A			
Radium-226	U Uncertainty	-134 +/-107	U	29.7 +/-277	pCi/L	N/A		N/A			
Radium-228	U Uncertainty	-19.0 +/-18.2	U	-2.19 +/-22.0	pCi/L	N/A		N/A			
Thallium-208	U Uncertainty	1.35 +/-7.83	U	-3.89 +/-5.98	pCi/L	N/A		N/A			
Thorium-227	U Uncertainty	-11.5 +/-32.1	U	-0.127 +/-39.8	pCi/L	N/A		N/A			

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2188306										
Thorium-234	U Uncertainty	161 +/-260	U	92.0 +/-612	pCi/L	N/A		N/A	MXR1	11/05/21	07:18
Uranium-235	U Uncertainty	12.0 +/-25.8	U	15.3 +/-31.7	pCi/L	N/A		N/A			
Uranium-238	U Uncertainty	161 +/-260	U	92.0 +/-612	pCi/L	N/A		N/A			
QC1204937037	LCS										
Americium-241	1.09E+05 Uncertainty			1.19E+05 +/-3230	pCi/L		110	(75%-125%)		11/05/21	07:55
Cesium-137	37800 Uncertainty			39500 +/-823	pCi/L		104	(75%-125%)			
Cobalt-60	21300 Uncertainty			23100 +/-784	pCi/L		108	(75%-125%)			
Actinium-228	Uncertainty		U	85.0 +/-692	pCi/L						
Bismuth-211	Uncertainty		U	58.1 +/-815	pCi/L						
Bismuth-212	Uncertainty		U	-373 +/-1880	pCi/L						
Bismuth-214	Uncertainty		U	141 +/-256	pCi/L						
Lead-210	Uncertainty			1.15E+06 +/-1.45E+05	pCi/L						
Lead-211	Uncertainty		U	-559 +/-3170	pCi/L						
Lead-212	Uncertainty		U	-37.7 +/-195	pCi/L						
Lead-214	Uncertainty		U	159 +/-291	pCi/L						
Potassium-40	Uncertainty		U	555 +/-602	pCi/L						

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2188306										
Protactinium-231			U	-1190	pCi/L				MXR1	11/05/21	07:55
	Uncertainty			+/-1770							
Protactinium-234			U	576	pCi/L						
	Uncertainty			+/-1740							
Radium-223			U	1970	pCi/L						
	Uncertainty			+/-2510							
Radium-226			U	-1290	pCi/L						
	Uncertainty			+/-2310							
Radium-228			U	85.0	pCi/L						
	Uncertainty			+/-692							
Thallium-208			U	-47.3	pCi/L						
	Uncertainty			+/-133							
Thorium-227			U	-550	pCi/L						
	Uncertainty			+/-915							
Thorium-234			U	496	pCi/L						
	Uncertainty			+/-5470							
Uranium-235			U	-204	pCi/L						
	Uncertainty			+/-587							
Uranium-238			U	496	pCi/L						
	Uncertainty			+/-5470							
QC1204937035	MB										
Actinium-228			U	-17.5	pCi/L					11/05/21	06:36
	Uncertainty			+/-19.9							
Bismuth-211			U	-12.9	pCi/L						
	Uncertainty			+/-31.0							
Bismuth-212			U	-44.8	pCi/L						
	Uncertainty			+/-70.8							
Bismuth-214			U	-6.86	pCi/L						
	Uncertainty			+/-12.0							
Lead-210			U	-614	pCi/L						
	Uncertainty			+/-1750							

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## QC Summary

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2188306										
Lead-211			U	-0.443	pCi/L				MXR1	11/05/21	06:36
	Uncertainty			+/-99.8							
Lead-212			U	12.4	pCi/L						
	Uncertainty			+/-15.0							
Lead-214			U	-4.80	pCi/L						
	Uncertainty			+/-11.0							
Potassium-40			U	-46.4	pCi/L						
	Uncertainty			+/-59.8							
Protactinium-231			U	35.4	pCi/L						
	Uncertainty			+/-74.3							
Protactinium-234			U	-27.1	pCi/L						
	Uncertainty			+/-43.0							
Radium-223			U	51.2	pCi/L						
	Uncertainty			+/-84.9							
Radium-226			U	-49.8	pCi/L						
	Uncertainty			+/-117							
Radium-228			U	-17.5	pCi/L						
	Uncertainty			+/-19.9							
Thallium-208			UI	0.000	pCi/L						
	Uncertainty			+/-7.30							
Thorium-227			U	11.6	pCi/L						
	Uncertainty			+/-38.6							
Thorium-234			U	216	pCi/L						
	Uncertainty			+/-644							
Uranium-235			U	12.9	pCi/L						
	Uncertainty			+/-31.4							
Uranium-238			U	216	pCi/L						
	Uncertainty			+/-644							

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	2189101										
QC1204938688	559504004		DUP								
Alpha	U	1.55	U	1.68	pCi/L	N/A		N/A	LXB3	11/15/21	16:33
	Uncertainty	+/-2.61		+/-3.18							
Beta		514		524	pCi/L	2.15		(0%-20%)			
	Uncertainty	+/-16.4		+/-17.9							
QC1204938691	LCS										
Alpha	124			104	pCi/L		84.2	(75%-125%)		11/15/21	16:33
	Uncertainty			+/-10.5							
Beta	464			476	pCi/L		103	(75%-125%)			
	Uncertainty			+/-17.0							
QC1204938687	MB										
Alpha			U	1.22	pCi/L					11/15/21	16:34
	Uncertainty			+/-1.97							
Beta			U	-1.13	pCi/L						
	Uncertainty			+/-2.53							
QC1204938689	559504004		MS								
Alpha	497	U	1.55	487	pCi/L		97.9	(75%-125%)		11/15/21	16:33
	Uncertainty		+/-2.61	+/-50.9							
Beta	1860		514	2310	pCi/L		96.6	(75%-125%)			
	Uncertainty		+/-16.4	+/-74.4							
QC1204938690	559504004		MSD								
Alpha	493	U	1.55	427	pCi/L	13.1	86.5	(0%-20%)		11/15/21	16:33
	Uncertainty		+/-2.61	+/-48.2							
Beta	1850		514	2170	pCi/L	6.5	89.5	(0%-20%)			
	Uncertainty		+/-16.4	+/-72.5							
Batch	2189103										
QC1204938696	559504007		DUP								
Alpha	U	3.21	U	2.19	pCi/L	N/A		N/A	LXB3	11/12/21	16:14
	Uncertainty	+/-3.04		+/-2.09							
Beta		6.80		8.12	pCi/L	17.7		(0% - 100%)			
	Uncertainty	+/-2.67		+/-2.81							
QC1204938699	LCS										
Alpha	122			129	pCi/L		106	(75%-125%)		11/12/21	16:14
	Uncertainty			+/-12.2							

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## QC Summary

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	2189103										
Beta	456			459	pCi/L		101	(75%-125%)	LXB3	11/12/21	16:14
	Uncertainty			+/-16.3							
QC1204938695	MB										
Alpha			U	-0.310	pCi/L					11/12/21	16:14
	Uncertainty			+/-0.940							
Beta			U	-1.37	pCi/L						
	Uncertainty			+/-2.47							
QC1204938697	559504007 MS										
Alpha	491	U	3.21	535	pCi/L		109	(75%-125%)		11/15/21	12:48
	Uncertainty		+/-3.04	+/-50.7							
Beta	1840		6.80	2050	pCi/L		111	(75%-125%)			
	Uncertainty		+/-2.67	+/-70.1							
QC1204938698	559504007 MSD										
Alpha	488	U	3.21	501	pCi/L	6.61	103	(0%-20%)		11/12/21	16:14
	Uncertainty		+/-3.04	+/-47.2							
Beta	1830		6.80	1940	pCi/L	5.94	106	(0%-20%)			
	Uncertainty		+/-2.67	+/-67.7							
<b>Rad Liquid Scintillation</b>											
Batch	2189587										
QC1204939929	559504004 DUP										
Technetium-99			719	775	pCi/L	7.43		(0%-20%)	JJ3	11/16/21	16:01
	Uncertainty		+/-14.2	+/-15.3							
QC1204939930	559504007 DUP										
Technetium-99			8.95	7.23	pCi/L	21.3		(0% - 100%)		11/16/21	16:25
	Uncertainty		+/-2.71	+/-3.13							
QC1204939931	LCS										
Technetium-99	127			128	pCi/L		101	(75%-125%)		11/16/21	16:44
	Uncertainty			+/-7.73							
QC1204939928	MB										
Technetium-99			U	-0.632	pCi/L					11/16/21	15:33
	Uncertainty			+/-2.19							

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## QC Summary

Workorder: 559504

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Liquid Scintillation</b>											
Batch	2194907										
QC1204951272	559504007		DUP								
Tritium	U	27.8	U	26.9	pCi/L	N/A			N/A KXA1	11/15/21	15:24
	Uncertainty	+/-314		+/-313							
QC1204951274	LCS										
Tritium	5490			4710	pCi/L		85.7	(75%-125%)		11/15/21	16:07
	Uncertainty			+/-591							
QC1204951271	MB										
Tritium			U	-15.0	pCi/L					11/15/21	15:03
	Uncertainty			+/-309							
QC1204951273	559504007		MS								
Tritium	5520	U	27.8	5520	pCi/L		100	(75%-125%)		11/15/21	15:46
	Uncertainty		+/-314	+/-635							

**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.
- N1 See case narrative
- 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
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy--Uncertain identification

# GEL LABORATORIES LLC

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## QC Summary

Workorder: 559504

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
UJ											
UL											
X											
Y											
^											
h											

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.

**Technical Case Narrative  
Westinghouse Electric Company PO  
SDG #: 559504**

**Metals**

**Product: Determination of Metals by ICP-MS**

**Analytical Method: EPA 200.8**

**Analytical Procedure: GL-MA-E-014 REV# 35**

**Analytical Batch: 2189549**

**Preparation Method: EPA 200.2**

**Preparation Procedure: GL-MA-E-016 REV# 18**

**Preparation Batch: 2189547**

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559504001	W-RW1-2021-Q4
559504002	W-7A-2021-Q4
559504003	W-10-2021-Q4
559504004	W-17-2021-Q4
559504005	W-18R-2021-Q4
559504006	W-22-2021-Q4
559504007	W-29-2021-Q4
559504008	W-30-2021-Q4
559504009	W-32-2021-Q4
559504010	W-33-2021-Q4
559504011	W-35-2021-Q4
559504012	W-36-2021-Q4
559504013	W-37-2021-Q4
559504014	W-38-2021-Q4
559504015	W-40-2021-Q4
559504016	W-45-2021-Q4
559504017	W-50-2021-Q4
559504018	W-51-2021-Q4
559504019	W-52-2021-Q4
559504020	W-53-2021-Q4
1204939800	Method Blank (MB) <b>ICP-MS</b>
1204939801	Laboratory Control Sample (LCS)
1204939896	Laboratory Control Sample (LCS)
1204939804	559504004(W-17-2021-Q4L) Serial Dilution (SD)
1204939807	559504007(W-29-2021-Q4L) Serial Dilution (SD)
1204939802	559504004(W-17-2021-Q4D) Sample Duplicate (DUP)
1204939805	559504007(W-29-2021-Q4D) Sample Duplicate (DUP)
1204939803	559504004(W-17-2021-Q4S) Matrix Spike (MS)
1204939806	559504007(W-29-2021-Q4S) Matrix Spike (MS)
1204939897	559504004(W-17-2021-Q4S) Matrix Spike (MS)
1204939898	559504007(W-29-2021-Q4S) Matrix Spike (MS)

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

### **Data Summary:**

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, with the following exceptions.

### **Calibration Information**

#### **ICSA/ICSAB Statement**

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

#### **Product: Inorganic Calculations**

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-GC-E-107 REV# 10

**Analytical Batch:** 2197563

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559504001	W-RW1-2021-Q4
559504002	W-7A-2021-Q4
559504003	W-10-2021-Q4
559504004	W-17-2021-Q4
559504005	W-18R-2021-Q4
559504006	W-22-2021-Q4
559504007	W-29-2021-Q4
559504008	W-30-2021-Q4
559504009	W-32-2021-Q4
559504010	W-33-2021-Q4
559504011	W-35-2021-Q4
559504012	W-36-2021-Q4
559504013	W-37-2021-Q4
559504014	W-38-2021-Q4
559504015	W-40-2021-Q4
559504016	W-45-2021-Q4
559504017	W-50-2021-Q4
559504018	W-51-2021-Q4
559504019	W-52-2021-Q4
559504020	W-53-2021-Q4

### **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.

## **Radiochemistry**

**Product:** Alphaspec U, Liquid

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

**Analytical Procedure:** GL-RAD-A-011 REV# 28

**Analytical Batch:** 2189102

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559504001	W-RW1-2021-Q4
559504002	W-7A-2021-Q4
559504003	W-10-2021-Q4
559504004	W-17-2021-Q4
559504005	W-18R-2021-Q4
559504006	W-22-2021-Q4
559504008	W-30-2021-Q4
559504009	W-32-2021-Q4
559504010	W-33-2021-Q4
559504011	W-35-2021-Q4
559504012	W-36-2021-Q4
559504013	W-37-2021-Q4
559504014	W-38-2021-Q4
559504015	W-40-2021-Q4
559504016	W-45-2021-Q4
559504017	W-50-2021-Q4
559504018	W-51-2021-Q4
559504019	W-52-2021-Q4
559504020	W-53-2021-Q4
1204938692	Method Blank (MB)
1204938693	559504004(W-17-2021-Q4) Sample Duplicate (DUP)
1204938694	Laboratory Control Sample (LCS)

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

#### **Data Summary:**

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, with the following exceptions.

#### **Miscellaneous Information**

##### **Manual Integration**

Manual integrations of alpha spectroscopy spectra 1204938693 (W-17-2021-Q4DUP) and 559504019 (W-52-2021-Q4) were performed to fully separate counts in Regions of Interest which would have been biased.

##### **Additional Comments**

The tracer peak centroid for samples 1204938693 (W-17-2021-Q4DUP) and 559504019 (W-52-2021-Q4) are greater than 50 keV from the expected library energy value for the tracer; however, the tracer yield requirement was met and the tracer peaks are within the tracer region of interest.

**Product:** Alphaspec U, Liquid

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

**Analytical Procedure:** GL-RAD-A-011 REV# 28

**Analytical Batch:** 2189104

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559504007	W-29-2021-Q4
1204938700	Method Blank (MB)
1204938701	559504007(W-29-2021-Q4) Sample Duplicate (DUP)
1204938702	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Miscellaneous Information**

**Manual Integration**

Manual integrations of alpha spectroscopy spectra 1204938701 (W-29-2021-Q4DUP) and 559504007 (W-29-2021-Q4) were performed to fully separate counts in Regions of Interest which would have been biased.

**Additional Comments**

The tracer peak centroid for samples 1204938701 (W-29-2021-Q4DUP) and 559504007 (W-29-2021-Q4) are greater than 50 keV from the expected library energy value for the tracer; however, the tracer yield requirement was met and the tracer peaks are within the tracer region of interest.

**Product:** Gammascpec, Gamma, Liquid NORM/TENORM

**Analytical Method:** EPA 901.1

**Analytical Procedure:** GL-RAD-A-013 REV# 27

**Analytical Batch:** 2188306

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559504002	W-7A-2021-Q4
559504003	W-10-2021-Q4
559504005	W-18R-2021-Q4
559504006	W-22-2021-Q4
559504007	W-29-2021-Q4
559504008	W-30-2021-Q4
559504009	W-32-2021-Q4
559504010	W-33-2021-Q4
1204937035	Method Blank (MB)
1204937036	559504007(W-29-2021-Q4) Sample Duplicate (DUP)
1204937037	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.

**Qualifier Information**

<b>Qualifier</b>	<b>Reason</b>	<b>Analyte</b>	<b>Sample</b>	<b>Client Sample</b>
UI	Results are considered a false positive due to high counting uncertainty.	Radium-226	559504006	W-22-2021-Q4
		Thallium-208	559504008	W-30-2021-Q4
UI	Results are considered a false positive due to high peak-width.	Thallium-208	559504009	W-32-2021-Q4
		Thallium-208	1204937035	MB for batch 2188306
UI	Results are considered a false positive due to low abundance.	Lead-212	559504009	W-32-2021-Q4
UI	Results are considered a false positive due to no valid peak.	Lead-210	1204937036	W-29-2021-Q4(559504007DUP)

**Product: GFPC, Gross Alpha Liquid**

**Analytical Method:** EPA 900.0/SW846 9310

**Analytical Procedure:** GL-RAD-A-001 REV# 20

**Analytical Batch:** 2189101

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559504001	W-RW1-2021-Q4
559504002	W-7A-2021-Q4
559504003	W-10-2021-Q4
559504004	W-17-2021-Q4
559504005	W-18R-2021-Q4
559504006	W-22-2021-Q4
559504008	W-30-2021-Q4
559504009	W-32-2021-Q4
559504010	W-33-2021-Q4
559504011	W-35-2021-Q4
559504012	W-36-2021-Q4
559504013	W-37-2021-Q4

559504014	W-38-2021-Q4
559504015	W-40-2021-Q4
559504016	W-45-2021-Q4
559504017	W-50-2021-Q4
559504018	W-51-2021-Q4
559504019	W-52-2021-Q4
559504020	W-53-2021-Q4
1204938687	Method Blank (MB)
1204938688	559504004(W-17-2021-Q4) Sample Duplicate (DUP)
1204938689	559504004(W-17-2021-Q4) Matrix Spike (MS)
1204938690	559504004(W-17-2021-Q4) Matrix Spike Duplicate (MSD)
1204938691	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Quality Control (QC) Information**

**RDL Met**

Sample (See Below) did not meet the required detection limit due to low sample volume. No more volume could be used due to not exceeding the maximum net weight limit of the calibration curve. The sample counted for 500 minutes.

Sample	Analyte	Value
559504002 (W-7A-2021-Q4)	Alpha	Result 3.78 < MDA 7.88 > RDL 5 pCi/L

**Technical Information**

**Gross Alpha/Beta Preparation Information**

High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating.

**Recounts**

Samples 559504002 (W-7A-2021-Q4), 559504003 (W-10-2021-Q4), 559504004 (W-17-2021-Q4), 559504005 (W-18R-2021-Q4), 559504009 (W-32-2021-Q4) and 559504010 (W-33-2021-Q4) were recounted to verify sample results. Both counts are reported.

**Miscellaneous Information**

**Additional Comments**

The matrix spike and matrix spike duplicate, 1204938689 (W-17-2021-Q4MS) and 1204938690 (W-17-2021-Q4MSD), aliquots were reduced to conserve sample volume.

**Product: GFPC, Gross Alpha Liquid**

**Analytical Method:** EPA 900.0/SW846 9310

**Analytical Procedure:** GL-RAD-A-001 REV# 20

**Analytical Batch:** 2189103

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559504007	W-29-2021-Q4
1204938695	Method Blank (MB)
1204938696	559504007(W-29-2021-Q4) Sample Duplicate (DUP)
1204938697	559504007(W-29-2021-Q4) Matrix Spike (MS)
1204938698	559504007(W-29-2021-Q4) Matrix Spike Duplicate (MSD)
1204938699	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Technical Information**

**Gross Alpha/Beta Preparation Information**

High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating.

**Recounts**

Sample 1204938697 (W-29-2021-Q4MS) was recounted due to high recovery. The recount is reported.

**Miscellaneous Information**

**Additional Comments**

The matrix spike and matrix spike duplicate, 1204938697 (W-29-2021-Q4MS) and 1204938698 (W-29-2021-Q4MSD), aliquots were reduced to conserve sample volume.

**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:** 2189587

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
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559504001	W-RW1-2021-Q4
559504002	W-7A-2021-Q4
559504003	W-10-2021-Q4
559504004	W-17-2021-Q4
559504005	W-18R-2021-Q4
559504006	W-22-2021-Q4
559504007	W-29-2021-Q4
559504008	W-30-2021-Q4
559504009	W-32-2021-Q4
559504010	W-33-2021-Q4
559504011	W-35-2021-Q4
559504012	W-36-2021-Q4
559504013	W-37-2021-Q4
559504014	W-38-2021-Q4
559504015	W-40-2021-Q4
559504016	W-45-2021-Q4
559504017	W-50-2021-Q4
559504018	W-51-2021-Q4
559504019	W-52-2021-Q4
559504020	W-53-2021-Q4
1204939928	Method Blank (MB)
1204939929	559504004(W-17-2021-Q4) Sample Duplicate (DUP)
1204939930	559504007(W-29-2021-Q4) Sample Duplicate (DUP)
1204939931	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: LSC, Tritium Distillation, Liquid**

**Analytical Method:** EPA 906.0 Modified

**Analytical Procedure:** GL-RAD-A-002 REV# 24

**Analytical Batch:** 2194907

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559504002	W-7A-2021-Q4
559504003	W-10-2021-Q4
559504005	W-18R-2021-Q4
559504006	W-22-2021-Q4
559504007	W-29-2021-Q4
559504008	W-30-2021-Q4
559504009	W-32-2021-Q4
559504010	W-33-2021-Q4
1204951271	Method Blank (MB)
1204951272	559504007(W-29-2021-Q4) Sample Duplicate (DUP)

1204951273  
1204951274

559504007(W-29-2021-Q4) Matrix Spike (MS)  
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.

**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.



GEL Laboratories, LLC  
 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171  
 Fax: (843) 766-1178

Sample ID	*Date Collected (mm- dd-yy)	*Time Collected (Military) (hhmm)	QC Code (a)	Field Filtered (b)	Sample Matrix (c)	Should this sample be considered:		Sample Analysis Requested (6) (Fill in the number of containers for each test)							Comments
						Yes, please supply isotopic info)	(7) Known or possible Hazards	Total number of containers	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)	Gamma TENORM	
W-29-2021-Q4	10/8/2021	0905	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-29-2021-Q4-MS-73	10/8/2021	0905	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-29-2021-Q4-MSD-73	10/8/2021	0905	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-30-2021-Q4	10/8/2021	1255	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-32-2021-Q4	10/5/2021	1153	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-33-2021-Q4	10/14/2021	1451	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-35-2021-Q4	10/14/2021	1323	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-36-2021-Q4	10/13/2021	0955	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942

**Chain of Custody Signatures**  
 Relinquished By (Signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 Received by (signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 1. *Randy Crews* 10/20/2021 0930  
 2. *Randy Crews* 10/22/21 1559  
 3. *Randy Crews* 10/22/21 1559  
 TAT Requested: Normal:  Rush: \_\_\_\_\_ Specify: \_\_\_\_\_  
 Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4  
 Additional Remarks:  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 21 °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other:

**For sample shipping and delivery details, see Sample Receipt & Review form (SRR)**  
 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  
 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=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=fecal, N=Nasal  
 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

KNOWN OR POSSIBLE HAZARDS	Characteristic Hazards	Listed Waste	Other
RCRA Metals As = Arsenic Ba = Barium Cd = Cadmium Cr = Chromium Pb = Lead	FL = Flammable/ignitable CO = Corrosive RE = Reactive TSCA Regulated PCB = Polychlorinated biphenyls	LW = Listed Waste (F, K, P and U-listed wastes.) Waste code(s):	OT = Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:

Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

**GEL Laboratories LLC**  
 Chemistry | Radiochemistry | Radiobiology | Speciality Analytics  
 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171  
 Fax: (843) 766-1178

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (a)	Field Filtered (b)	Sample Matrix (c)	Should this sample be considered:		Sample Analysis Requested (6) (Fill in the number of containers for each test)							Comments
						Yes, please supply isotopic info)	(7) Known or possible hazards	Total number of containers	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)	Gamma TENORM	
W-37-2021-Q4	10/11/2021	1307	G	N	GW			2	X	X	X	X	X		Preservative Lot #201942
W-38-2021-Q4	10/7/2021	1422	G	N	GW			2	X	X	X	X	X		Preservative Lot #201942
W-40-2021-Q4	10/12/2021	0920	G	N	GW			2	X	X	X	X	X		Preservative Lot #201942
W-45-2021-Q4	10/14/2021	1111	G	N	GW			2	X	X	X	X	X		Preservative Lot #201942
W-50-2021-Q4	10/12/2021	1045	G	N	GW			2	X	X	X	X	X		Preservative Lot #201942
W-51-2021-Q4	10/13/2021	1450	G	N	GW			2	X	X	X	X	X		Preservative Lot #201942
W-52-2021-Q4	10/13/2021	1355	G	N	GW			2	X	X	X	X	X		Preservative Lot #201942
W-53-2021-Q4	10/12/2021	1426	G	N	GW			2	X	X	X	X	X		Preservative Lot #201942

**Chain of Custody Signatures**

Relinquished By (Signed)	Date	Time	Date	Time
<i>[Signature]</i>	10/20/2021	0950		
<i>[Signature]</i>	10/20/21	1559		
<i>[Signature]</i>				

TAT Requested: Normal:  Rush: \_\_\_\_\_ Specify: \_\_\_\_\_  
 Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4  
 Additional Remarks:  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 1 °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR).

- Chain of Custody Number = Client Determined
- 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
- Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered.
- Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, ML=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 - 1704 - 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
- KNOWN OR POSSIBLE HAZARDS**

Characteristic Hazards	Listed Waste	Other
FL = Flammable/Ignitable CO = Corrosive RE = Reactive	LW = Listed Waste (F, K, P and U-listed wastes.) Waste code(s): _____	OT = Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description: _____
- RCRA Metals**  
 As = Arsenic    Hg = Mercury  
 Ba = Barium    Se = Selenium  
 Cd = Cadmium    Ag = Silver  
 Cr = Chromium    MR = Misc. RCRA metals  
 Pb = Lead  
 TSCA Regulated  
 PCB = Polychlorinated biphenyls

SH

SAMPLE RECEIPT & REVIEW FORM

Client: WNUC SDG/AR/COC/Work Order: 559504  
 Received By: DC Date Received: 10-10-21  
 Carrier and Tracking Number: \_\_\_\_\_  
 Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information

Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
	<input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___
	<input checked="" type="checkbox"/>	A) Shipped as a DOT Hazardous?
	<input checked="" type="checkbox"/>	B) Did the client designate the samples are to be received as radioactive? COC notation or radioactive stickers on containers equal client designation.
	<input checked="" type="checkbox"/>	C) Did the RSO classify the samples as radioactive? Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> CPM / mR/Hr Classified as: <u>Rad 1</u> Rad 2 Rad 3
	<input checked="" type="checkbox"/>	D) Did the client designate samples are hazardous? COC notation or hazard labels on containers equal client designation.
	<input checked="" type="checkbox"/>	E) Did the RSO identify possible hazards? If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other: _____

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>			Preservation Method: Wet Ice Ice Packs Dry ice <u>None</u> Other: _____ *all temperatures are recorded in Celsius TEMP: <u>21°</u>
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>			Temperature Device Serial #: <u>IR6-21</u> Secondary Temperature Device Serial # (If Applicable): _____
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>			Sample ID's and Containers Affected: _____ If Preservation added, Lot#: _____
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>			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?	<input checked="" type="checkbox"/>			ID's and tests affected: _____
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			ID's and containers affected: _____
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>			
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed): \_\_\_\_\_

**List of current GEL Certifications as of 17 November 2021**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
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
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
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	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122021-36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



November 16, 2021

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

Re: Ground Water Well Liquid Analysis  
Work Order: 559506

Dear Ms. Teague:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 20, 2021. 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](http://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. 4523.

Sincerely,

Samuel Hogan  
Project Manager

Purchase Order: 4500822910 Line 2  
Enclosures



## GEL LABORATORIES LLC

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

### Certificate of Analysis Report for

WNUC010 Westinghouse Electric Company PO (4500822910)

Client SDG: 559506 GEL Work Order: 559506

**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
- J See case narrative for an explanation
- J Value is estimated
- 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, Samuel Hogan.



Reviewed by \_\_\_\_\_





# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-56-2021-Q4  
Sample ID: 559506003  
Matrix: Ground Water  
Collect Date: 11-OCT-21 14:18  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235		4.44	0.100	0.700	ug/L	1.00	10	PRB	11/14/21	1039	2189553	1
Uranium-238		139	0.670	2.00	ug/L	1.00	10					
Uranium-234	J	0.0410	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2304	2189553	2
Calculation for Total U "See Parent Products"												
Total Uranium		143	0.670	2.00	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189550

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-57-2021-Q4  
Sample ID: 559506004  
Matrix: Ground Water  
Collect Date: 07-OCT-21 14:39  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2055	2189553	1
Uranium-238	J	0.0988	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2305	2189553	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.0988	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189550

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-58-2021-Q4  
Sample ID: 559506005  
Matrix: Ground Water  
Collect Date: 11-OCT-21 09:11  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	J	0.0319	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2056	2189553	1
Uranium-238		0.966	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2311	2189553	2
Calculation for Total U "See Parent Products"												
Total Uranium		0.998	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189550

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-59-2021-Q4  
Sample ID: 559506006  
Matrix: Ground Water  
Collect Date: 11-OCT-21 11:18  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235		0.286	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2058	2189553	1
Uranium-238		9.66	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2312	2189553	2
Calculation for Total U "See Parent Products"												
Total Uranium		9.95	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189550

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit





# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-72-2021-Q4 Project: WNUC01022  
Sample ID: 559506009 Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 12-OCT-21 11:33  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2104	2189553	1
Uranium-238		0.266	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2318	2189553	2
Calculation for Total U "See Parent Products"												
Total Uranium		0.266	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189550

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-73-2021-Q4  
Sample ID: 559506010  
Matrix: Ground Water  
Collect Date: 08-OCT-21 13:30  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2105	2189553	1
Uranium-238	J	0.133	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/13/21	2319	2189553	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.133	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189550

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-74-2021-Q4  
Sample ID: 559506011  
Matrix: Ground Water  
Collect Date: 12-OCT-21 09:49  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2111	2189553	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	0801	2189553	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189550

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-74-2021-Q4-Dup Project: WNUC01022  
Sample ID: 559506012 Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 12-OCT-21 09:49  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2118	2189553	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	0809	2189553	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189550

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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



# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-76-2021-Q4  
Sample ID: 559506014  
Matrix: Ground Water  
Collect Date: 07-OCT-21 13:06  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235		0.104	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2121	2189553	1
Uranium-238		3.12	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	0812	2189553	2
Calculation for Total U "See Parent Products"												
Total Uranium		3.23	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189550

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit



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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-80-2021-Q4  
Sample ID: 559506016  
Matrix: Ground Water  
Collect Date: 07-OCT-21 13:31  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/13/21	2125	2189553	1
Uranium-238	J	0.106	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	0816	2189553	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.106	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189550

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-54-2021-Q4	Project: WNUC01022
Sample ID: 559506001	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 12-OCT-21 12:49	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0808	2189104	1
Uranium-233/234	U	0.199	+/-0.210	0.300	0.500	pCi/L							
Uranium-235/236	U	0.0718	+/-0.141	0.196	0.500	pCi/L							
Uranium-238	U	0.0172	+/-0.0954	0.183	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.124	+/-0.855	2.26	5.00	pCi/L			LXB3	11/12/21	1635	2189103	2
Beta	U	2.06	+/-2.71	4.60	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.0455	+/-2.26	4.06	5.00	pCi/L			JJ3	11/14/21	0530	2189592	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			109	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95.3	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-55-2021-Q4	Project: WNUC01022
Sample ID: 559506002	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 11-OCT-21 12:16	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235		4.11				percent			MXS2	11/12/21	0808	2189104	1
Uranium-233/234		182	+/-4.96	0.263	0.500	pCi/L							
Uranium-235/236		9.38	+/-1.26	0.265	0.500	pCi/L							
Uranium-238		34.0	+/-2.14	0.272	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		290	+/-17.3	2.64	5.00	pCi/L			LXB3	11/12/21	1635	2189103	2
Beta		60.6	+/-5.44	4.04	5.00	pCi/L							
Alpha		261	+/-15.9	2.27	5.00	pCi/L			LXB3	11/15/21	1248	2189103	3
Beta		61.6	+/-6.18	4.73	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.449	+/-2.31	4.08	5.00	pCi/L			JJ3	11/14/21	0547	2189592	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	EPA 900.0/SW846 9310	
4	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			82.8	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			96.2	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-56-2021-Q4	Project: WNUC01022
Sample ID: 559506003	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 11-OCT-21 14:18	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235		3.72				percent			MXS2	11/12/21	0808	2189104	1
Uranium-233/234		231	+/-6.24	0.301	0.500	pCi/L							
Uranium-235/236		12.2	+/-1.60	0.163	0.500	pCi/L							
Uranium-238		49.0	+/-2.88	0.243	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		315	+/-18.1	2.72	5.00	pCi/L			LXB3	11/12/21	1635	2189103	2
Beta		69.8	+/-5.76	4.15	5.00	pCi/L							
Alpha		303	+/-17.0	3.29	5.00	pCi/L			LXB3	11/15/21	1248	2189103	3
Beta		74.9	+/-6.34	3.48	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.222	+/-2.32	4.13	5.00	pCi/L			JJ3	11/14/21	0604	2189592	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	EPA 900.0/SW846 9310	
4	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			68.1	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			97.4	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-57-2021-Q4	Project: WNUC01022
Sample ID: 559506004	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 07-OCT-21 14:39	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0808	2189104	1
Uranium-233/234	U	0.180	+/-0.175	0.227	0.500	pCi/L							
Uranium-235/236	U	0.0640	+/-0.126	0.174	0.500	pCi/L							
Uranium-238	U	0.0235	+/-0.106	0.206	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.771	+/-1.57	3.09	5.00	pCi/L			LXB3	11/12/21	1648	2189103	2
Beta	U	1.93	+/-2.72	4.65	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		15.0	+/-2.90	3.45	5.00	pCi/L			JJ3	11/15/21	0641	2189592	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			102	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			98.2	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-58-2021-Q4	Project: WNUC01022
Sample ID: 559506005	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 11-OCT-21 09:11	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0808	2189104	1
Uranium-233/234		1.40	+/-0.462	0.349	0.500	pCi/L							
Uranium-235/236	U	0.121	+/-0.195	0.302	0.500	pCi/L							
Uranium-238	U	0.128	+/-0.217	0.370	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		4.22	+/-2.85	3.53	5.00	pCi/L			LXB3	11/12/21	1648	2189103	2
Beta	U	2.33	+/-2.77	4.66	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.985	+/-2.26	3.92	5.00	pCi/L			JJ3	11/14/21	0640	2189592	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			86	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			97.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-59-2021-Q4	Project: WNUC01022
Sample ID: 559506006	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 11-OCT-21 11:18	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235		3.32				percent			MXS2	11/12/21	0808	2189104	1
Uranium-233/234		13.0	+/-1.21	0.281	0.500	pCi/L							
Uranium-235/236		0.590	+/-0.298	0.198	0.500	pCi/L							
Uranium-238		2.67	+/-0.557	0.259	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		17.6	+/-5.75	4.00	5.00	pCi/L			LXB3	11/12/21	1648	2189103	2
Beta		7.71	+/-3.37	4.81	5.00	pCi/L							
Alpha		17.7	+/-5.35	3.97	5.00	pCi/L			LXB3	11/15/21	1248	2189103	3
Beta		12.9	+/-3.40	3.60	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		7.63	+/-3.01	4.52	5.00	pCi/L			JJ3	11/14/21	0657	2189592	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	EPA 900.0/SW846 9310	
4	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			107	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			90.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-60-2021-Q4	Project: WNUC01022
Sample ID: 559506007	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 15-OCT-21 11:34	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0809	2189104	1
Uranium-233/234	U	0.0239	+/-0.140	0.282	0.500	pCi/L							
Uranium-235/236	U	0.0858	+/-0.136	0.189	0.500	pCi/L							
Uranium-238	U	-0.0463	+/-0.0653	0.213	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.303	+/-1.39	3.11	5.00	pCi/L			LXB3	11/12/21	1614	2189103	2
Beta	U	2.00	+/-2.12	3.50	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.43	+/-2.38	4.09	5.00	pCi/L			JJ3	11/14/21	0714	2189592	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			99.5	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			97.6	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-61-2021-Q4	Project: WNUC01022
Sample ID: 559506008	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 15-OCT-21 12:46	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0809	2189104	1
Uranium-233/234	U	-0.0391	+/-0.111	0.282	0.500	pCi/L							
Uranium-235/236	U	0.000	+/-0.0745	0.111	0.500	pCi/L							
Uranium-238	U	0.0180	+/-0.126	0.260	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.43	+/-2.13	2.89	5.00	pCi/L			LXB3	11/12/21	1614	2189103	2
Beta	U	4.11	+/-2.90	4.49	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.449	+/-2.22	4.03	5.00	pCi/L			JJ3	11/14/21	0732	2189592	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			92.5	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			98.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-72-2021-Q4	Project: WNUC01022
Sample ID: 559506009	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 12-OCT-21 11:33	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0809	2189104	1
Uranium-233/234		0.276	+/-0.212	0.247	0.500	pCi/L							
Uranium-235/236	U	0.0107	+/-0.112	0.233	0.500	pCi/L							
Uranium-238	U	0.117	+/-0.153	0.217	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.0817	+/-1.03	2.90	5.00	pCi/L			LXB3	11/12/21	1615	2189103	2
Beta	U	3.80	+/-2.60	3.98	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.352	+/-2.23	4.04	5.00	pCi/L			JJ3	11/14/21	0749	2189592	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			91.7	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-73-2021-Q4	Project: WNUC01022
Sample ID: 559506010	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 08-OCT-21 13:30	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0809	2189104	1
Uranium-233/234	U	0.153	+/-0.188	0.292	0.500	pCi/L							
Uranium-235/236	U	0.0189	+/-0.105	0.201	0.500	pCi/L							
Uranium-238	U	0.0894	+/-0.133	0.194	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.219	+/-1.83	4.11	5.00	pCi/L			LXB3	11/12/21	1615	2189103	2
Beta	U	1.84	+/-2.16	3.63	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	2.26	+/-2.35	3.92	5.00	pCi/L			JJ3	11/15/21	0659	2189592	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			94.9	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			78.3	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-74-2021-Q4	Project: WNUC01022
Sample ID: 559506011	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 12-OCT-21 09:49	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0809	2189104	1
Uranium-233/234	U	-0.0133	+/-0.150	0.338	0.500	pCi/L							
Uranium-235/236	U	0.0333	+/-0.125	0.210	0.500	pCi/L							
Uranium-238	U	0.0199	+/-0.128	0.262	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.306	+/-1.80	3.55	5.00	pCi/L			LXB3	11/12/21	1615	2189103	2
Beta	U	-0.601	+/-2.53	4.82	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.0903	+/-2.34	4.18	5.00	pCi/L			JJ3	11/14/21	0825	2189592	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			87	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-74-2021-Q4-Dup	Project: WNUC01022
Sample ID: 559506012	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 12-OCT-21 09:49	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0809	2189104	1
Uranium-233/234	U	0.0432	+/-0.189	0.368	0.500	pCi/L							
Uranium-235/236	U	-0.00947	+/-0.0816	0.189	0.500	pCi/L							
Uranium-238	U	-0.0523	+/-0.103	0.286	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.77	+/-2.62	4.11	5.00	pCi/L			LXB3	11/12/21	1615	2189103	2
Beta	U	0.744	+/-1.89	3.40	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.135	+/-2.26	4.07	5.00	pCi/L			JJ3	11/14/21	0842	2189592	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			92.1	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			99	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-75-2021-Q4	Project: WNUC01022
Sample ID: 559506013	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 12-OCT-21 08:51	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0809	2189104	1
Uranium-233/234	U	0.0458	+/-0.116	0.203	0.500	pCi/L							
Uranium-235/236	U	0.0187	+/-0.104	0.199	0.500	pCi/L							
Uranium-238	U	0.0442	+/-0.101	0.161	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.282	+/-1.23	3.16	5.00	pCi/L			LXB3	11/12/21	1615	2189103	2
Beta	U	1.17	+/-2.32	4.09	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.236	+/-2.30	4.08	5.00	pCi/L			JJ3	11/14/21	0859	2189592	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			106	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-76-2021-Q4	Project: WNUC01022
Sample ID: 559506014	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 07-OCT-21 13:06	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0809	2189104	1
Uranium-233/234		5.03	+/-0.895	0.367	0.500	pCi/L							
Uranium-235/236	U	0.162	+/-0.221	0.302	0.500	pCi/L							
Uranium-238		1.27	+/-0.451	0.192	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		8.71	+/-3.44	3.03	5.00	pCi/L			LXB3	11/12/21	1615	2189103	2
Beta		6.19	+/-2.91	4.14	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.0261	+/-2.23	3.98	5.00	pCi/L			JJ3	11/14/21	0917	2189592	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			81.1	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			98.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-79-2021-Q4	Project: WNUC01022
Sample ID: 559506015	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 06-OCT-21 14:12	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0809	2189104	1
Uranium-233/234	U	0.0283	+/-0.135	0.266	0.500	pCi/L							
Uranium-235/236	U	-0.00788	+/-0.0679	0.157	0.500	pCi/L							
Uranium-238	U	0.0340	+/-0.0935	0.162	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.864	+/-1.57	2.96	5.00	pCi/L			LXB3	11/12/21	1615	2189103	2
Beta	U	2.28	+/-2.39	3.95	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.468	+/-2.26	4.11	5.00	pCi/L			JJ3	11/14/21	0935	2189592	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			103	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95.3	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 16, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-80-2021-Q4	Project: WNUC01022
Sample ID: 559506016	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 07-OCT-21 13:31	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0809	2189104	1
Uranium-233/234	U	0.142	+/-0.189	0.292	0.500	pCi/L							
Uranium-235/236	U	-0.0197	+/-0.0870	0.227	0.500	pCi/L							
Uranium-238	U	0.0345	+/-0.118	0.218	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.513	+/-1.22	3.65	5.00	pCi/L			LXB3	11/15/21	1248	2189103	2
Beta		5.69	+/-3.09	4.73	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.17	+/-2.31	3.99	5.00	pCi/L			JJ3	11/14/21	0952	2189592	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			93.8	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## QC Summary

Report Date: November 16, 2021

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Westinghouse Electric Company, LLC

PO Drawer R  
Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 559506

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2189553										
QC1204939820	559506001	DUP									
Uranium-234	U	ND	U	ND	ug/L	N/A			PRB	11/13/21	22:56
Uranium-235	U	ND	U	ND	ug/L	N/A				11/13/21	20:42
Uranium-238	U	ND	U	ND	ug/L	N/A					
QC1204939823	559506011	DUP									
Uranium-234	U	ND	U	ND	ug/L	N/A				11/14/21	08:03
Uranium-235	U	ND	U	ND	ug/L	N/A				11/13/21	21:13
Uranium-238	U	ND	U	ND	ug/L	N/A					
QC1204939819	LCS										
Uranium-235	0.360			0.356	ug/L		98.8	(85%-115%)		11/13/21	20:39
Uranium-238	49.6			49.7	ug/L		100	(85%-115%)			
QC1204939884	LCS										
Uranium-234	0.550			0.542	ug/L		98.5	(85%-115%)		11/13/21	22:53
QC1204939818	MB										
Uranium-234			U	ND	ug/L					11/13/21	22:51
Uranium-235			U	ND	ug/L					11/13/21	20:37
Uranium-238			U	ND	ug/L						

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## QC Summary

Workorder: 559506

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch 2189553											
QC1204939821	559506001	MS									
Uranium-235	0.360	U	ND	0.370	ug/L		103	(75%-125%)	PRB	11/13/21	20:44
Uranium-238	49.6	U	ND	51.3	ug/L		103	(75%-125%)			
QC1204939824	559506011	MS									
Uranium-235	0.360	U	ND	0.369	ug/L		102	(75%-125%)		11/13/21	21:14
Uranium-238	49.6	U	ND	50.8	ug/L		102	(75%-125%)			
QC1204939885	559506001	MS									
Uranium-234	0.550	U	ND	0.591	ug/L		107	(75%-125%)		11/13/21	22:58
QC1204939886	559506011	MS									
Uranium-234	0.550	U	ND	0.580	ug/L		105	(75%-125%)		11/14/21	08:05
QC1204939822	559506001	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/13/21	23:00
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/13/21	20:46
Uranium-238		U	ND	U	ND	ug/L	N/A	(0%-10%)			
QC1204939825	559506011	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/14/21	08:07
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/13/21	21:16
Uranium-238		U	ND	U	ND	ug/L	N/A	(0%-10%)			

### Notes:

The Qualifiers in this report are defined as follows:

< Result is less than value reported

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## QC Summary

Workorder: 559506

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
E											
FB											
H											
J											
J											
N											
N/A											
N1											
ND											
NJ											
Q											
R											
U											
X											
Y											
^											
h											

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.

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## QC Summary

Report Date: November 16, 2021

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Westinghouse Electric Company, LLC  
 PO Drawer R  
 Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 559506

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Alpha Spec</b>											
Batch	2189104										
QC1204938701	559504007	DUP									
Pct Uranium-235	U	0.000	U	0.000	percent	N/A		N/A	MXS2	11/12/21	08:09
Uranium-233/234	U	0.314		0.648	pCi/L	59		(0% - 100%)			
	Uncertainty	+/-0.255		+/-0.383							
Uranium-235/236	U	0.0950	U	0.0745	pCi/L	N/A		N/A			
	Uncertainty	+/-0.151		+/-0.171							
Uranium-238		0.329	U	0.113	pCi/L	0.983		(0% - 100%)			
	Uncertainty	+/-0.218		+/-0.199							
QC1204938702	LCS										
Pct Uranium-235				0.831	percent					11/12/21	08:09
Uranium-233/234				12.3	pCi/L						
	Uncertainty			+/-1.28							
Uranium-235/236				0.671	pCi/L						
	Uncertainty			+/-0.361							
Uranium-238	13.4			12.4	pCi/L		92.7	(75%-125%)			
	Uncertainty			+/-1.28							
QC1204938700	MB										
Pct Uranium-235			U	0.000	percent					11/12/21	08:09
Uranium-233/234			U	-0.0217	pCi/L						
	Uncertainty			+/-0.142							
Uranium-235/236			U	-0.0576	pCi/L						
	Uncertainty			+/-0.109							
Uranium-238			U	0.0699	pCi/L						
	Uncertainty			+/-0.159							

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## QC Summary

Workorder: 559506

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	2189103										
QC1204938696	559504007 DUP										
Alpha	U	3.21	U	2.19	pCi/L	N/A		N/A	LXB3	11/12/21	16:14
	Uncertainty	+/-3.04		+/-2.09							
Beta		6.80		8.12	pCi/L	17.7		(0% - 100%)			
	Uncertainty	+/-2.67		+/-2.81							
QC1204938699	LCS										
Alpha	122			129	pCi/L		106	(75%-125%)		11/12/21	16:14
	Uncertainty			+/-12.2							
Beta	456			459	pCi/L		101	(75%-125%)			
	Uncertainty			+/-16.3							
QC1204938695	MB										
Alpha			U	-0.310	pCi/L					11/12/21	16:14
	Uncertainty			+/-0.940							
Beta			U	-1.37	pCi/L						
	Uncertainty			+/-2.47							
QC1204938697	559504007 MS										
Alpha	491	U	3.21	535	pCi/L		109	(75%-125%)		11/15/21	12:48
	Uncertainty		+/-3.04	+/-50.7							
Beta	1840		6.80	2050	pCi/L		111	(75%-125%)			
	Uncertainty		+/-2.67	+/-70.1							
QC1204938698	559504007 MSD										
Alpha	488	U	3.21	501	pCi/L	6.61	103	(0%-20%)		11/12/21	16:14
	Uncertainty		+/-3.04	+/-47.2							
Beta	1830		6.80	1940	pCi/L	5.94	106	(0%-20%)			
	Uncertainty		+/-2.67	+/-67.7							
<b>Rad Liquid Scintillation</b>											
Batch	2189592										
QC1204939942	LCS										
Technetium-99	127			123	pCi/L		96.5	(75%-125%)	JJ3	11/14/21	10:27
	Uncertainty			+/-7.14							
QC1204939941	LCSD										
Technetium-99	127			123	pCi/L	0.048	96.5	(0%-20%)		11/14/21	10:44
	Uncertainty			+/-6.70							

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## QC Summary

Workorder: 559506

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Liquid Scintillation</b>											
Batch	2189592										
QC1204939940	MB										
Technetium-99			U	0.141	pCi/L				JJ3	11/14/21	10:10
	Uncertainty			+/-2.21							

### 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.
- NI See case narrative
- 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
- 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

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## QC Summary

Workorder: 559506

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<u>Parmname</u>	<u>NOM</u>	<u>Sample Qual</u>	<u>QC</u>	<u>Units</u>	<u>RPD%</u>	<u>REC%</u>	<u>Range</u>	<u>Anlst</u>	<u>Date</u>	<u>Time</u>
-----------------	------------	--------------------	-----------	--------------	-------------	-------------	--------------	--------------	-------------	-------------

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.

**Technical Case Narrative  
Westinghouse Electric Company PO  
SDG #: 559506**

**Metals**

**Product: Determination of Metals by ICP-MS**

**Analytical Method: EPA 200.8**

**Analytical Procedure: GL-MA-E-014 REV# 35**

**Analytical Batch: 2189553**

**Preparation Method: EPA 200.2**

**Preparation Procedure: GL-MA-E-016 REV# 18**

**Preparation Batch: 2189550**

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559506001	W-54-2021-Q4
559506002	W-55-2021-Q4
559506003	W-56-2021-Q4
559506004	W-57-2021-Q4
559506005	W-58-2021-Q4
559506006	W-59-2021-Q4
559506007	W-60-2021-Q4
559506008	W-61-2021-Q4
559506009	W-72-2021-Q4
559506010	W-73-2021-Q4
559506011	W-74-2021-Q4
559506012	W-74-2021-Q4-Dup
559506013	W-75-2021-Q4
559506014	W-76-2021-Q4
559506015	W-79-2021-Q4
559506016	W-80-2021-Q4
1204939818	Method Blank (MB) <b>ICP-MS</b>
1204939819	Laboratory Control Sample (LCS)
1204939884	Laboratory Control Sample (LCS)
1204939822	559506001(W-54-2021-Q4L) Serial Dilution (SD)
1204939825	559506011(W-74-2021-Q4L) Serial Dilution (SD)
1204939820	559506001(W-54-2021-Q4D) Sample Duplicate (DUP)
1204939823	559506011(W-74-2021-Q4D) Sample Duplicate (DUP)
1204939821	559506001(W-54-2021-Q4S) Matrix Spike (MS)
1204939824	559506011(W-74-2021-Q4S) Matrix Spike (MS)
1204939885	559506001(W-54-2021-Q4S) Matrix Spike (MS)
1204939886	559506011(W-74-2021-Q4S) Matrix Spike (MS)

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

**Data Summary:**

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, with the following exceptions.

**Calibration Information**

**ICSA/ICSAB Statement**

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

**Technical Information**

**Sample Dilutions**

Dilutions may be required for many reasons, including to minimize matrix interferences or to bring over range target analyte concentrations into the linear calibration range. Samples 559506002 (W-55-2021-Q4) and 559506003 (W-56-2021-Q4) were diluted to ensure that the analyte concentrations were within the linear calibration range of the instrument.

Analyte	559506	
	002	003
Uranium-235	10X	10X
Uranium-238	10X	10X

**Product: Inorganic Calculations**

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-GC-E-107 REV# 10

**Analytical Batch:** 2197563

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559506001	W-54-2021-Q4
559506002	W-55-2021-Q4
559506003	W-56-2021-Q4
559506004	W-57-2021-Q4
559506005	W-58-2021-Q4
559506006	W-59-2021-Q4
559506007	W-60-2021-Q4
559506008	W-61-2021-Q4
559506009	W-72-2021-Q4
559506010	W-73-2021-Q4
559506011	W-74-2021-Q4
559506012	W-74-2021-Q4-Dup
559506013	W-75-2021-Q4
559506014	W-76-2021-Q4
559506015	W-79-2021-Q4
559506016	W-80-2021-Q4

**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.

# **Radiochemistry**

**Product:** Alphaspec U, Liquid

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

**Analytical Procedure:** GL-RAD-A-011 REV# 28

**Analytical Batch:** 2189104

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559506001	W-54-2021-Q4
559506002	W-55-2021-Q4
559506003	W-56-2021-Q4
559506004	W-57-2021-Q4
559506005	W-58-2021-Q4
559506006	W-59-2021-Q4
559506007	W-60-2021-Q4
559506008	W-61-2021-Q4
559506009	W-72-2021-Q4
559506010	W-73-2021-Q4
559506011	W-74-2021-Q4
559506012	W-74-2021-Q4-Dup
559506013	W-75-2021-Q4
559506014	W-76-2021-Q4
559506015	W-79-2021-Q4
559506016	W-80-2021-Q4
1204938700	Method Blank (MB)
1204938701	559504007(W-29-2021-Q4) Sample Duplicate (DUP)
1204938702	Laboratory Control Sample (LCS)

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

## **Data Summary:**

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, with the following exceptions.

## **Miscellaneous Information**

### **Manual Integration**

Manual integration of alpha spectroscopy spectra 1204938701 (W-29-2021-Q4DUP) was performed to fully separate counts in Regions of Interest which would have been biased.

### **Additional Comments**

The tracer peak centroid for sample 1204938701 (W-29-2021-Q4DUP) is greater than 50 keV from the expected library energy value for the tracer; however, the tracer yield requirement was met and the tracer peak is within the tracer region of interest.

**Product: GFPC, Gross Alpha Liquid**

**Analytical Method:** EPA 900.0/SW846 9310

**Analytical Procedure:** GL-RAD-A-001 REV# 20

**Analytical Batch:** 2189103

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559506001	W-54-2021-Q4
559506002	W-55-2021-Q4
559506003	W-56-2021-Q4
559506004	W-57-2021-Q4
559506005	W-58-2021-Q4
559506006	W-59-2021-Q4
559506007	W-60-2021-Q4
559506008	W-61-2021-Q4
559506009	W-72-2021-Q4
559506010	W-73-2021-Q4
559506011	W-74-2021-Q4
559506012	W-74-2021-Q4-Dup
559506013	W-75-2021-Q4
559506014	W-76-2021-Q4
559506015	W-79-2021-Q4
559506016	W-80-2021-Q4
1204938695	Method Blank (MB)
1204938696	559504007(W-29-2021-Q4) Sample Duplicate (DUP)
1204938697	559504007(W-29-2021-Q4) Matrix Spike (MS)
1204938698	559504007(W-29-2021-Q4) Matrix Spike Duplicate (MSD)
1204938699	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Technical Information**

**Gross Alpha/Beta Preparation Information**

High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating.

**Recounts**

Sample 1204938697 (W-29-2021-Q4MS) was recounted due to high recovery. The recount is reported. Sample 559506016 (W-80-2021-Q4) was recounted due to high MDC. The recount is reported. Samples 559506002 (W-55-2021-Q4), 559506003 (W-56-2021-Q4) and 559506006 (W-59-2021-Q4) were recounted to verify sample results. Both counts are reported.

**Miscellaneous Information**

**Additional Comments**

The matrix spike and matrix spike duplicate, 1204938697 (W-29-2021-Q4MS) and 1204938698 (W-29-2021-Q4MSD), aliquots were reduced to conserve sample volume.

**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:** 2189592

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559506001	W-54-2021-Q4
559506002	W-55-2021-Q4
559506003	W-56-2021-Q4
559506004	W-57-2021-Q4
559506005	W-58-2021-Q4
559506006	W-59-2021-Q4
559506007	W-60-2021-Q4
559506008	W-61-2021-Q4
559506009	W-72-2021-Q4
559506010	W-73-2021-Q4
559506011	W-74-2021-Q4
559506012	W-74-2021-Q4-Dup
559506013	W-75-2021-Q4
559506014	W-76-2021-Q4
559506015	W-79-2021-Q4
559506016	W-80-2021-Q4
1204939940	Method Blank (MB)
1204939941	Laboratory Control Sample Duplicate (LCSD)
1204939942	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Technical Information****Recounts**

Sample 559506010 (W-73-2021-Q4) was recounted due to high MDC. The recount is reported. Sample 559506004 (W-57-2021-Q4) was recounted to verify sample results. Recount is reported.

**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.



Sample Analysis Requested (6) (Fill in the number of containers for each test)

Sample ID	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)	Gamma TENORM	Comments
W-72-2021-Q4	2	X	X	X	X		Note: extra sample is required for sample specific QC Preservative Lot #201942
W-73-2021-Q4	2	X	X	X	X		Preservative Lot #201942
W-74-2021-Q4	2	X	X	X	X		Preservative Lot #201942
W-74-2021-Q4-Dup	2	X	X	X	X		Preservative Lot #201942
W-75-2021-Q4	2	X	X	X	X		Preservative Lot #201942
W-76-2021-Q4	2	X	X	X	X		Preservative Lot #201942
W-79-2021-Q4	2	X	X	X	X		Preservative Lot #201942
W-80-2021-Q4	2	X	X	X	X		Preservative Lot #201942

Should this sample be considered:  
 (1) Known or possible hazards  
 (2) Radioactive (if isotopic info)  
 Yes, please supply isotopic info:  No  Yes

TAT Requested: Normal:  Rush:  Specify:

Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4

Additional Remarks:  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 21 °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other:

Chain of Custody Signatures  
 Relinquished By (Signed) Date Time  
 Received by (signed) Date Time

1. R. Crews (Secure Location) 10/20/2021 09:50  
 2. [Signature] 10/20/2021 15:59  
 3. [Signature] 10/20/2021 15:59

> For sample shipping and delivery details, see Sample Receipt & Review form (SRR)

- Chain of Custody Number = Client Determined
- 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
- Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered
- Matrix Codes: DW = Drinking Water, GW = Groundwater, SW = Surface Water, WW = Waste Water, W = Water, ML = 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).
- 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.
- KNOWN OR POSSIBLE HAZARDS  
 Characteristic Hazards  
 FL = Flammable/Ignitable  
 CO = Corrosive  
 RE = Reactive  
 TSCA Regulated  
 PCB = Polychlorinated biphenyls  
 RCRA Metals  
 As = Arsenic  
 Ba = Barium  
 Cd = Cadmium  
 Cr = Chromium  
 Hg = Mercury  
 Pb = Lead  
 Se = Selenium  
 Ag = Silver  
 MR = Misc. RCRA metals  
 LW = Listed Waste  
 (F, K, P and U-listed wastes.)  
 Waste code(s):  
 Other  
 OT = Other / Unknown  
 (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)  
 Description:

Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

SH

**SAMPLE RECEIPT & REVIEW FORM**

Client: <u>WNUC</u>	SDG/AR/COC/Work Order: <u>559506</u>
Received By: <u>DC</u>	Date Received: <u>10-10-21</u>
Carrier and Tracking Number	Circle Applicable: FedEx Express    FedEx Ground    UPS    Field Services <u>Courier</u> Other

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A) Shipped as a DOT Hazardous?		<input checked="" type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___
B) Did the client designate the samples are to be received as radioactive?	<input checked="" type="checkbox"/>		COC notation or radioactive stickers on containers equal client designation.
C) Did the RSO classify the samples as radioactive?		<input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> CPM/mR/hr Classified as: <u>Rad 1</u> Rad 2 Rad 3
D) Did the client designate samples are hazardous?		<input checked="" type="checkbox"/>	COC notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		<input checked="" type="checkbox"/>	If D or E is yes, select Hazards below. PCB's    Flammable    Foreign Soil    RCRA    Asbestos    Beryllium    Other: _____

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken    Damaged container    Leaking container    Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			Circle Applicable: Client contacted and provided COC    COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>			Preservation Method: Wet Ice    Ice Packs    Dry ice <u>None</u> Other: _____ *all temperatures are recorded in Celsius    TEMP: <u>21°</u>
4 Ddily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>			Temperature Device Serial #: <u>IR6-21</u> Secondary Temperature Device Serial # (If Applicable): _____
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken    Damaged container    Leaking container    Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>			Sample ID's and Containers Affected: _____ If Preservation added, Lot#: _____
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>			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?	<input checked="" type="checkbox"/>			ID's and tests affected: _____
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			ID's and containers affected: _____
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Circle Applicable: No dates on containers    No times on containers    COC missing info    Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Circle Applicable: No container count on COC    Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>			
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>			Circle Applicable: Not relinquished    Other (describe)

Comments (Use Continuation Form if needed):

**List of current GEL Certifications as of 16 November 2021**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
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
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
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	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122021-36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



November 17, 2021

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

Re: Ground Water Well Liquid Analysis  
Work Order: 559507

Dear Ms. Teague:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 20, 2021. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

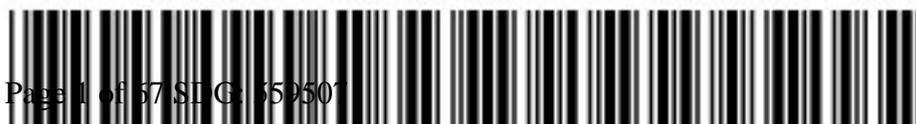
Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at [www.gel.com](http://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. 4523.

Sincerely,

Samuel Hogan  
Project Manager

Purchase Order: 4500822910 Line 2  
Enclosures



## GEL LABORATORIES LLC

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

### Certificate of Analysis Report for

WNUC010 Westinghouse Electric Company PO (4500822910)

Client SDG: 559507 GEL Work Order: 559507

**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
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy—Uncertain identification

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, Samuel Hogan.



Reviewed by \_\_\_\_\_

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-81-2021-Q4  
Sample ID: 559507001  
Matrix: Ground Water  
Collect Date: 07-OCT-21 11:44  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	J	0.0159	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1048	2189557	1
Uranium-238		1.41	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1210	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium		1.42	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-81-2021-Q4-Dup      Project: WNUC01022  
Sample ID: 559507002      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 07-OCT-21 11:44  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	J	0.0166	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1055	2189557	1
Uranium-238		1.35	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1217	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium		1.36	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-82-2021-Q4  
Sample ID: 559507003  
Matrix: Ground Water  
Collect Date: 07-OCT-21 09:54  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1057	2189557	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1219	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit



# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-84-2021-Q4  
Sample ID: 559507005  
Matrix: Ground Water  
Collect Date: 07-OCT-21 09:06  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1101	2189557	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1222	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-87-2021-Q4  
Sample ID: 559507006  
Matrix: Ground Water  
Collect Date: 13-OCT-21 12:25  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1106	2189557	1
Uranium-238		0.445	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1228	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium		0.445	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-99-2021-Q4  
Sample ID: 559507007  
Matrix: Ground Water  
Collect Date: 15-OCT-21 13:05  
Receive Date: 20-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1108	2189557	1
Uranium-238		0.243	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1229	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium		0.243	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-100-2021-Q4      Project: WNUC01022  
Sample ID: 559507008      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 15-OCT-21 12:03  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1110	2189557	1
Uranium-238	J	0.180	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1231	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.180	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-102-2021-Q4      Project: WNUC01022  
Sample ID: 559507009      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 08-OCT-21 11:07  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	J	0.0312	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1112	2189557	1
Uranium-238		1.78	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1233	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium		1.81	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-113-2021-Q4      Project: WNUC01022  
Sample ID: 559507010      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 15-OCT-21 09:12  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1113	2189557	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1235	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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





# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-116-2021-Q4      Project: WNUC01022  
Sample ID: 559507013      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 14-OCT-21 11:59  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1128	2189557	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1249	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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



# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-118-2021-Q4      Project: WNUC01022  
Sample ID: 559507015      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 14-OCT-21 13:00  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1131	2189557	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1252	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-120-2021-Q4      Project: WNUC01022  
Sample ID: 559507016      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 15-OCT-21 09:06  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1133	2189557	1
Uranium-238		0.623	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1254	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium		0.623	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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



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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-122-2021-Q4      Project: WNUC01022  
Sample ID: 559507018      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 13-OCT-21 10:56  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1136	2189557	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1258	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-100821      Project: WNUC01022  
Sample ID: 559507019      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 08-OCT-21 10:12  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1138	2189557	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1259	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-101421      Project: WNUC01022  
Sample ID: 559507020      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 14-OCT-21 11:39  
Receive Date: 20-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	PRB	11/14/21	1140	2189557	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	PRB	11/14/21	1301	2189557	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			SKJ	11/15/21	1142	2197563	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/08/21	1650	2189556

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-81-2021-Q4	Project: WNUC01022
Sample ID: 559507001	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 07-OCT-21 11:44	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0920	2189191	1
Uranium-233/234		0.874	+/-0.418	0.382	0.500	pCi/L							
Uranium-235/236	U	0.0533	+/-0.150	0.160	0.500	pCi/L							
Uranium-238		0.477	+/-0.322	0.348	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.133	+/-2.00	4.13	5.00	pCi/L			LXB3	11/12/21	1532	2189188	2
Beta		5.84	+/-2.87	4.10	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.279	+/-2.20	3.93	5.00	pCi/L			JJ3	11/16/21	0605	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			86.2	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			94.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-81-2021-Q4-Dup	Project: WNUC01022
Sample ID: 559507002	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 07-OCT-21 11:44	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0920	2189191	1
Uranium-233/234		0.910	+/-0.416	0.402	0.500	pCi/L							
Uranium-235/236	U	0.123	+/-0.196	0.271	0.500	pCi/L							
Uranium-238	U	0.231	+/-0.240	0.332	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.0950	+/-2.21	4.82	5.00	pCi/L		LXB3	11/12/21	1532	2189188		2
Beta		5.85	+/-2.57	3.64	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.20	+/-2.33	4.03	5.00	pCi/L		JJ3	11/16/21	0622	2189596		3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			95.6	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			92.3	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-82-2021-Q4	Project: WNUC01022
Sample ID: 559507003	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 07-OCT-21 09:54	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0920	2189191	1
Uranium-233/234	U	-0.0629	+/-0.168	0.429	0.500	pCi/L							
Uranium-235/236	U	0.0551	+/-0.155	0.165	0.500	pCi/L							
Uranium-238	U	-0.0963	+/-0.110	0.374	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.76	+/-2.07	3.18	5.00	pCi/L			LXB3	11/15/21	1245	2189188	2
Beta	U	1.51	+/-2.49	4.33	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.72	+/-2.25	3.81	5.00	pCi/L			JJ3	11/16/21	0640	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			81.5	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			97.1	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-83-2021-Q4	Project: WNUC01022
Sample ID: 559507004	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 07-OCT-21 11:09	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1008	2189191	1
Uranium-233/234	U	-0.0791	+/-0.181	0.453	0.500	pCi/L							
Uranium-235/236	U	0.0143	+/-0.149	0.311	0.500	pCi/L							
Uranium-238	U	0.00330	+/-0.152	0.333	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.50	+/-1.79	2.92	5.00	pCi/L			LXB3	11/12/21	1532	2189188	2
Beta	U	0.822	+/-2.75	4.84	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.28	+/-2.23	3.84	5.00	pCi/L			JJ3	11/16/21	0657	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			90.2	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-84-2021-Q4	Project: WNUC01022
Sample ID: 559507005	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 07-OCT-21 09:06	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0920	2189191	1
Uranium-233/234	U	-0.0531	+/-0.223	0.529	0.500	pCi/L							
Uranium-235/236	U	0.0486	+/-0.182	0.306	0.500	pCi/L							
Uranium-238	U	0.0434	+/-0.217	0.433	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.583	+/-1.53	3.59	5.00	pCi/L			LXB3	11/12/21	1532	2189188	2
Beta	U	0.282	+/-2.72	4.85	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.48	+/-2.23	3.81	5.00	pCi/L			JJ3	11/16/21	0715	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			70.1	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			96.4	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-87-2021-Q4	Project: WNUC01022
Sample ID: 559507006	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 13-OCT-21 12:25	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/15/21	1758	2189191	1
Uranium-233/234	U	0.0823	+/-0.210	0.384	0.500	pCi/L							
Uranium-235/236	U	0.0296	+/-0.136	0.246	0.500	pCi/L							
Uranium-238	U	0.0689	+/-0.178	0.324	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		2.81	+/-2.25	2.78	5.00	pCi/L			LXB3	11/12/21	1532	2189188	2
Beta		9.79	+/-3.53	4.74	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.05	+/-2.30	3.99	5.00	pCi/L			JJ3	11/16/21	0732	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			64.7	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			91.2	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-99-2021-Q4	Project: WNUC01022
Sample ID: 559507007	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 15-OCT-21 13:05	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0957	2189191	1
Uranium-233/234	U	0.314	+/-0.261	0.319	0.500	pCi/L							
Uranium-235/236	U	0.0255	+/-0.141	0.271	0.500	pCi/L							
Uranium-238	U	0.130	+/-0.178	0.242	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.01	+/-2.14	4.17	5.00	pCi/L			LXB3	11/12/21	1533	2189188	2
Beta		40.6	+/-5.21	3.12	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		57.7	+/-4.90	3.90	5.00	pCi/L			JJ3	11/16/21	0750	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			91.8	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			94.6	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-100-2021-Q4	Project: WNUC01022
Sample ID: 559507008	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 15-OCT-21 12:03	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/15/21	1758	2189191	1
Uranium-233/234	U	0.0196	+/-0.191	0.377	0.500	pCi/L							
Uranium-235/236	U	0.0619	+/-0.134	0.225	0.500	pCi/L							
Uranium-238	U	-0.0344	+/-0.122	0.286	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.75	+/-2.62	4.01	5.00	pCi/L			LXB3	11/12/21	1533	2189188	2
Beta		23.9	+/-3.64	2.84	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		18.0	+/-3.28	3.92	5.00	pCi/L			JJ3	11/16/21	0807	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			92.6	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			94	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-102-2021-Q4	Project: WNUC01022
Sample ID: 559507009	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 08-OCT-21 11:07	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235		5.06				percent			MXS2	11/12/21	0957	2189191	1
Uranium-233/234		1.81	+/-0.520	0.274	0.500	pCi/L							
Uranium-235/236		0.136	+/-0.179	0.136	0.500	pCi/L							
Uranium-238		0.396	+/-0.263	0.257	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.0613	+/-2.31	4.87	5.00	pCi/L			LXB3	11/12/21	1533	2189188	2
Beta		83.1	+/-5.80	2.92	5.00	pCi/L							
Alpha		6.57	+/-4.11	4.81	5.00	pCi/L			LXB3	11/15/21	1245	2189188	3
Beta		78.0	+/-6.66	4.01	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		119	+/-6.69	3.92	5.00	pCi/L			JJ3	11/16/21	0825	2189596	4

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	EPA 900.0/SW846 9310	
4	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			101	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-113-2021-Q4	Project: WNUC01022
Sample ID: 559507010	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 15-OCT-21 09:12	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0957	2189191	1
Uranium-233/234	U	-0.0147	+/-0.236	0.503	0.500	pCi/L							
Uranium-235/236	U	-0.0103	+/-0.154	0.360	0.500	pCi/L							
Uranium-238	U	0.118	+/-0.209	0.348	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.642	+/-1.39	2.79	5.00	pCi/L			LXB3	11/12/21	1532	2189188	2
Beta	U	1.04	+/-2.27	4.03	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.01	+/-2.23	3.87	5.00	pCi/L			JJ3	11/16/21	0843	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			91.7	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.6	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-114-2021-Q4	Project: WNUC01022
Sample ID: 559507011	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 15-OCT-21 10:36	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0958	2189191	1
Uranium-233/234	U	0.0697	+/-0.184	0.337	0.500	pCi/L							
Uranium-235/236	U	0.0380	+/-0.142	0.240	0.500	pCi/L							
Uranium-238	U	-0.00809	+/-0.121	0.284	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.602	+/-1.76	3.52	5.00	pCi/L			LXB3	11/12/21	1532	2189188	2
Beta	U	2.37	+/-2.03	3.21	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.900	+/-2.20	3.84	5.00	pCi/L			JJ3	11/16/21	0900	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			86.1	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-115-2021-Q4	Project: WNUC01022
Sample ID: 559507012	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 14-OCT-21 10:24	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0958	2189191	1
Uranium-233/234	U	0.0547	+/-0.192	0.368	0.500	pCi/L							
Uranium-235/236	U	0.0935	+/-0.160	0.140	0.500	pCi/L							
Uranium-238	U	0.0575	+/-0.132	0.210	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.669	+/-1.50	3.82	5.00	pCi/L			LXB3	11/12/21	1532	2189188	2
Beta	U	0.991	+/-2.29	4.07	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.0562	+/-2.10	3.78	5.00	pCi/L			JJ3	11/16/21	0917	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			94.9	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			96.3	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-116-2021-Q4	Project: WNUC01022
Sample ID: 559507013	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 14-OCT-21 11:59	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0958	2189191	1
Uranium-233/234	U	-0.0207	+/-0.166	0.372	0.500	pCi/L							
Uranium-235/236	U	0.108	+/-0.172	0.238	0.500	pCi/L							
Uranium-238	U	-0.0403	+/-0.109	0.292	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.24	+/-2.04	3.67	5.00	pCi/L			LXB3	11/12/21	1532	2189188	2
Beta	U	-0.802	+/-2.60	4.87	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.927	+/-2.31	4.03	5.00	pCi/L			JJ3	11/16/21	0935	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			104	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			93.1	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-117-2021-Q4	Project: WNUC01022
Sample ID: 559507014	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 14-OCT-21 14:25	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	0958	2189191	1
Uranium-233/234	U	-0.0185	+/-0.193	0.428	0.500	pCi/L							
Uranium-235/236	U	-0.0360	+/-0.109	0.305	0.500	pCi/L							
Uranium-238	U	-0.00808	+/-0.121	0.283	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.596	+/-1.15	2.26	5.00	pCi/L			LXB3	11/15/21	1245	2189188	2
Beta	U	0.859	+/-2.18	3.93	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.0293	+/-2.11	3.81	5.00	pCi/L			JJ3	11/16/21	0952	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			89.6	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			96	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-118-2021-Q4	Project: WNUC01022
Sample ID: 559507015	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 14-OCT-21 13:00	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1149	2189191	1
Uranium-233/234	U	0.0332	+/-0.173	0.343	0.500	pCi/L							
Uranium-235/236	U	0.0386	+/-0.109	0.116	0.500	pCi/L							
Uranium-238	U	0.0325	+/-0.111	0.206	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.08	+/-1.62	2.80	5.00	pCi/L			LXB3	11/15/21	1245	2189188	2
Beta	U	-0.366	+/-2.65	4.83	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.61	+/-2.27	3.86	5.00	pCi/L			JJ3	11/16/21	1010	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			90.9	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID:	W-120-2021-Q4	Project:	WNUC01022
Sample ID:	559507016	Client ID:	WNUC010
Matrix:	Ground Water		
Collect Date:	15-OCT-21 09:06		
Receive Date:	20-OCT-21		
Collector:	Client		

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1149	2189191	1
Uranium-233/234		0.393	+/-0.306	0.377	0.500	pCi/L							
Uranium-235/236	U	-0.0252	+/-0.111	0.290	0.500	pCi/L							
Uranium-238	U	0.278	+/-0.255	0.314	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.26	+/-1.77	3.05	5.00	pCi/L			LXB3	11/12/21	1532	2189188	2
Beta	U	3.56	+/-2.80	4.47	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.01	+/-2.22	3.86	5.00	pCi/L			JJ3	11/16/21	1028	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			74	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95.2	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-121-2021-Q4	Project: WNUC01022
Sample ID: 559507017	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 15-OCT-21 10:10	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/12/21	1149	2189191	1
Uranium-233/234	U	0.0102	+/-0.141	0.299	0.500	pCi/L							
Uranium-235/236	U	0.0118	+/-0.123	0.256	0.500	pCi/L							
Uranium-238	U	-0.0149	+/-0.103	0.251	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.242	+/-1.27	3.04	5.00	pCi/L			LXB3	11/12/21	1533	2189188	2
Beta		5.06	+/-2.95	4.54	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.62	+/-2.23	3.78	5.00	pCi/L			JJ3	11/16/21	1045	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			100	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			97.4	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-122-2021-Q4	Project: WNUC01022
Sample ID: 559507018	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 13-OCT-21 10:56	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/15/21	1758	2189191	1
Uranium-233/234	U	-0.135	+/-0.127	0.314	0.500	pCi/L							
Uranium-235/236	U	-0.0674	+/-0.0901	0.246	0.500	pCi/L							
Uranium-238	U	-0.154	+/-0.103	0.290	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		3.49	+/-2.31	2.72	5.00	pCi/L			LXB3	11/12/21	1533	2189188	2
Beta	U	1.45	+/-2.09	3.55	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.494	+/-2.14	3.78	5.00	pCi/L			JJ3	11/16/21	1102	2189596	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			99.7	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-100821	Project: WNUC01022
Sample ID: 559507019	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 08-OCT-21 10:12	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/15/21	1758	2189191	1
Uranium-233/234	U	-0.0329	+/-0.170	0.384	0.500	pCi/L							
Uranium-235/236	U	0.111	+/-0.169	0.222	0.500	pCi/L							
Uranium-238	U	-0.149	+/-0.134	0.404	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammasespec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	-1.36	+/-35.4	58.6		pCi/L			MXR1	11/05/21	0635	2188306	2
Bismuth-211	U	44.4	+/-51.0	49.5		pCi/L							
Bismuth-212	U	4.32	+/-82.7	157		pCi/L							
Bismuth-214	U	7.60	+/-21.2	33.4		pCi/L							
Lead-210	U	91.1	+/-117	114		pCi/L							
Lead-211	U	-88.4	+/-118	200		pCi/L							
Lead-212	UI	0.000	+/-16.5	21.2		pCi/L							
Lead-214	U	16.1	+/-18.5	25.7		pCi/L							
Potassium-40	U	120	+/-118	135		pCi/L							
Protactinium-231	U	38.7	+/-76.5	149		pCi/L							
Protactinium-234	U	0.479	+/-43.7	89.9		pCi/L							
Radium-223	U	114	+/-139	195		pCi/L							
Radium-226	U	-73.4	+/-112	196		pCi/L							
Radium-228	U	-1.36	+/-35.4	58.6		pCi/L							
Thallium-208	UI	0.000	+/-12.4	9.17		pCi/L							
Thorium-227	U	0.484	+/-35.8	67.3		pCi/L							
Thorium-234	U	28.3	+/-152	189		pCi/L							
Uranium-235	U	23.5	+/-25.9	48.7		pCi/L							
Uranium-238	U	28.3	+/-152	189		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.14	+/-2.08	3.71	5.00	pCi/L			LXB3	11/12/21	1533	2189188	3
Beta	U	0.421	+/-2.14	3.81	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	555	+/-359	569	700	pCi/L			KXA1	11/15/21	1421	2194907	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.54	+/-2.26	3.86	5.00	pCi/L			JJ3	11/16/21	1120	2189596	5

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-100821  
Sample ID: 559507019

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			72.4	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.5	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

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

## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-101421	Project: WNUC01022
Sample ID: 559507020	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 14-OCT-21 11:39	
Receive Date: 20-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/15/21	1758	2189191	1
Uranium-233/234	U	0.00487	+/-0.151	0.314	0.500	pCi/L							
Uranium-235/236	U	0.00976	+/-0.106	0.218	0.500	pCi/L							
Uranium-238	U	-0.0429	+/-0.0963	0.256	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammascpec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	-14.0	+/-21.4	32.8		pCi/L			MXR1	11/05/21	0635	2188306	2
Bismuth-211	U	-32.5	+/-30.0	48.4		pCi/L							
Bismuth-212	U	-41.2	+/-71.1	120		pCi/L							
Bismuth-214	U	14.6	+/-17.6	15.1		pCi/L							
Lead-210	U	412	+/-535	1020		pCi/L							
Lead-211	U	23.9	+/-82.4	163		pCi/L							
Lead-212	U	14.8	+/-15.2	18.1		pCi/L							
Lead-214	U	-3.23	+/-10.5	18.4		pCi/L							
Potassium-40	U	-16.2	+/-68.3	135		pCi/L							
Protactinium-231	U	-15.3	+/-63.4	118		pCi/L							
Protactinium-234	U	-21.9	+/-35.2	58.0		pCi/L							
Radium-223	U	-21.1	+/-73.8	138		pCi/L							
Radium-226	U	-53.7	+/-113	186		pCi/L							
Radium-228	U	-14.0	+/-21.4	32.8		pCi/L							
Thallium-208	U	3.81	+/-7.88	8.13		pCi/L							
Thorium-227	U	7.57	+/-35.1	61.9		pCi/L							
Thorium-234	U	65.9	+/-343	375		pCi/L							
Uranium-235	U	-18.0	+/-29.7	45.2		pCi/L							
Uranium-238	U	65.9	+/-343	375		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.523	+/-1.53	3.03	5.00	pCi/L			LXB3	11/15/21	1245	2189188	3
Beta	U	2.11	+/-2.45	4.12	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	376	+/-343	566	700	pCi/L			KXA1	11/15/21	1442	2194907	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.116	+/-2.14	3.83	5.00	pCi/L			JJ3	11/17/21	0534	2189596	5

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## Certificate of Analysis

Report Date: November 17, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-101421  
Sample ID: 559507020

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			88.3	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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:

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

# GEL LABORATORIES LLC

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

## QC Summary

Report Date: November 17, 2021

Page 1 of 3

Westinghouse Electric Company, LLC

PO Drawer R  
Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 559507

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2189557										
QC1204939835	559507001	DUP									
Uranium-234	U	ND	U	ND	ug/L	N/A			PRB	11/14/21	12:12
Uranium-235	J	0.0159	J	0.0184	ug/L	14.6 ^		(+/-0.0700)		11/14/21	10:50
Uranium-238		1.41		1.41	ug/L	0.368		(0%-20%)			
QC1204939838	559507012	DUP									
Uranium-234	U	ND	U	ND	ug/L	N/A				11/14/21	12:40
Uranium-235	U	ND	U	ND	ug/L	N/A				11/14/21	11:19
Uranium-238	U	ND	U	ND	ug/L	N/A					
QC1204939834	LCS										
Uranium-235	0.360			0.337	ug/L		93.7	(85%-115%)		11/14/21	10:47
Uranium-238	49.6			47.9	ug/L		96.4	(85%-115%)			
QC1204939841	LCS										
Uranium-234	0.550			0.556	ug/L		101	(85%-115%)		11/14/21	12:08
QC1204939833	MB										
Uranium-234			U	ND	ug/L					11/14/21	12:07
Uranium-235			U	ND	ug/L					11/14/21	10:45
Uranium-238			U	ND	ug/L						

# GEL LABORATORIES LLC

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

## QC Summary

Workorder: 559507

Page 2 of 3

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch 2189557											
QC1204939836 559507001 MS											
Uranium-235	0.360	J	0.0159	0.349	ug/L		92.6	(75%-125%)	PRB	11/14/21	10:52
Uranium-238	49.6		1.41	48.5	ug/L		94.8	(75%-125%)			
QC1204939839 559507012 MS											
Uranium-235	0.360	U	ND	0.348	ug/L		96.7	(75%-125%)		11/14/21	11:20
Uranium-238	49.6	U	ND	47.9	ug/L		96.6	(75%-125%)			
QC1204939842 559507001 MS											
Uranium-234	0.550	U	ND	0.535	ug/L		97.1	(75%-125%)		11/14/21	12:14
QC1204939843 559507012 MS											
Uranium-234	0.550	U	ND	0.550	ug/L		100	(75%-125%)		11/14/21	12:42
QC1204939837 559507001 SDILT											
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/14/21	12:15
Uranium-235		J	0.0159	U	ND	ug/L	N/A	(0%-10%)		11/14/21	10:54
Uranium-238			1.41		0.273	ug/L	3.25	(0%-10%)			
QC1204939840 559507012 SDILT											
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/14/21	12:44
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/14/21	11:22
Uranium-238		U	ND	U	ND	ug/L	N/A	(0%-10%)			

**Notes:**

The Qualifiers in this report are defined as follows:

< Result is less than value reported

# GEL LABORATORIES LLC

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

## QC Summary

Workorder: 559507

Page 3 of 3

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
E											
FB											
H											
J											
J											
N											
N/A											
N1											
ND											
NJ											
Q											
R											
U											
X											
Y											
^											
h											

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.

# GEL LABORATORIES LLC

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

## QC Summary

Report Date: November 17, 2021

Page 1 of 8

Westinghouse Electric Company, LLC  
 PO Drawer R  
 Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 559507

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Alpha Spec</b>											
Batch	2189191										
QC1204938928	559507001 DUP										
Pct Uranium-235	U	0.000	U	0.000	percent	N/A		N/A	MXS2	11/12/21	11:49
Uranium-233/234		0.874		1.06	pCi/L	19.4		(0% - 100%)			
	Uncertainty	+/-0.418		+/-0.355							
Uranium-235/236	U	0.0533	U	0.142	pCi/L	N/A		N/A			
	Uncertainty	+/-0.150		+/-0.162							
Uranium-238		0.477		0.865	pCi/L	57.7*		(0%-20%)			
	Uncertainty	+/-0.322		+/-0.307							
QC1204938929	LCS										
Pct Uranium-235				0.731	percent					11/12/21	11:49
Uranium-233/234				12.5	pCi/L						
	Uncertainty			+/-1.17							
Uranium-235/236				0.614	pCi/L						
	Uncertainty			+/-0.296							
Uranium-238	13.3			12.9	pCi/L		97.5	(75%-125%)			
	Uncertainty			+/-1.18							
QC1204938927	MB										
Pct Uranium-235			U	0.000	percent					11/12/21	11:49
Uranium-233/234			U	0.0357	pCi/L						
	Uncertainty			+/-0.123							
Uranium-235/236			U	-0.00905	pCi/L						
	Uncertainty			+/-0.0780							
Uranium-238			U	0.00244	pCi/L						
	Uncertainty			+/-0.112							

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## QC Summary

Workorder: 559507

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2188306										
QC1204937036 559504007 DUP											
Actinium-228	U	-19.0	U	-2.19	pCi/L	N/A		N/A MXR1		11/05/21	07:18
	Uncertainty	+/-18.2		+/-22.0							
Bismuth-211	U	-21.2	U	10.6	pCi/L	N/A		N/A			
	Uncertainty	+/-32.1		+/-32.0							
Bismuth-212	U	37.8	U	75.9	pCi/L	N/A		N/A			
	Uncertainty	+/-55.6		+/-80.8							
Bismuth-214	U	9.09	U	-4.02	pCi/L	N/A		N/A			
	Uncertainty	+/-17.5		+/-12.6							
Lead-210	U	423	UI	0.000	pCi/L	N/A		N/A			
	Uncertainty	+/-573		+/-3440							
Lead-211	U	2.31	U	39.7	pCi/L	N/A		N/A			
	Uncertainty	+/-78.9		+/-87.5							
Lead-212	U	5.30	U	12.4	pCi/L	N/A		N/A			
	Uncertainty	+/-13.5		+/-14.7							
Lead-214	U	1.79	U	2.98	pCi/L	N/A		N/A			
	Uncertainty	+/-11.0		+/-13.8							
Potassium-40	U	6.93	U	-1.09	pCi/L	N/A		N/A			
	Uncertainty	+/-104		+/-68.7							
Protactinium-231	U	-35.2	U	72.0	pCi/L	N/A		N/A			
	Uncertainty	+/-45.8		+/-66.7							
Protactinium-234	U	7.18	U	-49.1	pCi/L	N/A		N/A			
	Uncertainty	+/-34.0		+/-45.6							
Radium-223	U	53.9	U	-4.20	pCi/L	N/A		N/A			
	Uncertainty	+/-70.3		+/-90.9							
Radium-226	U	-134	U	29.7	pCi/L	N/A		N/A			
	Uncertainty	+/-107		+/-277							
Radium-228	U	-19.0	U	-2.19	pCi/L	N/A		N/A			
	Uncertainty	+/-18.2		+/-22.0							
Thallium-208	U	1.35	U	-3.89	pCi/L	N/A		N/A			
	Uncertainty	+/-7.83		+/-5.98							

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## QC Summary

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2188306										
Thorium-227	U Uncertainty	-11.5 +/-32.1	U	-0.127 +/-39.8	pCi/L	N/A		N/A	MXR1	11/05/21	07:18
Thorium-234	U Uncertainty	161 +/-260	U	92.0 +/-612	pCi/L	N/A		N/A			
Uranium-235	U Uncertainty	12.0 +/-25.8	U	15.3 +/-31.7	pCi/L	N/A		N/A			
Uranium-238	U Uncertainty	161 +/-260	U	92.0 +/-612	pCi/L	N/A		N/A			
QC1204937037	LCS										
Americium-241	1.09E+05 Uncertainty			1.19E+05 +/-3230	pCi/L		110	(75%-125%)		11/05/21	07:55
Cesium-137	37800 Uncertainty			39500 +/-823	pCi/L		104	(75%-125%)			
Cobalt-60	21300 Uncertainty			23100 +/-784	pCi/L		108	(75%-125%)			
Actinium-228	Uncertainty		U	85.0 +/-692	pCi/L						
Bismuth-211	Uncertainty		U	58.1 +/-815	pCi/L						
Bismuth-212	Uncertainty		U	-373 +/-1880	pCi/L						
Bismuth-214	Uncertainty		U	141 +/-256	pCi/L						
Lead-210	Uncertainty			1.15E+06 +/-1.45E+05	pCi/L						
Lead-211	Uncertainty		U	-559 +/-3170	pCi/L						
Lead-212	Uncertainty		U	-37.7 +/-195	pCi/L						
Lead-214	Uncertainty		U	159 +/-291	pCi/L						

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2188306										
Potassium-40			U	555	pCi/L				MXR1	11/05/21	07:55
	Uncertainty			+/-602							
Protactinium-231			U	-1190	pCi/L						
	Uncertainty			+/-1770							
Protactinium-234			U	576	pCi/L						
	Uncertainty			+/-1740							
Radium-223			U	1970	pCi/L						
	Uncertainty			+/-2510							
Radium-226			U	-1290	pCi/L						
	Uncertainty			+/-2310							
Radium-228			U	85.0	pCi/L						
	Uncertainty			+/-692							
Thallium-208			U	-47.3	pCi/L						
	Uncertainty			+/-133							
Thorium-227			U	-550	pCi/L						
	Uncertainty			+/-915							
Thorium-234			U	496	pCi/L						
	Uncertainty			+/-5470							
Uranium-235			U	-204	pCi/L						
	Uncertainty			+/-587							
Uranium-238			U	496	pCi/L						
	Uncertainty			+/-5470							
QC1204937035	MB										
Actinium-228			U	-17.5	pCi/L					11/05/21	06:36
	Uncertainty			+/-19.9							
Bismuth-211			U	-12.9	pCi/L						
	Uncertainty			+/-31.0							
Bismuth-212			U	-44.8	pCi/L						
	Uncertainty			+/-70.8							
Bismuth-214			U	-6.86	pCi/L						
	Uncertainty			+/-12.0							

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2188306										
Lead-210			U	-614	pCi/L				MXR1	11/05/21	06:36
	Uncertainty			+/-1750							
Lead-211			U	-0.443	pCi/L						
	Uncertainty			+/-99.8							
Lead-212			U	12.4	pCi/L						
	Uncertainty			+/-15.0							
Lead-214			U	-4.80	pCi/L						
	Uncertainty			+/-11.0							
Potassium-40			U	-46.4	pCi/L						
	Uncertainty			+/-59.8							
Protactinium-231			U	35.4	pCi/L						
	Uncertainty			+/-74.3							
Protactinium-234			U	-27.1	pCi/L						
	Uncertainty			+/-43.0							
Radium-223			U	51.2	pCi/L						
	Uncertainty			+/-84.9							
Radium-226			U	-49.8	pCi/L						
	Uncertainty			+/-117							
Radium-228			U	-17.5	pCi/L						
	Uncertainty			+/-19.9							
Thallium-208			UI	0.000	pCi/L						
	Uncertainty			+/-7.30							
Thorium-227			U	11.6	pCi/L						
	Uncertainty			+/-38.6							
Thorium-234			U	216	pCi/L						
	Uncertainty			+/-644							
Uranium-235			U	12.9	pCi/L						
	Uncertainty			+/-31.4							
Uranium-238			U	216	pCi/L						
	Uncertainty			+/-644							

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	2189188										
QC1204938921	559507003		DUP								
Alpha	U	1.76	U	-0.188	pCi/L	N/A		N/A	LXB3	11/15/21	12:45
	Uncertainty	+/-2.07		+/-1.40							
Beta	U	1.51	U	-0.883	pCi/L	N/A		N/A			
	Uncertainty	+/-2.49		+/-2.19							
QC1204938924	LCS										
Alpha		123		118	pCi/L		95.7	(75%-125%)		11/12/21	16:10
	Uncertainty			+/-11.6							
Beta		461		466	pCi/L		101	(75%-125%)			
	Uncertainty			+/-16.9							
QC1204938920	MB										
Alpha			U	0.631	pCi/L					11/12/21	15:32
	Uncertainty			+/-1.53							
Beta			U	-3.24	pCi/L						
	Uncertainty			+/-2.26							
QC1204938922	559507003		MS								
Alpha	464 U	1.76		407	pCi/L		87.6	(75%-125%)		11/12/21	16:10
	Uncertainty	+/-2.07		+/-43.6							
Beta	1740 U	1.51		1790	pCi/L		103	(75%-125%)			
	Uncertainty	+/-2.49		+/-63.5							
QC1204938923	559507003		MSD								
Alpha	478 U	1.76		442	pCi/L	8.21	92.5	(0%-20%)		11/12/21	16:10
	Uncertainty	+/-2.07		+/-44.6							
Beta	1790 U	1.51		1750	pCi/L	2.46	97.6	(0%-20%)			
	Uncertainty	+/-2.49		+/-63.1							
<b>Rad Liquid Scintillation</b>											
Batch	2189596										
QC1204939945	LCS										
Technetium-99		128		130	pCi/L		102	(75%-125%)	JJ3	11/17/21	06:09
	Uncertainty			+/-6.82							
QC1204954041	LCSD										
Technetium-99		128		128	pCi/L	1.25	100	(0%-20%)		11/17/21	06:26
	Uncertainty			+/-6.77							

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Liquid Scintillation</b>											
Batch	2189596										
QC1204939943	MB										
Technetium-99			U	0.294	pCi/L				JJ3	11/17/21	05:51
	Uncertainty			+/-2.04							
<hr/>											
Batch	2194907										
QC1204951272	559504007	DUP									
Tritium	U	27.8	U	26.9	pCi/L	N/A		N/A	KXA1	11/15/21	15:24
	Uncertainty	+/-314		+/-313							
QC1204951274	LCS										
Tritium	5490			4710	pCi/L		85.7	(75%-125%)		11/15/21	16:07
	Uncertainty			+/-591							
QC1204951271	MB										
Tritium			U	-15.0	pCi/L					11/15/21	15:03
	Uncertainty			+/-309							
QC1204951273	559504007	MS									
Tritium	5520	U	27.8	5520	pCi/L		100	(75%-125%)		11/15/21	15:46
	Uncertainty		+/-314	+/-635							

- 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.
    - N1 See case narrative
    - ND Analyte concentration is not detected above the detection limit
    - NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Q											
R											
U											
UI											
UJ											
UL											
X											
Y											
^											
h											

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.

**Technical Case Narrative**  
**Westinghouse Electric Company PO**  
**SDG #: 559507**

**Metals**

**Product:** Determination of Metals by ICP-MS

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-MA-E-014 REV# 35

**Analytical Batch:** 2189557

**Preparation Method:** EPA 200.2

**Preparation Procedure:** GL-MA-E-016 REV# 18

**Preparation Batch:** 2189556

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559507001	W-81-2021-Q4
559507002	W-81-2021-Q4-Dup
559507003	W-82-2021-Q4
559507004	W-83-2021-Q4
559507005	W-84-2021-Q4
559507006	W-87-2021-Q4
559507007	W-99-2021-Q4
559507008	W-100-2021-Q4
559507009	W-102-2021-Q4
559507010	W-113-2021-Q4
559507011	W-114-2021-Q4
559507012	W-115-2021-Q4
559507013	W-116-2021-Q4
559507014	W-117-2021-Q4
559507015	W-118-2021-Q4
559507016	W-120-2021-Q4
559507017	W-121-2021-Q4
559507018	W-122-2021-Q4
559507019	EB-01-100821
559507020	EB-01-101421
1204939833	Method Blank (MB) <b>ICP-MS</b>
1204939834	Laboratory Control Sample (LCS)
1204939841	Laboratory Control Sample (LCS)
1204939837	559507001(W-81-2021-Q4L) Serial Dilution (SD)
1204939840	559507012(W-115-2021-Q4L) Serial Dilution (SD)
1204939835	559507001(W-81-2021-Q4D) Sample Duplicate (DUP)
1204939838	559507012(W-115-2021-Q4D) Sample Duplicate (DUP)
1204939836	559507001(W-81-2021-Q4S) Matrix Spike (MS)
1204939839	559507012(W-115-2021-Q4S) Matrix Spike (MS)
1204939842	559507001(W-81-2021-Q4S) Matrix Spike (MS)
1204939843	559507012(W-115-2021-Q4S) Matrix Spike (MS)

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

### **Data Summary:**

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, with the following exceptions.

### **Calibration Information**

#### **ICSA/ICSAB Statement**

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

#### **Product: Inorganic Calculations**

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-GC-E-107 REV# 10

**Analytical Batch:** 2197563

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559507001	W-81-2021-Q4
559507002	W-81-2021-Q4-Dup
559507003	W-82-2021-Q4
559507004	W-83-2021-Q4
559507005	W-84-2021-Q4
559507006	W-87-2021-Q4
559507007	W-99-2021-Q4
559507008	W-100-2021-Q4
559507009	W-102-2021-Q4
559507010	W-113-2021-Q4
559507011	W-114-2021-Q4
559507012	W-115-2021-Q4
559507013	W-116-2021-Q4
559507014	W-117-2021-Q4
559507015	W-118-2021-Q4
559507016	W-120-2021-Q4
559507017	W-121-2021-Q4
559507018	W-122-2021-Q4
559507019	EB-01-100821
559507020	EB-01-101421

### **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.

## **Radiochemistry**

**Product:** Alphaspec U, Liquid

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

**Analytical Procedure:** GL-RAD-A-011 REV# 28

**Analytical Batch:** 2189191

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559507001	W-81-2021-Q4
559507002	W-81-2021-Q4-Dup
559507003	W-82-2021-Q4
559507004	W-83-2021-Q4
559507005	W-84-2021-Q4
559507006	W-87-2021-Q4
559507007	W-99-2021-Q4
559507008	W-100-2021-Q4
559507009	W-102-2021-Q4
559507010	W-113-2021-Q4
559507011	W-114-2021-Q4
559507012	W-115-2021-Q4
559507013	W-116-2021-Q4
559507014	W-117-2021-Q4
559507015	W-118-2021-Q4
559507016	W-120-2021-Q4
559507017	W-121-2021-Q4
559507018	W-122-2021-Q4
559507019	EB-01-100821
559507020	EB-01-101421
1204938927	Method Blank (MB)
1204938928	559507001(W-81-2021-Q4) Sample Duplicate (DUP)
1204938929	Laboratory Control Sample (LCS)

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

### **Data Summary:**

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, with the following exceptions.

### **Technical Information**

#### **Recounts**

Samples 559507006 (W-87-2021-Q4) and 559507020 (EB-01-101421) were recounted due to high MDCs. The recounts are reported. Sample 559507008 (W-100-2021-Q4) was recounted due to a peak shift. The recount is reported. Sample 559507019 (EB-01-100821) was recounted due to detector error. The recount is reported. Sample 559507018 (W-122-2021-Q4) was recounted due to a suspected false positive. The recount is reported.

### **Miscellaneous Information**

#### **Manual Integration**

Manual integrations of alpha spectroscopy spectra 1204938929 (LCS) and 559507011 (W-114-2021-Q4) were performed to fully separate counts in Regions of Interest which would have been biased.

#### **Additional Comments**

The tracer peak centroid for samples 1204938929 (LCS) and 559507011 (W-114-2021-Q4) are greater than 50 keV from the expected library energy value for the tracer; however, the tracer yield requirement was met and the

tracer peaks are within the tracer region of interest.

**Product:** Gammaspec, Gamma, Liquid NORM/TENORM

**Analytical Method:** EPA 901.1

**Analytical Procedure:** GL-RAD-A-013 REV# 27

**Analytical Batch:** 2188306

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559507019	EB-01-100821
559507020	EB-01-101421
1204937035	Method Blank (MB)
1204937036	559504007(W-29-2021-Q4) Sample Duplicate (DUP)
1204937037	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.

**Qualifier Information**

<b>Qualifier</b>	<b>Reason</b>	<b>Analyte</b>	<b>Sample</b>	<b>Client Sample</b>
UI	Results are considered a false positive due to high peak-width.	Thallium-208	1204937035	MB for batch 2188306
UI	Results are considered a false positive due to low abundance.	Lead-212	559507019	EB-01-100821
UI	Results are considered a false positive due to no valid peak.	Lead-210	1204937036	W-29-2021-Q4(559504007DUP)
		Thallium-208	559507019	EB-01-100821

**Product:** GFPC, Gross Alpha Liquid

**Analytical Method:** EPA 900.0/SW846 9310

**Analytical Procedure:** GL-RAD-A-001 REV# 20

**Analytical Batch:** 2189188

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559507001	W-81-2021-Q4
559507002	W-81-2021-Q4-Dup
559507003	W-82-2021-Q4
559507004	W-83-2021-Q4
559507005	W-84-2021-Q4
559507006	W-87-2021-Q4
559507007	W-99-2021-Q4
559507008	W-100-2021-Q4
559507009	W-102-2021-Q4
559507010	W-113-2021-Q4
559507011	W-114-2021-Q4
559507012	W-115-2021-Q4
559507013	W-116-2021-Q4
559507014	W-117-2021-Q4
559507015	W-118-2021-Q4
559507016	W-120-2021-Q4
559507017	W-121-2021-Q4
559507018	W-122-2021-Q4
559507019	EB-01-100821
559507020	EB-01-101421
1204938920	Method Blank (MB)
1204938921	559507003(W-82-2021-Q4) Sample Duplicate (DUP)
1204938922	559507003(W-82-2021-Q4) Matrix Spike (MS)
1204938923	559507003(W-82-2021-Q4) Matrix Spike Duplicate (MSD)
1204938924	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Technical Information**

**Gross Alpha/Beta Preparation Information**

High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating.

**Recounts**

Samples 1204938921 (W-82-2021-Q4DUP) and 559507003 (W-82-2021-Q4) were recounted due to high relative percent difference/relative error ratio. The recounts are reported. Samples 559507014 (W-117-2021-Q4), 559507015 (W-118-2021-Q4) and 559507020 (EB-01-101421) were recounted due to results more negative than the three sigma TPU. The second counts are reported. Sample 559507009 (W-102-2021-Q4) was recounted to verify sample results. Both count is reported.

**Miscellaneous Information**

**Additional Comments**

The matrix spike and matrix spike duplicate, 1204938922 (W-82-2021-Q4MS) and 1204938923 (W-82-2021-Q4MSD), aliquots were reduced to conserve sample volume.

**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:** 2189596

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559507001	W-81-2021-Q4
559507002	W-81-2021-Q4-Dup
559507003	W-82-2021-Q4
559507004	W-83-2021-Q4
559507005	W-84-2021-Q4
559507006	W-87-2021-Q4
559507007	W-99-2021-Q4
559507008	W-100-2021-Q4
559507009	W-102-2021-Q4
559507010	W-113-2021-Q4
559507011	W-114-2021-Q4
559507012	W-115-2021-Q4
559507013	W-116-2021-Q4
559507014	W-117-2021-Q4
559507015	W-118-2021-Q4
559507016	W-120-2021-Q4
559507017	W-121-2021-Q4
559507018	W-122-2021-Q4
559507019	EB-01-100821
559507020	EB-01-101421
1204939943	Method Blank (MB)
1204939945	Laboratory Control Sample (LCS)
1204954041	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.

**Product: LSC, Tritium Distillation, Liquid**

**Analytical Method:** EPA 906.0 Modified

**Analytical Procedure:** GL-RAD-A-002 REV# 24

**Analytical Batch:** 2194907

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
559507019	EB-01-100821
559507020	EB-01-101421
1204951271	Method Blank (MB)
1204951272	559504007(W-29-2021-Q4) Sample Duplicate (DUP)
1204951273	559504007(W-29-2021-Q4) Matrix Spike (MS)
1204951274	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.

**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.

**GEL** Laboratories LLC  
 Chemistry | Radiochemistry | Radiobiology | Specialty Analytics  
 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171  
 Fax: (843) 766-1178

**Chain of Custody and Analytical Request**  
**GEL Work Order Number:** 559507  
**GEL Project Manager:** S. Hogan

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code <sup>(1)</sup>	Field Filtered <sup>(2)</sup>	Sample Matrix <sup>(3)</sup>	Should this sample be considered:		Sample Analysis Requested <sup>(5)</sup> (Fill in the number of containers for each test)						Comments	
						Radioactive (if isotopic info. Yes, please supply isotopic info.)	(7) Known or possible Hazards	Total number of containers	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)		Gamma TERNORM
W-81-2021-Q4	10/7/2021	1144	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942	
W-81-2021-Q4-Dup	10/7/2021	1144	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942	
W-82-2021-Q4	10/7/2021	0954	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942	
W-83-2021-Q4	10/7/2021	1109	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942	
W-84-2021-Q4	10/7/2021	0906	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942	
W-87-2021-Q4	10/13/2021	1225	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942	
W-99-2021-Q4	10/15/2021	1305	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942	
W-100-2021-Q4	10/15/2021	1203	G	N	GW			2	X	X	X	X	X	Preservative Lot #201942	

**Chain of Custody Signatures**

Relinquished By (Signed)	Date	Received by (signed)	Date	Time
<i>Randy Crews</i>	10/20/2021	<i>R. Davis</i>	10/20/21	0950
<i>R. Davis</i>	10/21/21	<i>R. Davis</i>	10/21/21	1055
<i>R. Davis</i>	10/21/21	<i>R. Davis</i>	10/21/21	1535

Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4  
 Additional Remarks:  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 21 °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other:  
**TAT Requested: Normal: X Rush: Specify: (Subject to Surcharge)**

**For sample shipping and delivery details, see Sample Receipt & Review form (SRR).**

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  
 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=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal  
 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  
 7.) **KNOWN OR POSSIBLE HAZARDS**  
 Characteristic Hazards  
 FL = Flammable/Ignitable  
 CO = Corrosive  
 RE = Reactive  
 TSCA Regulated  
 PCB = Polychlorinated biphenyls  
 Listed Waste  
 LW = Listed Waste  
 (F, K, P and U-listed wastes.)  
 Waste code(s): \_\_\_\_\_  
 Other  
 OT = Other / Unknown  
 (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)  
 Description: \_\_\_\_\_  
 Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

Chain of Custody and Analytical Request  
 Send Results To: joynerdp@westinghouse.com  
 \* For composites - indicate start and stop date/time

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (6)	Should this sample be considered:	Total number of containers	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)	Gamma TENORM	Comments
W-102-2021-Q4	10/8/2021	1107	G	N	GW	(7) Known or possible Hazards (8) Radioactive (if yes, please supply isotopic info.)	2	X	X	X	X	X		Preservative Lot #201942
W-113-2021-Q4	10/15/2021	0912	G	N	GW		2	X	X	X	X	X		Preservative Lot #201942
W-114-2021-Q4	10/15/2021	1036	G	N	GW		2	X	X	X	X	X		Preservative Lot #201942
W-115-2021-Q4	10/14/2021	1024	G	N	GW		2	X	X	X	X	X		Preservative Lot #201942
W-116-2021-Q4	10/14/2021	1159	G	N	GW		2	X	X	X	X	X		Preservative Lot #201942
W-117-2021-Q4	10/14/2021	1425	G	N	GW		2	X	X	X	X	X		Preservative Lot #201942
W-118-2021-Q4	10/14/2021	1300	G	N	GW		2	X	X	X	X	X		Preservative Lot #201942
W-120-2021-Q4	10/15/2021	0906	G	N	GW		2	X	X	X	X	X		Preservative Lot #201942

**Chain of Custody Signatures**  
 Relinquished By (Signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 Received by (signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 1. R. Crews (Secure Location) 10/20/2021 0950  
 2. J.P. 10/20/2021 1555  
 3. J.P. 10/20/2021 1555  
 TAT Requested: Normal:  Rush:  Specify: \_\_\_\_\_  
 Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4  
 Additional Remarks:  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 21 °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other:

**For sample shipping and delivery details, see Sample Receipt & Review form (SRC)**  
 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  
 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 = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal  
 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.  
 7.) **KNOWN OR POSSIBLE HAZARDS**  
 Characteristic Hazards  
 FL = Flammable/ignitable  
 CO = Corrosive  
 RE = Reactive  
 TSCA Regulated  
 PCB = Polychlorinated biphenyls  
 RCRA Metals  
 As = Arsenic Hg = Mercury  
 Ba = Barium Se = Selenium  
 Cd = Cadmium Ag = Silver  
 Cr = Chromium MR = Misc. RCRA metals  
 Pb = Lead  
 Listed Waste  
 LW = Listed Waste  
 (F, K, P and U-listed wastes.)  
 Waste code(s): \_\_\_\_\_  
 Other  
 OT = Other / Unknown  
 (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)  
 Description: \_\_\_\_\_  
 Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

Sample ID <i>* For composites - indicate start and stop date/time</i>	*Date Collected (mm-dd-yy)	*Time Collected (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered:		Sample Analysis Requested (6) (Fill in the number of containers for each test)						Comments	
						Radioactive (if Yes, please supply isotopic info.)	(7) Known or possible Hazards	Total number of containers	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)		Gamma TENORM
W-121-2021-Q4	10/15/2021	1010	G	N	GW			2	X	X	X	X	X		Preservative Lot #201942
W-122-2021-Q4	10/13/2021	1056	G	N	GW			2	X	X	X	X	X		Preservative Lot #201942
EB-01-100821	10/8/2021	1012	G	N	GW			2	X	X	X	X	X		Preservative Lot #201942
EB-01-101421	10/14/2021	1139	G	N	GW			2	X	X	X	X	X		Preservative Lot #201942

**Chain of Custody Signatures**

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1 R. Crews (Secure Location)	10/20/2021	0930	[Signature]	10/20/2021	1055
2 [Signature]	10/20/21	1539	[Signature]	10/20/21	1539
3 [Signature]					

Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4  
 Additional Remarks:  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp:  °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other:

**> For sample shipping and delivery details, see Sample Receipt & Review form (SRR).**

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

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=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

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

7) **KNOWN OR POSSIBLE HAZARDS**

RCRA Metals	Characteristic Hazards	Listed Waste	Other
As = Arsenic Ba = Barium Cd = Cadmium Cr = Chromium Pb = Lead	FL = Flammable/Ignitable CO = Corrosive RE = Reactive	LW = Listed Waste (F, K, P and U-listed wastes.) Waste code(s):	OT = Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:

TSCA Regulated  
 PCB = Polychlorinated biphenyls

Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

SH

**SAMPLE RECEIPT & REVIEW FORM**

Client: <u>WNUC</u>		SDG/AR/COC/Work Order: <u>559507</u>	
Received By: <u>DC</u>		Date Received: <u>10-10-21</u>	
Carrier and Tracking Number		Circle Applicable: FedEx Express    FedEx Ground    UPS    Field Services <u>Courier</u> Other	
Suspected Hazard Information		Yes	No
*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.			
A) Shipped as a DOT Hazardous?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
B) Did the client designate the samples are to be received as radioactive?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
C) Did the RSO classify the samples as radioactive?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
D) Did the client designate samples are hazardous?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
E) Did the RSO identify possible hazards?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample Receipt Criteria		Yes	NA
		No	
Comments/Qualifiers (Required for Non-Conforming Items)			
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Comments (Use Continuation Form if needed):			

PM (or PMA) review: Initials NRG Date 10/21/21 Page 1 of 1

**List of current GEL Certifications as of 17 November 2021**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
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
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
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	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122021-36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



November 24, 2021

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

Re: Ground Water Well Liquid Analysis  
Work Order: 560265

Dear Ms. Teague:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 27, 2021. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

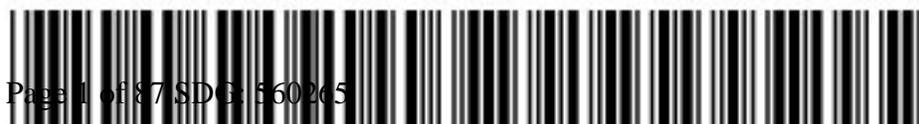
Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at [www.gel.com](http://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. 4523.

Sincerely,

Samuel Hogan  
Project Manager

Purchase Order: 4500822910 Line 2  
Enclosures



## GEL LABORATORIES LLC

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

### Certificate of Analysis Report for

WNUC010 Westinghouse Electric Company PO (4500822910)

Client SDG: 560265 GEL Work Order: 560265

**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
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy—Uncertain identification

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, Samuel Hogan.



Reviewed by \_\_\_\_\_

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-RW2-2021-Q4      Project: WNUC01022  
Sample ID: 560265001      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 21-OCT-21 10:03  
Receive Date: 27-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1247	2193211	1
Uranium-238	J	0.0739	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1729	2193211	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1729	2193211	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.0739	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2193210

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-14-2021-Q4  
Sample ID: 560265002  
Matrix: Ground Water  
Collect Date: 18-OCT-21 13:30  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1254	2193211	1
Uranium-238		0.221	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1736	2193211	2
Calculation for Total U "See Parent Products"												
Total Uranium		0.221	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2193210

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-15-2021-Q4  
Sample ID: 560265003  
Matrix: Ground Water  
Collect Date: 19-OCT-21 10:54  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1255	2193211	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1738	2193211	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1738	2193211	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2193210

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-16-2021-Q4  
Sample ID: 560265004  
Matrix: Ground Water  
Collect Date: 19-OCT-21 12:18  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1301	2193211	1
Uranium-238	J	0.0770	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1743	2193211	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1743	2193211	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.0770	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2193210

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit



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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

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Client Sample ID:	W-23R-2021-Q4	Project:	WNUC01022
Sample ID:	560265006	Client ID:	WNUC010
Matrix:	Ground Water		
Collect Date:	18-OCT-21 10:29		
Receive Date:	27-OCT-21		
Collector:	Client		

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Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1304	2193211	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1747	2193211	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1747	2193211	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

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Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2193210

The following Analytical Methods were performed:

---

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-24-2021-Q4  
Sample ID: 560265007  
Matrix: Ground Water  
Collect Date: 21-OCT-21 14:15  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1306	2193211	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1748	2193211	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1748	2193211	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2193210

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-26-2021-Q4  
Sample ID: 560265008  
Matrix: Ground Water  
Collect Date: 19-OCT-21 11:53  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1307	2193211	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1750	2193211	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1750	2193211	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2193210

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-27-2021-Q4  
Sample ID: 560265009  
Matrix: Ground Water  
Collect Date: 22-OCT-21 13:03  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1309	2193211	1
Uranium-238	J	0.0985	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1752	2193211	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1752	2193211	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.0985	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2193210

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-39-2021-Q4  
Sample ID: 560265010  
Matrix: Ground Water  
Collect Date: 18-OCT-21 12:02  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1311	2193211	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1754	2193211	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1754	2193211	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2193210

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit



# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-42-2021-Q4  
Sample ID: 560265012  
Matrix: Ground Water  
Collect Date: 20-OCT-21 09:17  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1323	2193211	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1806	2193211	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1806	2193211	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2193210

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-43-2021-Q4  
Sample ID: 560265013  
Matrix: Ground Water  
Collect Date: 18-OCT-21 13:02  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1324	2193211	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1808	2193211	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1808	2193211	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2193210

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-44-2021-Q4  
Sample ID: 560265014  
Matrix: Ground Water  
Collect Date: 18-OCT-21 14:23  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1326	2193211	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1809	2193211	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1809	2193211	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2193210

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-46-2021-Q4  
Sample ID: 560265015  
Matrix: Ground Water  
Collect Date: 21-OCT-21 09:03  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1328	2193211	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1811	2193211	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1811	2193211	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2193210

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-47-2021-Q4  
Sample ID: 560265016  
Matrix: Ground Water  
Collect Date: 19-OCT-21 09:47  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1502	2193213	1
Uranium-238	J	0.0704	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1909	2193213	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1909	2193213	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.0704	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193212

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-48-2021-Q4  
Sample ID: 560265017  
Matrix: Ground Water  
Collect Date: 19-OCT-21 13:35  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1509	2193213	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1917	2193213	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1917	2193213	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193212

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-49-2021-Q4  
Sample ID: 560265018  
Matrix: Ground Water  
Collect Date: 20-OCT-21 10:18  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1511	2193213	1
Uranium-238	J	0.0826	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1918	2193213	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1918	2193213	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.0826	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193212

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-62-2021-Q4  
Sample ID: 560265019  
Matrix: Ground Water  
Collect Date: 19-OCT-21 10:24  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1512	2193213	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1920	2193213	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1920	2193213	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193212

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-63-2021-Q4  
Sample ID: 560265020  
Matrix: Ground Water  
Collect Date: 19-OCT-21 13:23  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	J	0.0101	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1514	2193213	1
Uranium-238		1.54	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1922	2193213	2
Calculation for Total U "See Parent Products"												
Total Uranium		1.55	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193212

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit



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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-65-2021-Q4  
Sample ID: 560265022  
Matrix: Ground Water  
Collect Date: 18-OCT-21 09:38  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1521	2193213	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1929	2193213	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1929	2193213	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193212

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-RW2-2021-Q4	Project: WNUC01022
Sample ID: 560265001	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 21-OCT-21 10:03	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	0.134	+/-0.191	0.310	0.500	pCi/L							
Uranium-235/236	U	0.0295	+/-0.111	0.186	0.500	pCi/L							
Uranium-238		0.582	+/-0.284	0.232	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammascpec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	11.9	+/-19.2	24.6		pCi/L			MJH1	11/09/21	1947	2191164	2
Bismuth-211	UI	0.000	+/-32.7	25.2		pCi/L							
Bismuth-212	U	26.6	+/-38.0	74.9		pCi/L							
Bismuth-214	U	-1.45	+/-8.03	12.4		pCi/L							
Lead-210	U	295	+/-624	588		pCi/L							
Lead-211	U	-7.07	+/-55.3	102		pCi/L							
Lead-212	U	3.16	+/-10.4	10.5		pCi/L							
Lead-214	UI	0.000	+/-11.9	12.4		pCi/L							
Potassium-40	U	1.81	+/-49.0	95.2		pCi/L							
Protactinium-231	U	9.73	+/-41.2	70.7		pCi/L							
Protactinium-234	U	6.16	+/-19.4	37.9		pCi/L							
Radium-223	U	21.6	+/-49.7	95.3		pCi/L							
Radium-226	U	-23.8	+/-75.9	130		pCi/L							
Radium-228	U	11.9	+/-19.2	24.6		pCi/L							
Thallium-208	U	-2.49	+/-3.91	5.34		pCi/L							
Thorium-227	U	-7.08	+/-20.1	33.2		pCi/L							
Thorium-234	U	9.97	+/-235	197		pCi/L							
Uranium-235	U	-14.7	+/-20.6	29.8		pCi/L							
Uranium-238	U	9.97	+/-235	197		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.577	+/-1.74	3.45	5.00	pCi/L			LXB3	11/18/21	1438	2192937	3
Beta		5.46	+/-2.72	3.93	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	39.1	+/-292	524	700	pCi/L			KXA1	11/19/21	1257	2194929	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		6.40	+/-2.73	4.15	5.00	pCi/L			JJ3	11/21/21	2007	2192264	5

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-RW2-2021-Q4  
Sample ID: 560265001

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			91.3	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95	(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  
MDC: Minimum Detectable Concentration  
Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-14-2021-Q4	Project: WNUC01022
Sample ID: 560265002	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 18-OCT-21 13:30	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	-0.00863	+/-0.130	0.291	0.500	pCi/L							
Uranium-235/236	U	-0.0367	+/-0.0850	0.252	0.500	pCi/L							
Uranium-238	U	0.00371	+/-0.132	0.285	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	3.06	+/-2.67	3.82	5.00	pCi/L			LXB3	11/18/21	1438	2192937	2
Beta		9.79	+/-3.33	4.35	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.299	+/-2.48	4.40	5.00	pCi/L			JJ3	11/21/21	2030	2192264	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			102	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			92.9	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-15-2021-Q4	Project: WNUC01022
Sample ID: 560265003	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 19-OCT-21 10:54	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	-0.0306	+/-0.145	0.342	0.500	pCi/L							
Uranium-235/236	U	0.0538	+/-0.148	0.257	0.500	pCi/L							
Uranium-238	U	-0.0313	+/-0.106	0.274	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammascpec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	-8.54	+/-14.6	20.8		pCi/L			MJH1	11/09/21	1947	2191164	2
Bismuth-211	U	4.64	+/-15.5	29.3		pCi/L							
Bismuth-212	U	1.59	+/-33.5	62.6		pCi/L							
Bismuth-214	U	4.23	+/-10.1	10.0		pCi/L							
Lead-210	U	45.3	+/-282	448		pCi/L							
Lead-211	U	-5.89	+/-50.3	92.7		pCi/L							
Lead-212	U	2.31	+/-7.26	7.24		pCi/L							
Lead-214	U	-4.73	+/-8.33	11.3		pCi/L							
Potassium-40	U	28.1	+/-61.2	52.9		pCi/L							
Protactinium-231	U	62.4	+/-45.5	62.6		pCi/L							
Protactinium-234	U	11.1	+/-18.4	37.8		pCi/L							
Radium-223	U	6.85	+/-38.6	74.1		pCi/L							
Radium-226	UI	0.000	+/-98.1	76.3		pCi/L							
Radium-228	U	-8.54	+/-14.6	20.8		pCi/L							
Thallium-208	U	0.547	+/-6.16	4.52		pCi/L							
Thorium-227	U	1.63	+/-18.9	32.3		pCi/L							
Thorium-234	U	39.6	+/-143	191		pCi/L							
Uranium-235	U	5.98	+/-17.5	24.8		pCi/L							
Uranium-238	U	39.6	+/-143	191		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.39	+/-2.06	2.67	5.00	pCi/L			LXB3	11/18/21	1439	2192937	3
Beta		109	+/-6.66	4.64	5.00	pCi/L							
Alpha	U	-0.262	+/-1.67	3.74	5.00	pCi/L			LXB3	11/19/21	1634	2192937	4
Beta		119	+/-7.22	4.72	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	104	+/-296	521	700	pCi/L			KXA1	11/19/21	1319	2194929	5
<b>Liquid Scint Tc99, Liquid "As Received"</b>													

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-15-2021-Q4  
Sample ID: 560265003

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Rad Liquid Scintillation Analysis												
Liquid Scint Tc99, Liquid "As Received"												
Technetium-99		221	+/-8.89	4.28	5.00	pCi/L			JJ3	11/21/21	2052 2192264	6

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 900.0/SW846 9310	
5	EPA 906.0 Modified	
6	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			100	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.4	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-16-2021-Q4	Project: WNUC01022
Sample ID: 560265004	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 19-OCT-21 12:18	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	-0.0531	+/-0.111	0.292	0.500	pCi/L							
Uranium-235/236	U	0.0276	+/-0.104	0.174	0.500	pCi/L							
Uranium-238	U	0.00235	+/-0.108	0.237	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammascpec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	23.3	+/-16.0	27.7		pCi/L			MJH1	11/09/21	1947	2191164	2
Bismuth-211	U	1.21	+/-26.3	33.8		pCi/L							
Bismuth-212	U	18.1	+/-38.2	74.3		pCi/L							
Bismuth-214	U	1.22	+/-14.0	11.8		pCi/L							
Lead-210	U	22.5	+/-949	1780		pCi/L							
Lead-211	U	103	+/-221	114		pCi/L							
Lead-212	U	8.03	+/-10.2	11.6		pCi/L							
Lead-214	U	0.438	+/-9.54	12.8		pCi/L							
Potassium-40	U	15.4	+/-59.6	59.4		pCi/L							
Protactinium-231	U	-1.63	+/-38.2	71.0		pCi/L							
Protactinium-234	U	-19.2	+/-20.8	34.6		pCi/L							
Radium-223	U	23.2	+/-52.9	102		pCi/L							
Radium-226	U	49.0	+/-141	98.7		pCi/L							
Radium-228	U	23.3	+/-16.0	27.7		pCi/L							
Thallium-208	U	-4.37	+/-4.16	5.93		pCi/L							
Thorium-227	U	-13.7	+/-22.0	35.0		pCi/L							
Thorium-234	U	-102	+/-241	367		pCi/L							
Uranium-235	U	2.45	+/-22.1	33.1		pCi/L							
Uranium-238	U	-102	+/-241	367		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.42	+/-2.20	3.44	5.00	pCi/L			LXB3	11/18/21	1439	2192937	3
Beta		16.9	+/-3.66	4.72	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	39.0	+/-291	522	700	pCi/L			KXA1	11/19/21	1340	2194929	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		7.37	+/-2.78	4.14	5.00	pCi/L			JJ3	11/21/21	2115	2192264	5

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-16-2021-Q4  
Sample ID: 560265004

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			109	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95.3	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
 Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
 Project: Ground Water Well Liquid Analysis

Client Sample ID: W-19B-2021-Q4	Project: WNUC01022
Sample ID: 560265005	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 20-OCT-21 13:53	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	0.0812	+/-0.174	0.309	0.500	pCi/L							
Uranium-235/236	U	0.0699	+/-0.137	0.190	0.500	pCi/L							
Uranium-238	U	0.0976	+/-0.145	0.212	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		2.63	+/-1.76	2.13	5.00	pCi/L			LXB3	11/18/21	1439	2192937	2
Beta	U	-3.93	+/-2.18	4.57	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.70	+/-2.41	4.09	5.00	pCi/L			JJ3	11/21/21	2137	2192264	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			87.8	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-23R-2021-Q4	Project: WNUC01022
Sample ID: 560265006	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 18-OCT-21 10:29	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	-0.0909	+/-0.111	0.337	0.500	pCi/L							
Uranium-235/236	U	0.0323	+/-0.121	0.204	0.500	pCi/L							
Uranium-238	U	0.0357	+/-0.122	0.226	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.635	+/-1.75	3.51	5.00	pCi/L			LXB3	11/18/21	1439	2192937	2
Beta	U	0.988	+/-2.07	3.67	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.717	+/-2.29	4.18	5.00	pCi/L			JJ3	11/21/21	2200	2192264	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			87.2	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			96.1	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-24-2021-Q4	Project: WNUC01022
Sample ID: 560265007	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 21-OCT-21 14:15	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/23/21	1204	2192938	1
Uranium-233/234	U	-0.0344	+/-0.124	0.258	0.500	pCi/L							
Uranium-235/236	U	-0.0208	+/-0.0707	0.159	0.500	pCi/L							
Uranium-238	U	0.0168	+/-0.109	0.207	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammascpec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	-6.76	+/-16.6	26.0		pCi/L			MJH1	11/09/21	1947	2191164	2
Bismuth-211	U	-3.35	+/-26.4	38.9		pCi/L							
Bismuth-212	U	30.7	+/-44.4	86.6		pCi/L							
Bismuth-214	U	5.30	+/-14.4	16.0		pCi/L							
Lead-210	U	868	+/-780	1460		pCi/L							
Lead-211	U	-19.6	+/-54.1	96.2		pCi/L							
Lead-212	U	7.52	+/-10.6	12.6		pCi/L							
Lead-214	U	-1.37	+/-9.59	14.2		pCi/L							
Potassium-40	U	-10.3	+/-51.6	84.1		pCi/L							
Protactinium-231	U	5.20	+/-40.1	74.4		pCi/L							
Protactinium-234	U	5.69	+/-19.2	40.0		pCi/L							
Radium-223	U	4.67	+/-60.7	111		pCi/L							
Radium-226	U	68.9	+/-151	101		pCi/L							
Radium-228	U	-6.76	+/-16.6	26.0		pCi/L							
Thallium-208	U	3.87	+/-6.74	4.73		pCi/L							
Thorium-227	UI	0.000	+/-102	38.8		pCi/L							
Thorium-234	U	85.7	+/-397	302		pCi/L							
Uranium-235	U	20.7	+/-33.9	29.8		pCi/L							
Uranium-238	U	85.7	+/-397	302		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.51	+/-2.02	2.69	5.00	pCi/L			LXB3	11/18/21	1439	2192937	3
Beta		12.2	+/-3.38	3.86	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	39.3	+/-294	527	700	pCi/L			KXA1	11/19/21	1402	2194929	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.255	+/-2.21	3.98	5.00	pCi/L			JJ3	11/21/21	2222	2192264	5

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-24-2021-Q4  
Sample ID: 560265007

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			46.1	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			97.4	(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  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-26-2021-Q4	Project: WNUC01022
Sample ID: 560265008	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 19-OCT-21 11:53	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	0.0743	+/-0.141	0.240	0.500	pCi/L							
Uranium-235/236	U	0.0622	+/-0.122	0.169	0.500	pCi/L							
Uranium-238	U	0.137	+/-0.152	0.201	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammascpec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	-5.23	+/-18.3	26.2		pCi/L			MJH1	11/09/21	1948	2191164	2
Bismuth-211	U	-1.37	+/-25.8	40.1		pCi/L							
Bismuth-212	U	14.3	+/-49.3	93.0		pCi/L							
Bismuth-214	U	3.62	+/-9.60	15.6		pCi/L							
Lead-210	U	-1050	+/-1500	2080		pCi/L							
Lead-211	U	15.3	+/-62.8	120		pCi/L							
Lead-212	U	18.1	+/-11.7	9.79		pCi/L							
Lead-214	U	-5.99	+/-9.35	13.9		pCi/L							
Potassium-40	UI	0.000	+/-60.6	71.9		pCi/L							
Protactinium-231	U	27.3	+/-41.9	82.0		pCi/L							
Protactinium-234	U	-1.10	+/-27.4	49.9		pCi/L							
Radium-223	U	-36.8	+/-57.7	103		pCi/L							
Radium-226	U	73.6	+/-147	110		pCi/L							
Radium-228	U	-5.23	+/-18.3	26.2		pCi/L							
Thallium-208	U	0.310	+/-5.78	5.97		pCi/L							
Thorium-227	U	8.44	+/-24.0	42.2		pCi/L							
Thorium-234	U	-108	+/-280	405		pCi/L							
Uranium-235	U	11.5	+/-25.4	38.1		pCi/L							
Uranium-238	U	-108	+/-280	405		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.933	+/-1.88	3.59	5.00	pCi/L			LXB3	11/18/21	1439	2192937	3
Beta		7.26	+/-3.06	4.26	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	105	+/-299	526	700	pCi/L			KXA1	11/19/21	1423	2194929	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		5.60	+/-2.70	4.19	5.00	pCi/L			JJ3	11/21/21	2245	2192264	5

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-26-2021-Q4  
Sample ID: 560265008

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			101	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-27-2021-Q4	Project: WNUC01022
Sample ID: 560265009	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 22-OCT-21 13:03	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	0.0360	+/-0.125	0.237	0.500	pCi/L							
Uranium-235/236	U	0.0765	+/-0.131	0.115	0.500	pCi/L							
Uranium-238	U	0.0631	+/-0.126	0.204	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.235	+/-1.29	3.71	5.00	pCi/L			LXB3	11/18/21	1439	2192937	2
Beta		5.28	+/-2.42	3.23	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	3.49	+/-2.74	4.49	5.00	pCi/L			JJ3	11/21/21	2307	2192264	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			96.7	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93.4	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-39-2021-Q4	Project: WNUC01022
Sample ID: 560265010	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 18-OCT-21 12:02	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	0.0183	+/-0.153	0.315	0.500	pCi/L							
Uranium-235/236	U	-0.00974	+/-0.0840	0.195	0.500	pCi/L							
Uranium-238	U	0.0841	+/-0.150	0.243	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammascpec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	6.15	+/-26.4	30.6		pCi/L			MJH1	11/10/21	2326	2191164	2
Bismuth-211	U	34.0	+/-39.8	47.6		pCi/L							
Bismuth-212	U	53.8	+/-57.9	117		pCi/L							
Bismuth-214	U	17.7	+/-15.0	21.8		pCi/L							
Lead-210	U	-96.6	+/-75.0	129		pCi/L							
Lead-211	U	-21.4	+/-71.3	126		pCi/L							
Lead-212	U	0.186	+/-10.8	10.0		pCi/L							
Lead-214	U	12.3	+/-14.4	13.8		pCi/L							
Potassium-40	U	12.5	+/-81.3	138		pCi/L							
Protactinium-231	U	-42.0	+/-48.0	81.6		pCi/L							
Protactinium-234	U	7.91	+/-33.6	66.8		pCi/L							
Radium-223	U	29.5	+/-69.0	125		pCi/L							
Radium-226	U	2.55	+/-130	101		pCi/L							
Radium-228	U	6.15	+/-26.4	30.6		pCi/L							
Thallium-208	U	2.01	+/-6.17	9.94		pCi/L							
Thorium-227	U	-1.89	+/-24.1	43.9		pCi/L							
Thorium-234	U	78.1	+/-130	96.5		pCi/L							
Uranium-235	U	-11.6	+/-22.9	31.6		pCi/L							
Uranium-238	U	78.1	+/-130	96.5		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.360	+/-2.08	4.25	5.00	pCi/L			LXB3	11/18/21	1438	2192937	3
Beta		10.4	+/-3.35	4.79	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	248	+/-310	525	700	pCi/L			KXA1	11/19/21	1445	2194929	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		10.4	+/-3.05	4.32	5.00	pCi/L			JJ3	11/21/21	2330	2192264	5

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-39-2021-Q4  
Sample ID: 560265010

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			90.9	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-41R-2021-Q4	Project: WNUC01022
Sample ID: 560265011	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 21-OCT-21 09:06	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	-0.0601	+/-0.111	0.297	0.500	pCi/L							
Uranium-235/236	U	0.0101	+/-0.106	0.220	0.500	pCi/L							
Uranium-238	U	0.00350	+/-0.125	0.269	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammasepec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	2.13	+/-17.7	34.0		pCi/L			MJH1	11/09/21	1948	2191164	2
Bismuth-211	U	24.2	+/-33.5	31.2		pCi/L							
Bismuth-212	U	-26.5	+/-55.9	94.6		pCi/L							
Bismuth-214	U	5.94	+/-16.0	18.9		pCi/L							
Lead-210	U	-29.6	+/-72.4	128		pCi/L							
Lead-211	U	-33.4	+/-60.8	107		pCi/L							
Lead-212	U	1.29	+/-10.8	11.8		pCi/L							
Lead-214	U	8.78	+/-12.1	16.3		pCi/L							
Potassium-40	U	-16.6	+/-49.4	100		pCi/L							
Protactinium-231	U	19.1	+/-38.0	74.3		pCi/L							
Protactinium-234	U	-10.6	+/-26.8	49.6		pCi/L							
Radium-223	U	36.5	+/-53.6	106		pCi/L							
Radium-226	U	45.4	+/-111	83.9		pCi/L							
Radium-228	U	2.13	+/-17.7	34.0		pCi/L							
Thallium-208	U	-2.60	+/-5.51	8.42		pCi/L							
Thorium-227	U	-12.0	+/-21.6	38.8		pCi/L							
Thorium-234	U	-35.7	+/-90.7	164		pCi/L							
Uranium-235	U	14.4	+/-31.2	27.7		pCi/L							
Uranium-238	U	-35.7	+/-90.7	164		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.858	+/-2.30	4.47	5.00	pCi/L			LXB3	11/18/21	1438	2192937	3
Beta		10.2	+/-2.79	3.06	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	103	+/-295	519	700	pCi/L			KXA1	11/19/21	1506	2194929	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		13.5	+/-3.07	4.07	5.00	pCi/L			JJ3	11/21/21	2352	2192264	5

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-41R-2021-Q4  
Sample ID: 560265011

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Te-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			103	(15%-125%)
Technetium-99m Tracer	Liquid Scint Te99, Liquid "As Received"			98.2	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-42-2021-Q4	Project: WNUC01022
Sample ID: 560265012	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 20-OCT-21 09:17	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	0.0236	+/-0.147	0.297	0.500	pCi/L							
Uranium-235/236	U	-0.0282	+/-0.0851	0.239	0.500	pCi/L							
Uranium-238	U	-0.0596	+/-0.103	0.292	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.217	+/-1.08	2.89	5.00	pCi/L			LXB3	11/18/21	1438	2192937	2
Beta	U	3.47	+/-2.60	4.10	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	2.31	+/-2.59	4.34	5.00	pCi/L			JJ3	11/22/21	0015	2192264	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			98.4	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			96.9	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Project: Ms. Cynthia Teague  
Ground Water Well Liquid Analysis

Client Sample ID: W-43-2021-Q4	Project: WNUC01022
Sample ID: 560265013	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 18-OCT-21 13:02	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	-0.000456	+/-0.143	0.309	0.500	pCi/L							
Uranium-235/236	U	-0.0256	+/-0.116	0.292	0.500	pCi/L							
Uranium-238	U	0.0793	+/-0.154	0.265	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammasespec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	-7.45	+/-15.2	24.0		pCi/L			MJH1	11/10/21	2328	2191164	2
Bismuth-211	U	14.0	+/-25.1	38.4		pCi/L							
Bismuth-212	U	-10.5	+/-44.7	79.0		pCi/L							
Bismuth-214	U	3.67	+/-13.3	14.2		pCi/L							
Lead-210	U	-224	+/-472	708		pCi/L							
Lead-211	U	19.0	+/-65.9	124		pCi/L							
Lead-212	U	7.02	+/-7.14	11.7		pCi/L							
Lead-214	U	0.806	+/-9.12	13.5		pCi/L							
Potassium-40	UI	0.000	+/-77.4	58.2		pCi/L							
Protactinium-231	U	7.04	+/-41.2	77.5		pCi/L							
Protactinium-234	U	27.8	+/-26.7	54.6		pCi/L							
Radium-223	U	-25.3	+/-56.5	102		pCi/L							
Radium-226	U	47.4	+/-107	98.5		pCi/L							
Radium-228	U	-7.45	+/-15.2	24.0		pCi/L							
Thallium-208	U	0.765	+/-4.69	7.40		pCi/L							
Thorium-227	U	14.7	+/-23.0	40.9		pCi/L							
Thorium-234	U	-85.1	+/-176	253		pCi/L							
Uranium-235	U	16.2	+/-22.7	31.9		pCi/L							
Uranium-238	U	-85.1	+/-176	253		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.0302	+/-1.54	3.32	5.00	pCi/L			LXB3	11/18/21	1438	2192937	3
Beta	U	-0.921	+/-2.29	4.31	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	-39.2	+/-286	525	700	pCi/L			KXA1	11/19/21	1545	2194929	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		39.9	+/-4.61	4.68	5.00	pCi/L			JJ3	11/22/21	0037	2192264	5

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-43-2021-Q4  
Sample ID: 560265013

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			90.2	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			87.5	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-44-2021-Q4	Project: WNUC01022
Sample ID: 560265014	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 18-OCT-21 14:23	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	-0.0453	+/-0.103	0.269	0.500	pCi/L							
Uranium-235/236	U	0.0451	+/-0.141	0.264	0.500	pCi/L							
Uranium-238	U	0.0630	+/-0.111	0.169	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammasepec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	6.50	+/-22.6	33.3		pCi/L			MJH1	11/10/21	2334	2191164	2
Bismuth-211	U	-10.0	+/-30.7	43.3		pCi/L							
Bismuth-212	U	0.981	+/-61.5	95.3		pCi/L							
Bismuth-214		17.6	+/-11.7	12.1		pCi/L							
Lead-210	U	310	+/-1120	1960		pCi/L							
Lead-211	U	-50.6	+/-67.4	110		pCi/L							
Lead-212	U	12.9	+/-13.3	14.1		pCi/L							
Lead-214	U	1.48	+/-12.2	15.1		pCi/L							
Potassium-40	U	-34.5	+/-53.7	86.5		pCi/L							
Protactinium-231	U	-35.1	+/-61.5	87.0		pCi/L							
Protactinium-234	U	15.3	+/-29.5	58.2		pCi/L							
Radium-223	U	-9.98	+/-64.5	113		pCi/L							
Radium-226	UI	0.000	+/-155	104		pCi/L							
Radium-228	U	6.50	+/-22.6	33.3		pCi/L							
Thallium-208	U	-2.28	+/-4.57	7.91		pCi/L							
Thorium-227	U	-8.03	+/-26.5	46.2		pCi/L							
Thorium-234	U	-296	+/-285	432		pCi/L							
Uranium-235	U	-16.2	+/-24.6	37.4		pCi/L							
Uranium-238	U	-296	+/-285	432		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.557	+/-1.35	2.60	5.00	pCi/L			LXB3	11/18/21	1438	2192937	3
Beta	U	3.38	+/-2.75	4.49	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	287	+/-313	524	700	pCi/L			KXA1	11/19/21	1607	2194929	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.648	+/-2.45	4.30	5.00	pCi/L			JJ3	11/22/21	0100	2192264	5

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-44-2021-Q4  
Sample ID: 560265014

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			100	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			96.3	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
 Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
 Project: Ground Water Well Liquid Analysis

Client Sample ID: W-46-2021-Q4	Project: WNUC01022
Sample ID: 560265015	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 21-OCT-21 09:03	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	-0.0394	+/-0.111	0.283	0.500	pCi/L							
Uranium-235/236	U	-0.00741	+/-0.111	0.260	0.500	pCi/L							
Uranium-238	U	-0.0575	+/-0.0724	0.242	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.25	+/-1.71	2.94	5.00	pCi/L			LXB3	11/18/21	1439	2192937	2
Beta		37.5	+/-4.85	4.43	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		51.3	+/-4.69	4.16	5.00	pCi/L			JJ3	11/22/21	0122	2192264	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			95.7	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.4	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-47-2021-Q4	Project: WNUC01022
Sample ID: 560265016	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 19-OCT-21 09:47	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	0.00116	+/-0.138	0.301	0.500	pCi/L							
Uranium-235/236	U	-0.00983	+/-0.0848	0.196	0.500	pCi/L							
Uranium-238	U	-0.0385	+/-0.104	0.278	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammasespec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	31.6	+/-21.9	31.7		pCi/L			MJH1	11/10/21	2335	2191164	2
Bismuth-211	U	36.1	+/-38.0	38.8		pCi/L							
Bismuth-212	U	-14.9	+/-48.6	86.2		pCi/L							
Bismuth-214	U	6.71	+/-14.1	16.9		pCi/L							
Lead-210	U	-1100	+/-1660	2470		pCi/L							
Lead-211	U	9.04	+/-63.2	121		pCi/L							
Lead-212	U	-6.10	+/-8.30	11.6		pCi/L							
Lead-214	U	13.1	+/-13.8	17.0		pCi/L							
Potassium-40	U	-58.5	+/-63.3	109		pCi/L							
Protactinium-231	U	22.7	+/-44.9	87.5		pCi/L							
Protactinium-234	U	12.8	+/-24.3	50.0		pCi/L							
Radium-223	U	50.7	+/-78.4	129		pCi/L							
Radium-226	U	19.0	+/-96.9	153		pCi/L							
Radium-228	U	31.6	+/-21.9	31.7		pCi/L							
Thallium-208	U	4.51	+/-6.70	6.41		pCi/L							
Thorium-227	U	-11.5	+/-27.8	45.5		pCi/L							
Thorium-234	U	35.4	+/-398	379		pCi/L							
Uranium-235	U	-19.3	+/-26.0	37.0		pCi/L							
Uranium-238	U	35.4	+/-398	379		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.833	+/-0.982	3.85	5.00	pCi/L			LXB3	11/18/21	1439	2192937	3
Beta		53.8	+/-6.17	4.54	5.00	pCi/L							
Alpha	U	-0.698	+/-1.88	4.40	5.00	pCi/L			LXB3	11/19/21	1634	2192937	4
Beta		48.7	+/-4.93	4.14	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	193	+/-302	518	700	pCi/L			KXA1	11/19/21	1628	2194929	5
<b>Liquid Scint Tc99, Liquid "As Received"</b>													

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-47-2021-Q4  
Sample ID: 560265016

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Liquid Scintillation Analysis													
Liquid Scint Tc99, Liquid "As Received"													
Technetium-99		37.9	+/-4.02	3.89	5.00	pCi/L			JJ3	11/22/21	0145	2192264	6

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 900.0/SW846 9310	
5	EPA 906.0 Modified	
6	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			84.6	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			104	(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  
DL: Detection Limit                      PF: Prep Factor  
MDA: Minimum Detectable Activity      RL: Reporting Limit  
MDC: Minimum Detectable Concentration      SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-48-2021-Q4	Project: WNUC01022
Sample ID: 560265017	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 19-OCT-21 13:35	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	-0.0949	+/-0.104	0.324	0.500	pCi/L							
Uranium-235/236	U	-0.0190	+/-0.0842	0.220	0.500	pCi/L							
Uranium-238	U	0.0103	+/-0.117	0.249	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammascpec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	4.18	+/-15.3	26.8		pCi/L			MJH1	11/10/21	2335	2191164	2
Bismuth-211	UI	0.000	+/-37.5	29.2		pCi/L							
Bismuth-212	U	14.9	+/-90.0	74.0		pCi/L							
Bismuth-214	UI	0.000	+/-12.2	14.0		pCi/L							
Lead-210	U	-390	+/-488	708		pCi/L							
Lead-211	U	5.77	+/-52.6	99.7		pCi/L							
Lead-212	U	2.82	+/-11.4	8.11		pCi/L							
Lead-214	U	13.7	+/-13.6	14.7		pCi/L							
Potassium-40	U	7.86	+/-73.9	52.8		pCi/L							
Protactinium-231	U	-11.2	+/-48.9	77.7		pCi/L							
Protactinium-234	U	13.7	+/-25.1	49.8		pCi/L							
Radium-223	U	4.25	+/-50.1	94.3		pCi/L							
Radium-226	U	45.1	+/-95.5	88.9		pCi/L							
Radium-228	U	4.18	+/-15.3	26.8		pCi/L							
Thallium-208	UI	0.000	+/-7.90	5.35		pCi/L							
Thorium-227	U	-15.1	+/-18.5	32.8		pCi/L							
Thorium-234	U	-2.45	+/-150	236		pCi/L							
Uranium-235	U	4.73	+/-16.5	29.1		pCi/L							
Uranium-238	U	-2.45	+/-150	236		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.162	+/-1.21	2.90	5.00	pCi/L			LXB3	11/18/21	1439	2192937	3
Beta		13.7	+/-3.63	4.58	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	132	+/-304	532	700	pCi/L			KXA1	11/19/21	1650	2194929	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		14.9	+/-3.30	4.34	5.00	pCi/L			JJ3	11/22/21	0322	2192264	5

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-48-2021-Q4  
Sample ID: 560265017

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			96	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95.2	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-49-2021-Q4	Project: WNUC01022
Sample ID: 560265018	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 20-OCT-21 10:18	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/22/21	0823	2192938	1
Uranium-233/234	U	-0.0811	+/-0.133	0.361	0.500	pCi/L							
Uranium-235/236	U	-0.00852	+/-0.128	0.299	0.500	pCi/L							
Uranium-238	U	0.0110	+/-0.126	0.267	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.23	+/-1.76	2.59	5.00	pCi/L			LXB3	11/18/21	1439	2192937	2
Beta	U	-0.957	+/-2.49	4.52	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.419	+/-2.37	4.28	5.00	pCi/L			JJ3	11/22/21	0345	2192264	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			84.4	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95.2	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-62-2021-Q4	Project: WNUC01022
Sample ID: 560265019	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 19-OCT-21 10:24	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/19/21	1427	2192940	1
Uranium-233/234	U	-0.0753	+/-0.145	0.362	0.500	pCi/L							
Uranium-235/236	U	-0.0551	+/-0.0962	0.291	0.500	pCi/L							
Uranium-238	U	-0.00247	+/-0.0962	0.216	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.08	+/-1.64	2.91	5.00	pCi/L			JXK3	11/18/21	1546	2192939	2
Beta	U	0.941	+/-2.32	4.12	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.0589	+/-2.44	4.37	5.00	pCi/L			JJ3	11/22/21	0407	2192264	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			77.6	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93.2	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-63-2021-Q4	Project: WNUC01022
Sample ID: 560265020	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 19-OCT-21 13:23	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/19/21	1427	2192940	1
Uranium-233/234		0.573	+/-0.224	0.194	0.500	pCi/L							
Uranium-235/236	U	0.0151	+/-0.0695	0.125	0.500	pCi/L							
Uranium-238		0.578	+/-0.213	0.119	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.07	+/-2.37	3.82	5.00	pCi/L			JXK3	11/18/21	1546	2192939	2
Beta		14.2	+/-3.68	4.19	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		13.6	+/-3.26	4.39	5.00	pCi/L			JJ3	11/22/21	0430	2192264	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			102	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-64-2021-Q4	Project: WNUC01022
Sample ID: 560265021	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 19-OCT-21 08:54	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/19/21	1427	2192940	1
Uranium-233/234	U	0.0842	+/-0.115	0.178	0.500	pCi/L							
Uranium-235/236	U	-0.00892	+/-0.0545	0.131	0.500	pCi/L							
Uranium-238	U	0.0914	+/-0.109	0.152	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		5.14	+/-3.11	3.50	5.00	pCi/L			JXK3	11/18/21	1546	2192939	2
Beta		48.8	+/-5.70	4.25	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		72.9	+/-5.26	3.72	5.00	pCi/L			AG2	11/21/21	0852	2192266	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			99.4	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			97.3	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-65-2021-Q4	Project: WNUC01022
Sample ID: 560265022	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 18-OCT-21 09:38	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/19/21	1427	2192940	1
Uranium-233/234	U	-0.0219	+/-0.0829	0.203	0.500	pCi/L							
Uranium-235/236	U	0.0175	+/-0.0806	0.145	0.500	pCi/L							
Uranium-238	U	-0.00354	+/-0.0858	0.191	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-1.09	+/-1.30	3.59	5.00	pCi/L			JXK3	11/18/21	1546	2192939	2
Beta	U	0.229	+/-1.91	3.52	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.363	+/-2.44	4.35	5.00	pCi/L			AG2	11/21/21	0910	2192266	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			90	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			83.3	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## QC Summary

Report Date: November 24, 2021

Page 1 of 5

Westinghouse Electric Company, LLC

PO Drawer R  
Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 560265

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2193211										
QC1204947641	560265001	DUP									
Uranium-234	U	ND	U	ND	ug/L	N/A			SKJ	11/17/21	17:31
Uranium-235	U	ND	U	ND	ug/L	N/A				11/17/21	12:49
Uranium-238	J	0.0739	U	ND	ug/L	200	^				
QC1204947644	560265011	DUP									
Uranium-234	U	ND	U	ND	ug/L	N/A				11/17/21	18:01
Uranium-235	U	ND	U	ND	ug/L	N/A				11/17/21	13:18
Uranium-238	U	ND	U	ND	ug/L	N/A					
QC1204947640	LCS										
Uranium-235	0.360			0.369	ug/L		103	(85%-115%)		11/17/21	12:45
Uranium-238	49.6			51.7	ug/L		104	(85%-115%)			
QC1204947647	LCS										
Uranium-234	0.550			0.572	ug/L		104	(85%-115%)		11/17/21	17:27
QC1204947639	MB										
Uranium-234			U	ND	ug/L					11/17/21	17:25
Uranium-235			U	ND	ug/L					11/17/21	12:44
Uranium-238			U	ND	ug/L						

# GEL LABORATORIES LLC

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## QC Summary

Workorder: 560265

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2193211										
QC1204947642	560265001	MS									
Uranium-235	0.360	U	ND	0.369	ug/L		102	(75%-125%)	SKJ	11/17/21	12:50
Uranium-238	49.6	J	0.0739	50.0	ug/L		101	(75%-125%)			
QC1204947645	560265011	MS									
Uranium-235	0.360	U	ND	0.363	ug/L		101	(75%-125%)		11/17/21	13:19
Uranium-238	49.6	U	ND	50.9	ug/L		102	(75%-125%)			
QC1204947648	560265001	MS									
Uranium-234	0.550	U	ND	0.571	ug/L		104	(75%-125%)		11/17/21	17:32
QC1204947649	560265011	MS									
Uranium-234	0.550	U	ND	0.575	ug/L		105	(75%-125%)		11/17/21	18:02
QC1204947643	560265001	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	17:34
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	12:52
Uranium-238		J	0.0739	U	ND	ug/L	N/A	(0%-10%)			
QC1204947646	560265011	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	18:04
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	13:21
Uranium-238		U	ND	U	ND	ug/L	N/A	(0%-10%)			
Batch	2193213										
QC1204947652	560265016	DUP									
Uranium-234		U	ND	U	ND	ug/L	N/A		SKJ	11/17/21	19:11

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## QC Summary

Workorder: 560265

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2193213										
Uranium-235	U	ND	U	ND	ug/L	N/A			SKJ	11/17/21	15:04
Uranium-238	J	0.0704	U	ND	ug/L	200	^				
QC1204947655	560266005 DUP										
Uranium-234	U	ND	U	ND	ug/L	N/A				11/17/21	19:43
Uranium-235	U	ND	U	ND	ug/L	N/A				11/17/21	15:35
Uranium-238	U	ND	U	ND	ug/L	N/A					
QC1204947651	LCS										
Uranium-235	0.360			0.371	ug/L		103	(85%-115%)		11/17/21	15:00
Uranium-238	49.6			50.9	ug/L		103	(85%-115%)			
QC1204956449	LCS										
Uranium-234	0.550			0.564	ug/L		103	(85%-115%)		11/17/21	19:08
QC1204947650	MB										
Uranium-234			U	ND	ug/L					11/17/21	19:06
Uranium-235			U	ND	ug/L					11/17/21	14:59
Uranium-238			U	ND	ug/L						
QC1204947653	560265016 MS										
Uranium-235	0.360	U	ND	0.366	ug/L		102	(75%-125%)		11/17/21	15:05
Uranium-238	49.6	J	0.0704	51.2	ug/L		103	(75%-125%)			
QC1204947656	560266005 MS										
Uranium-235	0.360	U	ND	0.370	ug/L		103	(75%-125%)		11/17/21	15:36

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## QC Summary

Workorder: **560265**

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2193213										
Uranium-238	49.6	U	ND	51.7	ug/L		104	(75%-125%)	SKJ	11/17/21	15:36
QC1204956446	560265016	MS									
Uranium-234	0.550	U	ND	0.595	ug/L		108	(75%-125%)		11/17/21	19:13
QC1204956447	560266005	MS									
Uranium-234	0.550	U	ND	0.583	ug/L		106	(75%-125%)		11/17/21	19:45
QC1204947654	560265016	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	19:15
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	15:07
Uranium-238		J	0.0704	U	ND	ug/L	N/A	(0%-10%)			
QC1204947657	560266005	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	19:47
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	15:38
Uranium-238		U	ND	U	ND	ug/L	N/A	(0%-10%)			

**Notes:**

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated
- N Metals--The Matrix spike sample recovery is not within specified control limits



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## QC Summary

Report Date: November 24, 2021

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Westinghouse Electric Company, LLC

PO Drawer R  
Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 560265

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Alpha Spec</b>											
Batch	2192938										
QC1204947044	560265011	DUP									
Pct Uranium-235	U	0.000	U	0.000	percent	N/A		N/A	MXS2	11/22/21	08:23
Uranium-233/234	U	-0.0601	U	-0.0504	pCi/L	N/A		N/A			
	Uncertainty	+/-0.111		+/-0.109							
Uranium-235/236	U	0.0101	U	0.0337	pCi/L	N/A		N/A			
	Uncertainty	+/-0.106		+/-0.126							
Uranium-238	U	0.00350	U	0.0373	pCi/L	N/A		N/A			
	Uncertainty	+/-0.125		+/-0.127							
QC1204947045	LCS										
Pct Uranium-235				0.908	percent					11/22/21	08:23
Uranium-233/234				11.7	pCi/L						
	Uncertainty			+/-1.18							
Uranium-235/236				0.711	pCi/L						
	Uncertainty			+/-0.333							
Uranium-238	13.4			12.0	pCi/L		89.6	(75%-125%)			
	Uncertainty			+/-1.19							
QC1204947043	MB										
Pct Uranium-235			U	0.000	percent					11/22/21	08:23
Uranium-233/234			U	-0.0319	pCi/L						
	Uncertainty			+/-0.106							
Uranium-235/236			U	0.0186	pCi/L						
	Uncertainty			+/-0.103							
Uranium-238			U	0.0150	pCi/L						
	Uncertainty			+/-0.0834							

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Alpha Spec</b>											
Batch	2192940										
QC1204947052	560266019 DUP										
Pct Uranium-235	U	0.000	U	0.000	percent	N/A		N/A	MXS2	11/19/21	14:27
Uranium-233/234	U	-0.0417	U	-0.0262	pCi/L	N/A		N/A			
	Uncertainty	+/-0.112		+/-0.105							
Uranium-235/236	U	0.0153	U	-0.00209	pCi/L	N/A		N/A			
	Uncertainty	+/-0.102		+/-0.0811							
Uranium-238	U	-0.0336	U	0.00422	pCi/L	N/A		N/A			
	Uncertainty	+/-0.0755		+/-0.0803							
<b>QC1204947053 LCS</b>											
Pct Uranium-235				0.950	percent					11/19/21	14:27
Uranium-233/234				12.7	pCi/L						
	Uncertainty			+/-1.03							
Uranium-235/236				0.777	pCi/L						
	Uncertainty			+/-0.287							
Uranium-238	13.3			12.6	pCi/L		94.7	(75%-125%)			
	Uncertainty			+/-1.02							
<b>QC1204947051 MB</b>											
Pct Uranium-235			U	0.000	percent					11/19/21	14:27
Uranium-233/234			U	-0.00461	pCi/L						
	Uncertainty			+/-0.129							
Uranium-235/236			U	0.0350	pCi/L						
	Uncertainty			+/-0.0987							
Uranium-238			U	0.0345	pCi/L						
	Uncertainty			+/-0.0935							
<b>Rad Gamma Spec</b>											
Batch	2191164										
QC1204943338	560265011 DUP										
Actinium-228	U	2.13	U	11.2	pCi/L	N/A		N/A	MJH1	11/10/21	23:15
	Uncertainty	+/-17.7		+/-30.0							

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2191164										
Bismuth-211	U Uncertainty	24.2 +/-33.5	U	42.3 +/-44.9	pCi/L	N/A		N/A	MJH1	11/10/21	23:15
Bismuth-212	U Uncertainty	-26.5 +/-55.9	U	47.6 +/-48.4	pCi/L	N/A		N/A			
Bismuth-214	U Uncertainty	5.94 +/-16.0		33.4 +/-14.7	pCi/L	55.2		(0% - 100%)			
Lead-210	U Uncertainty	-29.6 +/-72.4	U	293 +/-821	pCi/L	N/A		N/A			
Lead-211	U Uncertainty	-33.4 +/-60.8	U	30.7 +/-78.7	pCi/L	N/A		N/A			
Lead-212	U Uncertainty	1.29 +/-10.8	U	2.93 +/-14.0	pCi/L	N/A		N/A			
Lead-214	U Uncertainty	8.78 +/-12.1	UI	0.000 +/-16.3	pCi/L	N/A		N/A			
Potassium-40	U Uncertainty	-16.6 +/-49.4	U	31.4 +/-51.6	pCi/L	N/A		N/A			
Protactinium-231	U Uncertainty	19.1 +/-38.0	U	-23.4 +/-46.1	pCi/L	N/A		N/A			
Protactinium-234	U Uncertainty	-10.6 +/-26.8	U	20.3 +/-27.3	pCi/L	N/A		N/A			
Radium-223	U Uncertainty	36.5 +/-53.6	U	-18.7 +/-62.2	pCi/L	N/A		N/A			
Radium-226	U Uncertainty	45.4 +/-111	U	54.5 +/-167	pCi/L	N/A		N/A			
Radium-228	U Uncertainty	2.13 +/-17.7	U	11.2 +/-30.0	pCi/L	N/A		N/A			
Thallium-208	U Uncertainty	-2.60 +/-5.51	U	1.09 +/-5.39	pCi/L	N/A		N/A			
Thorium-227	U Uncertainty	-12.0 +/-21.6	U	-0.664 +/-24.2	pCi/L	N/A		N/A			

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## QC Summary

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2191164										
Thorium-234	U Uncertainty	-35.7 +/-90.7	U	235 +/-400	pCi/L	N/A		N/A	MJH1	11/10/21	23:15
Uranium-235	U Uncertainty	14.4 +/-31.2	U	-2.40 +/-26.5	pCi/L	N/A		N/A			
Uranium-238	U Uncertainty	-35.7 +/-90.7	U	235 +/-400	pCi/L	N/A		N/A			
QC1204943339	LCS										
Americium-241	34200 Uncertainty			35300 +/-545	pCi/L		103	(75%-125%)		11/11/21	05:58
Cesium-137	11900 Uncertainty			12500 +/-351	pCi/L		105	(75%-125%)			
Cobalt-60	6700 Uncertainty			6980 +/-297	pCi/L		104	(75%-125%)			
Actinium-228	Uncertainty		U	-100 +/-267	pCi/L						
Bismuth-211	Uncertainty		U	-161 +/-307	pCi/L						
Bismuth-212	Uncertainty		U	111 +/-675	pCi/L						
Bismuth-214	Uncertainty		U	-76.1 +/-97.1	pCi/L						
Lead-210	Uncertainty			3.79E+05 +/-6630	pCi/L						
Lead-211	Uncertainty		U	-354 +/-1190	pCi/L						
Lead-212	Uncertainty		U	-23.9 +/-84.8	pCi/L						
Lead-214	Uncertainty		U	9.55 +/-111	pCi/L						
Potassium-40	Uncertainty		U	-8.14 +/-149	pCi/L						

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch		2191164									
Protactinium-231			U	372	pCi/L				MJH1	11/11/21	05:58
	Uncertainty			+/-705							
Protactinium-234			U	-48.5	pCi/L						
	Uncertainty			+/-600							
Radium-223			U	31.9	pCi/L						
	Uncertainty			+/-1010							
Radium-226			U	-372	pCi/L						
	Uncertainty			+/-1050							
Radium-228			U	-100	pCi/L						
	Uncertainty			+/-267							
Thallium-208			U	6.02	pCi/L						
	Uncertainty			+/-51.5							
Thorium-227			U	23.4	pCi/L						
	Uncertainty			+/-395							
Thorium-234			U	-184	pCi/L						
	Uncertainty			+/-1000							
Uranium-235			U	-45.0	pCi/L						
	Uncertainty			+/-299							
Uranium-238			U	-184	pCi/L						
	Uncertainty			+/-1000							
QC1204943336 MB											
Actinium-228			U	3.25	pCi/L					11/10/21	23:37
	Uncertainty			+/-7.50							
Bismuth-211			U	-3.07	pCi/L						
	Uncertainty			+/-12.5							
Bismuth-212			U	23.4	pCi/L						
	Uncertainty			+/-20.1							
Bismuth-214			U	0.0878	pCi/L						
	Uncertainty			+/-5.07							
Lead-210			U	295	pCi/L						
	Uncertainty			+/-509							

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## QC Summary

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2191164										
Lead-211			U	-7.31	pCi/L				MJH1	11/10/21	23:37
	Uncertainty			+/-29.2							
Lead-212			U	-2.98	pCi/L						
	Uncertainty			+/-3.48							
Lead-214			U	6.06	pCi/L						
	Uncertainty			+/-6.61							
Potassium-40			U	3.64	pCi/L						
	Uncertainty			+/-35.1							
Protactinium-231			U	16.5	pCi/L						
	Uncertainty			+/-20.3							
Protactinium-234			U	0.554	pCi/L						
	Uncertainty			+/-13.7							
Radium-223			U	20.8	pCi/L						
	Uncertainty			+/-27.4							
Radium-226			U	-63.1	pCi/L						
	Uncertainty			+/-49.8							
Radium-228			U	3.25	pCi/L						
	Uncertainty			+/-7.50							
Thallium-208			U	-1.72	pCi/L						
	Uncertainty			+/-2.14							
Thorium-227			U	9.99	pCi/L						
	Uncertainty			+/-15.2							
Thorium-234			U	-111	pCi/L						
	Uncertainty			+/-128							
Uranium-235			U	-7.35	pCi/L						
	Uncertainty			+/-11.1							
Uranium-238			U	-111	pCi/L						
	Uncertainty			+/-128							

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	2192937										
QC1204947039 560265011 DUP											
Alpha	U	0.858		4.38	pCi/L	135*		(0% - 100%)	LXB3	11/18/21	15:26
	Uncertainty	+/-2.30		+/-3.38							
Beta		10.2		13.0	pCi/L	24		(0% - 100%)			
	Uncertainty	+/-2.79		+/-3.64							
QC1204947042 LCS											
Alpha	116			110	pCi/L		95.2	(75%-125%)		11/18/21	15:26
	Uncertainty			+/-10.9							
Beta	433			455	pCi/L		105	(75%-125%)			
	Uncertainty			+/-15.8							
QC1204947038 MB											
Alpha			U	-1.19	pCi/L					11/18/21	15:26
	Uncertainty			+/-1.09							
Beta			U	0.813	pCi/L						
	Uncertainty			+/-1.80							
QC1204947040 560265011 MS											
Alpha	244 U	0.858		240	pCi/L		98.3	(75%-125%)		11/18/21	15:26
	Uncertainty	+/-2.30		+/-26.0							
Beta	913	10.2		945	pCi/L		102	(75%-125%)			
	Uncertainty	+/-2.79		+/-33.6							
QC1204947041 560265011 MSD											
Alpha	251 U	0.858		220	pCi/L	8.51	87.8	(0%-20%)		11/18/21	15:26
	Uncertainty	+/-2.30		+/-25.9							
Beta	939	10.2		947	pCi/L	0.167	99.7	(0%-20%)			
	Uncertainty	+/-2.79		+/-34.1							
Batch	2192939										
QC1204947047 560266019 DUP											
Alpha	U	2.25	U	-0.0361	pCi/L	N/A		N/A	JXK3	11/18/21	15:55
	Uncertainty	+/-2.18		+/-1.12							
Beta	U	2.00	U	1.01	pCi/L	N/A		N/A			
	Uncertainty	+/-2.58		+/-2.19							
QC1204947050 LCS											
Alpha	115			99.8	pCi/L		86.5	(75%-125%)		11/18/21	15:54
	Uncertainty			+/-9.79							

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	2192939										
Beta	432			466	pCi/L		108	(75%-125%)	JXK3	11/18/21	15:54
	Uncertainty			+/-16.2							
QC1204947046	MB										
Alpha			U	0.124	pCi/L					11/18/21	15:55
	Uncertainty			+/-0.835							
Beta			U	-0.728	pCi/L						
	Uncertainty			+/-2.48							
QC1204947048	560266019	MS									
Alpha	247	U	2.25	215	pCi/L		87.1	(75%-125%)		11/18/21	15:54
	Uncertainty		+/-2.18	+/-22.1							
Beta	925	U	2.00	971	pCi/L		105	(75%-125%)			
	Uncertainty		+/-2.58	+/-33.8							
QC1204947049	560266019	MSD									
Alpha	240	U	2.25	222	pCi/L	3.01	92.4	(0%-20%)		11/18/21	15:54
	Uncertainty		+/-2.18	+/-22.5							
Beta	899	U	2.00	964	pCi/L	0.747	107	(0%-20%)			
	Uncertainty		+/-2.58	+/-33.4							
<b>Rad Liquid Scintillation</b>											
Batch	2192264										
QC1204945599	560265011	DUP									
Technetium-99			13.5	10.7	pCi/L	23.3		(0% - 100%)	JJ3	11/22/21	05:15
	Uncertainty		+/-3.07	+/-2.97							
QC1204945600	LCS										
Technetium-99	125			121	pCi/L		96.3	(75%-125%)		11/22/21	05:37
	Uncertainty			+/-6.67							
QC1204945598	MB										
Technetium-99			U	1.53	pCi/L					11/22/21	04:52
	Uncertainty			+/-2.40							
Batch	2192266										
QC1204945605	560265021	DUP									
Technetium-99			72.9	74.2	pCi/L	1.8		(0%-20%)	AG2	11/21/21	10:20
	Uncertainty		+/-5.26	+/-5.34							

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## QC Summary

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Liquid Scintillation</b>											
Batch 2192266											
QC1204945606	LCS										
Technetium-99	127			120	pCi/L		93.8	(75%-125%)	AG2	11/21/21	10:37
	Uncertainty			+/-6.58							
QC1204945604	MB										
Technetium-99			U	0.500	pCi/L					11/21/21	10:02
	Uncertainty			+/-2.20							
Batch 2194929											
QC1204951333	560265011	DUP									
Tritium	U	103	U	170	pCi/L	N/A			N/A KXA1	11/19/21	18:15
	Uncertainty	+/-295		+/-304							
QC1204951335	LCS										
Tritium	5490			5550	pCi/L		101	(75%-125%)		11/19/21	18:58
	Uncertainty			+/-600							
QC1204951332	MB										
Tritium			U	221	pCi/L					11/19/21	17:54
	Uncertainty			+/-308							
QC1204951334	560265011	MS									
Tritium	5510	U	103	5540	pCi/L		101	(75%-125%)		11/19/21	18:37
	Uncertainty	+/-295		+/-605							

**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.

# GEL LABORATORIES LLC

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

## QC Summary

Workorder: 560265

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
N1	See case narrative										
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										
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.

**Technical Case Narrative  
Westinghouse Electric Company PO  
SDG #: 560265**

## **Metals**

**Product:** Determination of Metals by ICP-MS

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-MA-E-014 REV# 35

**Analytical Batch:** 2193211

**Preparation Method:** EPA 200.2

**Preparation Procedure:** GL-MA-E-016 REV# 18

**Preparation Batch:** 2193210

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560265001	W-RW2-2021-Q4
560265002	W-14-2021-Q4
560265003	W-15-2021-Q4
560265004	W-16-2021-Q4
560265005	W-19B-2021-Q4
560265006	W-23R-2021-Q4
560265007	W-24-2021-Q4
560265008	W-26-2021-Q4
560265009	W-27-2021-Q4
560265010	W-39-2021-Q4
560265011	W-41R-2021-Q4
560265012	W-42-2021-Q4
560265013	W-43-2021-Q4
560265014	W-44-2021-Q4
560265015	W-46-2021-Q4
1204947639	Method Blank (MB)ICP-MS
1204947640	Laboratory Control Sample (LCS)
1204947647	Laboratory Control Sample (LCS)
1204947643	560265001(W-RW2-2021-Q4L) Serial Dilution (SD)
1204947646	560265011(W-41R-2021-Q4L) Serial Dilution (SD)
1204947641	560265001(W-RW2-2021-Q4D) Sample Duplicate (DUP)
1204947644	560265011(W-41R-2021-Q4D) Sample Duplicate (DUP)
1204947642	560265001(W-RW2-2021-Q4S) Matrix Spike (MS)
1204947645	560265011(W-41R-2021-Q4S) Matrix Spike (MS)
1204947648	560265001(W-RW2-2021-Q4S) Matrix Spike (MS)
1204947649	560265011(W-41R-2021-Q4S) Matrix Spike (MS)

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

### **Data Summary:**

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, with the following exceptions.

**Calibration Information**

**ICSA/ICSAB Statement**

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

**Product: Determination of Metals by ICP-MS**

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-MA-E-014 REV# 35

**Analytical Batch:** 2193213

**Preparation Method:** EPA 200.2

**Preparation Procedure:** GL-MA-E-016 REV# 18

**Preparation Batch:** 2193212

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560265016	W-47-2021-Q4
560265017	W-48-2021-Q4
560265018	W-49-2021-Q4
560265019	W-62-2021-Q4
560265020	W-63-2021-Q4
560265021	W-64-2021-Q4
560265022	W-65-2021-Q4
1204947650	Method Blank (MB) <b>ICP-MS</b>
1204947651	Laboratory Control Sample (LCS)
1204956449	Laboratory Control Sample (LCS)
1204947654	560265016(W-47-2021-Q4L) Serial Dilution (SD)
1204947657	560266005(W-69-2021-Q4L) Serial Dilution (SD)
1204947652	560265016(W-47-2021-Q4D) Sample Duplicate (DUP)
1204947655	560266005(W-69-2021-Q4D) Sample Duplicate (DUP)
1204947653	560265016(W-47-2021-Q4S) Matrix Spike (MS)
1204947656	560266005(W-69-2021-Q4S) Matrix Spike (MS)
1204956446	560265016(W-47-2021-Q4S) Matrix Spike (MS)
1204956447	560266005(W-69-2021-Q4S) Matrix Spike (MS)

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

**Data Summary:**

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, with the following exceptions.

**Calibration Information**

**ICSA/ICSAB Statement**

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

**Product: Inorganic Calculations**

**Analytical Method: EPA 200.8**

**Analytical Procedure: GL-GC-E-107 REV# 10**

**Analytical Batch: 2199267**

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560265001	W-RW2-2021-Q4
560265002	W-14-2021-Q4
560265003	W-15-2021-Q4
560265004	W-16-2021-Q4
560265005	W-19B-2021-Q4
560265006	W-23R-2021-Q4
560265007	W-24-2021-Q4
560265008	W-26-2021-Q4
560265009	W-27-2021-Q4
560265010	W-39-2021-Q4
560265011	W-41R-2021-Q4
560265012	W-42-2021-Q4
560265013	W-43-2021-Q4
560265014	W-44-2021-Q4
560265015	W-46-2021-Q4
560265016	W-47-2021-Q4
560265017	W-48-2021-Q4
560265018	W-49-2021-Q4
560265019	W-62-2021-Q4
560265020	W-63-2021-Q4
560265021	W-64-2021-Q4
560265022	W-65-2021-Q4

**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.

## **Radiochemistry**

**Product: Alphaspec U, Liquid**

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

**Analytical Procedure: GL-RAD-A-011 REV# 28**

**Analytical Batch: 2192938**

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560265001	W-RW2-2021-Q4
560265002	W-14-2021-Q4
560265003	W-15-2021-Q4
560265004	W-16-2021-Q4
560265005	W-19B-2021-Q4
560265006	W-23R-2021-Q4

560265007	W-24-2021-Q4
560265008	W-26-2021-Q4
560265009	W-27-2021-Q4
560265010	W-39-2021-Q4
560265011	W-41R-2021-Q4
560265012	W-42-2021-Q4
560265013	W-43-2021-Q4
560265014	W-44-2021-Q4
560265015	W-46-2021-Q4
560265016	W-47-2021-Q4
560265017	W-48-2021-Q4
560265018	W-49-2021-Q4
1204947043	Method Blank (MB)
1204947044	560265011(W-41R-2021-Q4) Sample Duplicate (DUP)
1204947045	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Technical Information**

**Recounts**

Sample 560265007 (W-24-2021-Q4) was recounted due to high MDC. The recount is reported.

**Miscellaneous Information**

**Manual Integration**

Manual integration of alpha spectroscopy spectra 560265006 (W-23R-2021-Q4) was performed to fully separate counts in Regions of Interest which would have been biased.

**Additional Comments**

The tracer peak centroid for sample 560265006 (W-23R-2021-Q4) is greater than 50 keV from the expected library energy value for the tracer; however, the tracer yield requirement was met and the tracer peak is within the tracer region of interest.

**Product: Alphaspec U, Liquid**

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

**Analytical Procedure:** GL-RAD-A-011 REV# 28

**Analytical Batch:** 2192940

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560265019	W-62-2021-Q4
560265020	W-63-2021-Q4
560265021	W-64-2021-Q4

560265022	W-65-2021-Q4
1204947051	Method Blank (MB)
1204947052	560266019(W-119-2021-Q4) Sample Duplicate (DUP)
1204947053	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: Gammaspec, Gamma, Liquid NORM/TENORM**

**Analytical Method: EPA 901.1**

**Analytical Procedure: GL-RAD-A-013 REV# 27**

**Analytical Batch: 2191164**

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560265001	W-RW2-2021-Q4
560265003	W-15-2021-Q4
560265004	W-16-2021-Q4
560265007	W-24-2021-Q4
560265008	W-26-2021-Q4
560265010	W-39-2021-Q4
560265011	W-41R-2021-Q4
560265013	W-43-2021-Q4
560265014	W-44-2021-Q4
560265016	W-47-2021-Q4
560265017	W-48-2021-Q4
1204943336	Method Blank (MB)
1204943338	560265011(W-41R-2021-Q4) Sample Duplicate (DUP)
1204943339	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.

**Qualifier Information**

<b>Qualifier</b>	<b>Reason</b>	<b>Analyte</b>	<b>Sample</b>	<b>Client Sample</b>
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UI	Results are considered a false positive due to high counting uncertainty.	Bismuth-211	560265017	W-48-2021-Q4
		Lead-214	1204943338	W-41R-2021-Q4(560265011DUP)
		Potassium-40	560265013	W-43-2021-Q4
		Radium-226	560265003	W-15-2021-Q4
		Radium-226	560265014	W-44-2021-Q4
		Thallium-208	560265017	W-48-2021-Q4
UI	Results are considered a false positive due to high peak-width.	Potassium-40	560265008	W-26-2021-Q4
UI	Results are considered a false positive due to low abundance.	Bismuth-214	560265017	W-48-2021-Q4
		Lead-214	560265001	W-RW2-2021-Q4
		Thorium-227	560265007	W-24-2021-Q4
UI	Results are considered a false positive due to no valid peak.	Bismuth-211	560265001	W-RW2-2021-Q4

**Product: GFPC, Gross Alpha Liquid**

**Analytical Method:** EPA 900.0/SW846 9310

**Analytical Procedure:** GL-RAD-A-001 REV# 20

**Analytical Batch:** 2192937

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560265001	W-RW2-2021-Q4
560265002	W-14-2021-Q4
560265003	W-15-2021-Q4
560265004	W-16-2021-Q4
560265005	W-19B-2021-Q4
560265006	W-23R-2021-Q4
560265007	W-24-2021-Q4
560265008	W-26-2021-Q4
560265009	W-27-2021-Q4
560265010	W-39-2021-Q4
560265011	W-41R-2021-Q4
560265012	W-42-2021-Q4
560265013	W-43-2021-Q4

560265014	W-44-2021-Q4
560265015	W-46-2021-Q4
560265016	W-47-2021-Q4
560265017	W-48-2021-Q4
560265018	W-49-2021-Q4
1204947038	Method Blank (MB)
1204947039	560265011(W-41R-2021-Q4) Sample Duplicate (DUP)
1204947040	560265011(W-41R-2021-Q4) Matrix Spike (MS)
1204947041	560265011(W-41R-2021-Q4) Matrix Spike Duplicate (MSD)
1204947042	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Quality Control (QC) Information**

**Duplication Criteria between QC Sample and Duplicate Sample**

The Sample and the Duplicate, (See Below), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with the value listed below.

Sample	Analyte	Value
1204947039 (W-41R-2021-Q4DUP)	Alpha	RPD 135* (0.0%-100.0%) RER 1.65 (0-3)

**Technical Information**

**Negative > 3 sigma TPU**

Sample result was more negative than the three sigma TPU. The background control chart was examined and the detector was determined to be fully functional.

Sample	Analyte	Value
560265005 (W-19B-2021-Q4)	Beta	Negative Result > 3 sigma value

**Gross Alpha/Beta Preparation Information**

High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating.

**Recounts**

Samples 560265003 (W-15-2021-Q4) and 560265016 (W-47-2021-Q4) were recounted due to beta results greater than 50 pCi/L. Both counts are reported.

**Miscellaneous Information**

**Additional Comments**

The matrix spike and matrix spike duplicate, 1204947040 (W-41R-2021-Q4MS) and 1204947041

(W-41R-2021-Q4MSD), aliquots were reduced to conserve sample volume.

**Product: GFPC, Gross Alpha Liquid**

**Analytical Method:** EPA 900.0/SW846 9310

**Analytical Procedure:** GL-RAD-A-001 REV# 20

**Analytical Batch:** 2192939

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560265019	W-62-2021-Q4
560265020	W-63-2021-Q4
560265021	W-64-2021-Q4
560265022	W-65-2021-Q4
1204947046	Method Blank (MB)
1204947047	560266019(W-119-2021-Q4) Sample Duplicate (DUP)
1204947048	560266019(W-119-2021-Q4) Matrix Spike (MS)
1204947049	560266019(W-119-2021-Q4) Matrix Spike Duplicate (MSD)
1204947050	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Technical Information**

**Gross Alpha/Beta Preparation Information**

High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating.

**Miscellaneous Information**

**Additional Comments**

The matrix spike and matrix spike duplicate, 1204947048 (W-119-2021-Q4MS) and 1204947049 (W-119-2021-Q4MSD), aliquots were reduced to conserve sample volume.

**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:** 2192264

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560265001	W-RW2-2021-Q4
560265002	W-14-2021-Q4
560265003	W-15-2021-Q4
560265004	W-16-2021-Q4
560265005	W-19B-2021-Q4
560265006	W-23R-2021-Q4
560265007	W-24-2021-Q4
560265008	W-26-2021-Q4
560265009	W-27-2021-Q4
560265010	W-39-2021-Q4
560265011	W-41R-2021-Q4
560265012	W-42-2021-Q4
560265013	W-43-2021-Q4
560265014	W-44-2021-Q4
560265015	W-46-2021-Q4
560265016	W-47-2021-Q4
560265017	W-48-2021-Q4
560265018	W-49-2021-Q4
560265019	W-62-2021-Q4
560265020	W-63-2021-Q4
1204945598	Method Blank (MB)
1204945599	560265011(W-41R-2021-Q4) Sample Duplicate (DUP)
1204945600	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:** 2192266

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560265021	W-64-2021-Q4
560265022	W-65-2021-Q4
1204945604	Method Blank (MB)
1204945605	560265021(W-64-2021-Q4) Sample Duplicate (DUP)
1204945606	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:** LSC, Tritium Distillation, Liquid

**Analytical Method:** EPA 906.0 Modified

**Analytical Procedure:** GL-RAD-A-002 REV# 24

**Analytical Batch:** 2194929

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560265001	W-RW2-2021-Q4
560265003	W-15-2021-Q4
560265004	W-16-2021-Q4
560265007	W-24-2021-Q4
560265008	W-26-2021-Q4
560265010	W-39-2021-Q4
560265011	W-41R-2021-Q4
560265013	W-43-2021-Q4
560265014	W-44-2021-Q4
560265016	W-47-2021-Q4
560265017	W-48-2021-Q4
1204951332	Method Blank (MB)
1204951333	560265011(W-41R-2021-Q4) Sample Duplicate (DUP)
1204951334	560265011(W-41R-2021-Q4) Matrix Spike (MS)
1204951335	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.

**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.

**GEL Laboratories LLC**  
 Chemistry | Radiochemistry | Radiobiology | Specialty Analytics  
**Chain of Custody and Analytical Request**  
 GEL Work Order Number:   
 Phone # 803.647.1920  
 Fax # 803.695.3964

Sample ID <i>* For composites - indicate start and stop date/time</i>	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (a) Filtered (b)	Field	Sample Matrix (c)	Should this sample be considered:		Sample Analysis Requested (6) (Fill in the number of containers for each test)							Comments
						Radioactive (if isotopic info)	(7) known or possible hazards	Total number of containers	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)	Gamma TENORM	
W-RW2-2021-Q4	10/21/2021	1003	G	N	GW			3	X	X	X	X	X	X	Preservative Lot #201942
W-14-2021-Q4	10/18/2021	1330	G	N	GW			2	X	X	X	X	*		Preservative Lot #201942 *Must perform Gamma TENORM if gross beta is > 50 pCi/L
W-15-2021-Q4	10/19/2021	1054	G	N	GW			3	X	X	X	X	X	X	Preservative Lot #201942
W-16-2021-Q4	10/19/2021	1218	G	N	GW			3	X	X	X	X	X	X	Preservative Lot #201942
W-19B-2021-Q4	10/20/2021	1353	G	N	GW			2	X	X	X	X	X		Preservative Lot #201942
W-23R-2021-Q4	10/18/2021	1029	G	N	GW			2	X	X	X	X	*		Preservative Lot #201942 *Must perform Gamma TENORM if gross beta is > 50 pCi/L
W-24-2021-Q4	10/21/2021	1415	G	N	GW			3	X	X	X	X	X	X	Preservative Lot #201942
W-26-2021-Q4	10/19/2021	1153	G	N	GW			3	X	X	X	X	X	X	Preservative Lot #201942

Chain of Custody Signatures		
Relinquished By (Signed)	Date	Time
<i>Randy Crews</i>	10/27/21	0947
<i>Randy Crews</i>	10/27/21	1546
<i>Randy Crews</i>	10/27/21	1546

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  
 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, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Faecal, N=Nasal  
 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  
 7) **KNOWN OR POSSIBLE HAZARDS**  
 Characteristic Hazards: FL = Flammable/Ignitable, CO = Corrosive, RE = Reactive  
 Listed Waste: LW = Listed Waste (F, K, P and U-listed wastes.)  
 Waste code(s):  
 TSCA Regulated: Ag= Silver, Cr= Chromium, MR= Misc. RCRA metals, PCB= Polychlorinated biphenyls  
 Other: OT= Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)  
 Description:

TAT Requested: Normal:  Rush:  Specify:   
 Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4  
 Additional Remarks:  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 4 °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other:  
 > For sample shipping and delivery details, see Sample Receipt & Review form (SRR).  
 Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

**GEL Laboratories LLC**  
 Chemistry | Radiochemistry | Radiobiology | Speciality Analytics  
 Chain of Custody and Analytical Request  
**GEL Project Manager: S. Hogan**  
 Phone # 803.647.1920  
 Fax # 803.695.3964  
 GEL Work Order Number: \_\_\_\_\_  
 Project Name: Westinghouse  
 Project/Site Name: \_\_\_\_\_  
 Address: 5801 Bluff Road, Hopkins, SC 29061  
 Collected By: Randy Crews *Randy* Send Results To: joynerdp@westinghouse.com  
 265

GEL Laboratories, LLC  
 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171  
 Fax: (843) 766-1178

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military (hhmm))	QC Code (a)	Field Filtered (b)	Sample Matrix (c)	Should this sample be considered:		Sample Analysis Requested (d) (Fill in the number of containers for each test)						Comments									
						Radioactive (if yes, please supply isotopic info.)	(7) Known or possible Hazards	Total number of containers	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)		Gamma TENORM	NI							
W-27-2021-Q4	10/22/2021	1303	G	N	GW			2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Preservative Lot #201942 *Must perform Gamma TENORM if gross beta is > 50 pCi/L
W-39-2021-Q4	10/18/2021	1202	G	N	GW			3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Preservative Lot #201942
W-41R-2021-Q4	10/21/2021	0906	G	N	GW			3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Preservative Lot #201942
W-41R-2021-Q4-MS	10/21/2021	0906	G	N	GW			3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Preservative Lot #201942
W-41R-2021-Q4-MSD	10/21/2021	0906	G	N	GW			3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Preservative Lot #201942
W-42-2021-Q4	10/20/2021	0917	G	N	GW			2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Preservative Lot #201942
W-43-2021-Q4	10/18/2021	1302	G	N	GW			3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Preservative Lot #201942
W-44-2021-Q4	10/18/2021	1423	G	N	GW			3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Preservative Lot #201942

**Chain of Custody Signatures**  
 Relinquished By (Signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 Received by (signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 1. R. Crews (Secure Location) 10/27/2021 0917  
 2. *[Signature]* 10/27/21 1545  
 3. *[Signature]* 10/27/21 1545  
 Additional Remarks: \_\_\_\_\_  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 4 °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other: \_\_\_\_\_  
 TAT Requested: Normal:  Rush: \_\_\_\_\_ Specify: \_\_\_\_\_  
 Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4  
 For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)

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  
 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=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal  
 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  
 7.) **KNOWN OR POSSIBLE HAZARDS**  
 Characteristic Hazards: FL = Flammable/Ignitable, CO = Corrosive, RE = Reactive  
 Listed Waste: LW = Listed Waste  
 Waste code(s): \_\_\_\_\_  
 TSCA Regulated: PCB = Polychlorinated biphenyls  
 RCRA Metals: As = Arsenic, Hg = Mercury, Ba = Barium, Se = Selenium, Cd = Cadmium, Ag = Silver, Cr = Chromium, MR = Misc. RCRA metals  
 Pb = Lead  
 Other: \_\_\_\_\_  
 OT = Other / Unknown  
 (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)  
 Description: \_\_\_\_\_  
 Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

GEL Laboratories, LLC  
 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171  
 Fax: (843) 766-1178

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military (hhmm) (hhmm))	QC Code (a)	Field Filtered (b)	Sample Matrix (c)	Should this sample be considered:		Sample Analysis Requested (6) (Fill in the number of containers for each test)							Comments		
						Yes, please supply isotopic info.)	(7) Known or possible Hazards	Total number of containers	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)	Gamma TENORM		NI	NI
W-46-2021-Q4	10/21/2021	0903	G	N	GW			2	X	X	X	X	X	X	X	X	Preservative Lot #201942
W-47-2021-Q4	10/19/2021	0947	G	N	GW			3	X	X	X	X	X	X	X	X	Preservative Lot #201942
W-48-2021-Q4	10/19/2021	1335	G	N	GW			3	X	X	X	X	X	X	X	X	Preservative Lot #201942
W-49-2021-Q4	10/20/2021	1018	G	N	GW			2	X	X	X	X	X	X	X	X	Preservative Lot #201942
W-62-2021-Q4	10/19/2021	1024	G	N	GW			2	X	X	X	X	X	X	X	X	Preservative Lot #201942
W-63-2021-Q4	10/19/2021	1323	G	N	GW			2	X	X	X	X	X	X	X	X	Preservative Lot #201942
W-64-2021-Q4	10/19/2021	0854	G	N	GW			2	X	X	X	X	X	X	X	X	Preservative Lot #201942
W-65-2021-Q4	10/18/2021	0938	G	N	GW			2	X	X	X	X	X	X	X	X	Preservative Lot #201942

**Chain of Custody Signatures**  
 Relinquished By (Signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 Received by (signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 1. R. Crews (Secure Location) 10/27/2021 0947 *Randy Crews*  
 2. *[Signature]* 10/27/21 1545  
 3. *[Signature]* 10/27/21 1545  
 Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4  
 Additional Remarks:  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: *4* °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other:

**For sample shipping and delivery details, see Sample Receipt & Review form (SRR).**  
 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  
 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=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal  
 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  
**7) KNOWN OR POSSIBLE HAZARDS**  
 Characteristic Hazards  
 FL = Flammable/Ignitable  
 CO = Corrosive  
 RE = Reactive  
 TSCA Regulated  
 PCB = Polychlorinated biphenyls  
 RCRA Metals  
 As = Arsenic  
 Ba = Barium  
 Cd = Cadmium  
 Cr = Chromium  
 Pb = Lead  
 Hg = Mercury  
 Se = Selenium  
 Ag = Silver  
 MR = Misc. RCRA metals  
 Listed Waste  
 LW = Listed Waste  
 (F, K, P and U-listed wastes)  
 Waste code(s):  
 Other  
 OT = Other / Unknown  
 (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)  
 Description:

Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

SH

**SAMPLE RECEIPT & REVIEW FORM**

Client: <u>WNUC</u>		SDG/AR/COC/Work Order: <u>560259 / 560265 / 560266</u>			
Received By: <u>BE</u>		Date Received: <u>10/27/21</u>			
Carrier and Tracking Number		Circle Applicable:			
		FedEx Express    FedEx Ground    UPS    Field Services <u>Courier</u> Other			
Suspected Hazard Information:		Yes	No		
*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.					
A) Shipped as a DOT Hazardous?		Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___			
B) Did the client designate the samples are to be received as radioactive?		COC notation or radioactive stickers on containers equal client designation.			
C) Did the RSO classify the samples as radioactive?		Maximum Net Counts <u>Observed</u> (Observed Counts - Area Background Counts): <u>0</u> CPM/mR/Hr Classified as: <u>Rad 1</u> Rad 2 Rad 3			
D) Did the client designate samples are hazardous?		COC notation or hazard labels on containers equal client designation.			
E) Did the RSO identify possible hazards?		If D or E is yes, select Hazards below. PCB's    Flammable    Foreign Soil    RCRA    Asbestos    Beryllium    Other: _____			
Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable:    Seals broken    Damaged container    Leaking container    Other (describe)
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable:    Client contacted and provided COC    COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Preservation Method: <u>Wet Ice</u> Ice Packs Dry ice None Other: *all temperatures are recorded in Celsius    TEMP: <u>4</u>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>IR2-21</u> Secondary Temperature Device Serial # (If Applicable): _____
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable:    Seals broken    Damaged container    Leaking container    Other (describe)
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#:
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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 ___
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected:
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable:    No dates on containers    No times on containers    COC missing info    Other (describe)
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable:    No container count on COC    Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable:    Not relinquished    Other (describe)
Comments (Use Continuation Form if needed):					

PM (or PMA) review: Initials NRL Date 10/27/21 Page 1 of 1

**List of current GEL Certifications as of 24 November 2021**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
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
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
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	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122021-36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



November 24, 2021

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

Re: Ground Water Well Liquid Analysis  
Work Order: 560266

Dear Ms. Teague:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on October 27, 2021. 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](http://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. 4523.

Sincerely,

Samuel Hogan  
Project Manager

Purchase Order: 4500822910 Line 2  
Enclosures



**GEL LABORATORIES LLC**

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

**Certificate of Analysis Report  
for**

WNUC010 Westinghouse Electric Company PO (4500822910)

Client SDG: 560266 GEL Work Order: 560266

**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
- J See case narrative for an explanation
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy—Uncertain identification

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, Samuel Hogan.



Reviewed by \_\_\_\_\_

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-66-2021-Q4  
Sample ID: 560266001  
Matrix: Ground Water  
Collect Date: 18-OCT-21 10:40  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1523	2193213	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1931	2193213	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1931	2193213	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193212

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-66-2021-Q4-Dup Project: WNUC01022  
Sample ID: 560266002 Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 18-OCT-21 10:40  
Receive Date: 27-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1524	2193213	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1932	2193213	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1932	2193213	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193212

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-67-2021-Q4 Project: WNUC01022  
Sample ID: 560266003 Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 18-OCT-21 11:24  
Receive Date: 27-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1526	2193213	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1934	2193213	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1934	2193213	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193212

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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



# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-69-2021-Q4  
Sample ID: 560266005  
Matrix: Ground Water  
Collect Date: 21-OCT-21 12:23  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1533	2193213	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1941	2193213	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1941	2193213	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193212

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-70-2021-Q4  
Sample ID: 560266006  
Matrix: Ground Water  
Collect Date: 21-OCT-21 11:27  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1540	2193213	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1948	2193213	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1948	2193213	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193212

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit



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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-71-2021-Q4-Dup      Project: WNUC01022  
Sample ID: 560266008      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 21-OCT-21 13:24  
Receive Date: 27-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1543	2193213	1
Uranium-238	J	0.0898	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1952	2193213	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.0898	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193212

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-85-2021-Q4  
Sample ID: 560266009  
Matrix: Ground Water  
Collect Date: 22-OCT-21 11:13  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1414	2193217	1
Uranium-238	J	0.0781	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1820	2193217	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1820	2193217	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.0781	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193216

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit





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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-89-2021-Q4  
Sample ID: 560266012  
Matrix: Ground Water  
Collect Date: 21-OCT-21 12:08  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1428	2193217	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1834	2193217	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1834	2193217	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193216

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-90-2021-Q4  
Sample ID: 560266013  
Matrix: Ground Water  
Collect Date: 20-OCT-21 11:27  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1430	2193217	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1836	2193217	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1836	2193217	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193216

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit



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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-92-2021-Q4  
Sample ID: 560266015  
Matrix: Ground Water  
Collect Date: 22-OCT-21 12:01  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1433	2193217	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1839	2193217	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1839	2193217	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193216

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-98-2021-Q4  
Sample ID: 560266016  
Matrix: Ground Water  
Collect Date: 19-OCT-21 14:51  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1435	2193217	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1841	2193217	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1841	2193217	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193216

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-103-2021-Q4  
Sample ID: 560266017  
Matrix: Ground Water  
Collect Date: 18-OCT-21 12:22  
Receive Date: 27-OCT-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1436	2193217	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1843	2193217	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1843	2193217	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193216

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-106-2021-Q4      Project: WNUC01022  
Sample ID: 560266018      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 18-OCT-21 14:33  
Receive Date: 27-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1438	2193217	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1845	2193217	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1845	2193217	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193216

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-119-2021-Q4      Project: WNUC01022  
Sample ID: 560266019      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 18-OCT-21 08:58  
Receive Date: 27-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1443	2193217	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1850	2193217	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1850	2193217	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193216

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

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Client Sample ID:	EB-01-101821	Project:	WNUC01022
Sample ID:	560266020	Client ID:	WNUC010
Matrix:	Ground Water		
Collect Date:	18-OCT-21 13:25		
Receive Date:	27-OCT-21		
Collector:	Client		

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Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1450	2193217	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1857	2193217	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1857	2193217	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

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Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193216

The following Analytical Methods were performed:

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Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-101921      Project: WNUC01022  
Sample ID: 560266021      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 19-OCT-21 10:53  
Receive Date: 27-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1452	2193217	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1859	2193217	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1859	2193217	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193216

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-102121      Project: WNUC01022  
Sample ID: 560266022      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 21-OCT-21 12:33  
Receive Date: 27-OCT-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1453	2193217	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1901	2193217	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1901	2193217	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	LG2	11/15/21	0825	2193216

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-66-2021-Q4	Project: WNUC01022
Sample ID: 560266001	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 18-OCT-21 10:40	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0937	2192942	1
Uranium-233/234	U	-0.162	+/-0.108	0.416	0.500	pCi/L							
Uranium-235/236	U	0.0386	+/-0.145	0.243	0.500	pCi/L							
Uranium-238	U	-0.0591	+/-0.0953	0.304	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.899	+/-1.94	3.39	5.00	pCi/L			JXK3	11/20/21	1034	2192941	2
Beta	U	2.95	+/-2.82	4.64	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.10	+/-2.30	3.90	5.00	pCi/L			JJ3	11/21/21	0614	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			91.1	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			91.9	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-66-2021-Q4-Dup	Project: WNUC01022
Sample ID: 560266002	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 18-OCT-21 10:40	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0937	2192942	1
Uranium-233/234	U	0.0119	+/-0.193	0.407	0.500	pCi/L							
Uranium-235/236	U	0.0264	+/-0.147	0.281	0.500	pCi/L							
Uranium-238	U	0.0230	+/-0.149	0.304	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.560	+/-1.64	3.25	5.00	pCi/L			JXK3	11/20/21	1034	2192941	2
Beta	U	2.22	+/-2.42	4.04	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-1.12	+/-2.14	3.72	5.00	pCi/L			JJ3	11/21/21	0707	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			89.8	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.1	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-67-2021-Q4	Project: WNUC01022
Sample ID: 560266003	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 18-OCT-21 11:24	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0937	2192942	1
Uranium-233/234	U	-0.168	+/-0.113	0.433	0.500	pCi/L							
Uranium-235/236	U	-0.0508	+/-0.118	0.349	0.500	pCi/L							
Uranium-238	U	-0.123	+/-0.111	0.395	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.06	+/-2.09	3.11	5.00	pCi/L			JXK3	11/20/21	1034	2192941	2
Beta		33.4	+/-4.80	4.08	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		69.8	+/-3.47	3.77	5.00	pCi/L			JJ3	11/21/21	0759	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			87.1	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			93	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-68-2021-Q4	Project: WNUC01022
Sample ID: 560266004	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 19-OCT-21 09:13	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0937	2192942	1
Uranium-233/234	U	-0.0485	+/-0.209	0.482	0.500	pCi/L							
Uranium-235/236	U	-0.0256	+/-0.113	0.296	0.500	pCi/L							
Uranium-238	U	-0.123	+/-0.146	0.440	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.0923	+/-1.45	3.04	5.00	pCi/L			JXK3	11/20/21	1034	2192941	2
Beta	U	2.61	+/-2.79	4.66	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.0281	+/-2.12	3.63	5.00	pCi/L			JJ3	11/21/21	0852	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			86	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Contact: Columbia, South Carolina 29205  
Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-69-2021-Q4 Project: WNUC01022  
Sample ID: 560266005 Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 21-OCT-21 12:23  
Receive Date: 27-OCT-21  
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0937	2192942	1
Uranium-233/234	U	-0.0946	+/-0.114	0.393	0.500	pCi/L							
Uranium-235/236	U	0.0618	+/-0.174	0.185	0.500	pCi/L							
Uranium-238	U	-0.0480	+/-0.111	0.329	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.465	+/-0.585	2.22	5.00	pCi/L			JXK3	11/20/21	1034	2192941	2
Beta	U	-3.76	+/-2.30	4.78	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.608	+/-2.11	3.65	5.00	pCi/L			JJ3	11/21/21	0944	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			73.1	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			95.2	(15%-125%)

### Notes:

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-70-2021-Q4	Project: WNUC01022
Sample ID: 560266006	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 21-OCT-21 11:27	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0937	2192942	1
Uranium-233/234	U	0.0582	+/-0.210	0.402	0.500	pCi/L							
Uranium-235/236	U	0.0330	+/-0.183	0.351	0.500	pCi/L							
Uranium-238	U	-0.0739	+/-0.119	0.380	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.37	+/-1.72	2.89	5.00	pCi/L			JXK3	11/20/21	1034	2192941	2
Beta	U	-0.229	+/-1.60	3.15	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.570	+/-2.25	3.84	5.00	pCi/L			JJ3	11/21/21	1036	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			72	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			90.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-71-2021-Q4	Project: WNUC01022
Sample ID: 560266007	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 21-OCT-21 13:24	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0937	2192942	1
Uranium-233/234	U	-0.116	+/-0.162	0.429	0.500	pCi/L							
Uranium-235/236	U	0.101	+/-0.178	0.270	0.500	pCi/L							
Uranium-238	U	0.0757	+/-0.182	0.329	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.418	+/-1.69	3.41	5.00	pCi/L			JXK3	11/20/21	1034	2192941	2
Beta	U	2.35	+/-2.27	3.72	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.0199	+/-2.16	3.70	5.00	pCi/L			JJ3	11/21/21	1129	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			101	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-71-2021-Q4-Dup	Project: WNUC01022
Sample ID: 560266008	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 21-OCT-21 13:24	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/23/21	1204	2192942	1
Uranium-233/234	U	-0.0300	+/-0.160	0.373	0.500	pCi/L							
Uranium-235/236	U	0.0591	+/-0.163	0.282	0.500	pCi/L							
Uranium-238	U	-0.0164	+/-0.113	0.276	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.98	+/-2.21	2.98	5.00	pCi/L			JXK3	11/20/21	1034	2192941	2
Beta	U	2.04	+/-2.12	3.45	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.395	+/-2.15	3.66	5.00	pCi/L			JJ3	11/21/21	1221	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			96.6	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			96.5	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-85-2021-Q4	Project: WNUC01022
Sample ID: 560266009	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 22-OCT-21 11:13	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0937	2192942	1
Uranium-233/234	U	-0.0612	+/-0.151	0.388	0.500	pCi/L							
Uranium-235/236	U	-0.0119	+/-0.102	0.237	0.500	pCi/L							
Uranium-238	U	-0.144	+/-0.109	0.398	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.78	+/-2.75	4.47	5.00	pCi/L			JXK3	11/20/21	1034	2192941	2
Beta	U	1.85	+/-1.86	3.03	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.278	+/-2.16	3.72	5.00	pCi/L			JJ3	11/21/21	1313	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			95.6	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			94.4	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-86-2021-Q4	Project: WNUC01022
Sample ID: 560266010	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 22-OCT-21 09:23	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/23/21	1204	2192942	1
Uranium-233/234	U	-0.181	+/-0.269	0.607	0.500	pCi/L							
Uranium-235/236	U	-0.0453	+/-0.199	0.434	0.500	pCi/L							
Uranium-238	U	0.147	+/-0.227	0.351	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.850	+/-1.09	3.00	5.00	pCi/L			JXK3	11/20/21	1035	2192941	2
Beta	U	0.663	+/-2.71	4.77	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.291	+/-2.15	3.70	5.00	pCi/L			JJ3	11/21/21	1406	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			20.1	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			92.6	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-88-2021-Q4	Project: WNUC01022
Sample ID: 560266011	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 21-OCT-21 11:12	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
<b>Rad Alpha Spec Analysis</b>												
<b>Alphaspec U, Liquid "As Received"</b>												
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	1041 2192942	1
Uranium-233/234	U	-0.0758	+/-0.112	0.330	0.500	pCi/L						
Uranium-235/236	U	0.0772	+/-0.152	0.210	0.500	pCi/L						
Uranium-238	U	-0.0667	+/-0.115	0.327	0.500	pCi/L						
<b>Rad Gas Flow Proportional Counting</b>												
<b>GFPC, Gross Alpha Liquid "As Received"</b>												
Alpha	U	0.593	+/-1.70	3.31	5.00	pCi/L		JXK3	11/20/21	1035 2192941		2
Beta	U	0.117	+/-1.89	3.55	5.00	pCi/L						
<b>Rad Liquid Scintillation Analysis</b>												
<b>Liquid Scint Tc99, Liquid "As Received"</b>												
Technetium-99	U	1.74	+/-2.26	3.80	5.00	pCi/L		JJ3	11/21/21	1458 2192265		3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			107	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			92.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-89-2021-Q4	Project: WNUC01022
Sample ID: 560266012	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 21-OCT-21 12:08	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
<b>Rad Alpha Spec Analysis</b>												
<b>Alphaspec U, Liquid "As Received"</b>												
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	1041 2192942	1
Uranium-233/234	U	0.107	+/-0.184	0.302	0.500	pCi/L						
Uranium-235/236	U	-0.0331	+/-0.100	0.281	0.500	pCi/L						
Uranium-238	U	0.0119	+/-0.136	0.288	0.500	pCi/L						
<b>Rad Gas Flow Proportional Counting</b>												
<b>GFPC, Gross Alpha Liquid "As Received"</b>												
Alpha	U	0.991	+/-1.41	2.43	5.00	pCi/L			JXK3	11/20/21	1035 2192941	2
Beta	U	2.99	+/-2.76	4.54	5.00	pCi/L						
<b>Rad Liquid Scintillation Analysis</b>												
<b>Liquid Scint Tc99, Liquid "As Received"</b>												
Technetium-99	U	0.544	+/-2.25	3.84	5.00	pCi/L			JJ3	11/21/21	1551 2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			96.8	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			92.3	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-90-2021-Q4	Project: WNUC01022
Sample ID: 560266013	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 20-OCT-21 11:27	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
<b>Rad Alpha Spec Analysis</b>												
<b>Alphaspec U, Liquid "As Received"</b>												
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	1041 2192942	1
Uranium-233/234	U	-0.0802	+/-0.155	0.436	0.500	pCi/L						
Uranium-235/236	U	-0.103	+/-0.146	0.476	0.500	pCi/L						
Uranium-238	U	-0.0199	+/-0.186	0.431	0.500	pCi/L						
<b>Rad Gas Flow Proportional Counting</b>												
<b>GFPC, Gross Alpha Liquid "As Received"</b>												
Alpha	U	0.419	+/-1.42	2.96	5.00	pCi/L			JXK3	11/20/21	1035 2192941	2
Beta	U	2.13	+/-2.42	4.05	5.00	pCi/L						
<b>Rad Liquid Scintillation Analysis</b>												
<b>Liquid Scint Tc99, Liquid "As Received"</b>												
Technetium-99	U	0.185	+/-2.24	3.83	5.00	pCi/L			JJ3	11/21/21	1644 2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			75.2	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			91.1	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-91-2021-Q4	Project: WNUC01022
Sample ID: 560266014	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 20-OCT-21 12:20	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
<b>Rad Alpha Spec Analysis</b>												
<b>Alphaspec U, Liquid "As Received"</b>												
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	1041 2192942	1
Uranium-233/234	U	-0.156	+/-0.171	0.528	0.500	pCi/L						
Uranium-235/236	U	-0.0765	+/-0.145	0.447	0.500	pCi/L						
Uranium-238	U	-0.0722	+/-0.164	0.447	0.500	pCi/L						
<b>Rad Gas Flow Proportional Counting</b>												
<b>GFPC, Gross Alpha Liquid "As Received"</b>												
Alpha	U	-0.659	+/-1.20	3.49	5.00	pCi/L		JXK3	11/20/21	1035 2192941		2
Beta	U	-1.56	+/-1.66	3.66	5.00	pCi/L						
<b>Rad Liquid Scintillation Analysis</b>												
<b>Liquid Scint Tc99, Liquid "As Received"</b>												
Technetium-99	U	0.352	+/-2.17	3.71	5.00	pCi/L		JJ3	11/21/21	1736 2192265		3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			70.9	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95.2	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-92-2021-Q4	Project: WNUC01022
Sample ID: 560266015	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 22-OCT-21 12:01	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	1041	2192942	1
Uranium-233/234	U	0.0378	+/-0.240	0.481	0.500	pCi/L							
Uranium-235/236	U	-0.0894	+/-0.126	0.413	0.500	pCi/L							
Uranium-238	U	-0.0465	+/-0.189	0.448	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha		3.35	+/-2.50	3.20	5.00	pCi/L			JXK3	11/20/21	1035	2192941	2
Beta	U	0.885	+/-2.18	3.88	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	2.76	+/-2.18	3.64	5.00	pCi/L			JJ3	11/21/21	1828	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			87.9	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-98-2021-Q4	Project: WNUC01022
Sample ID: 560266016	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 19-OCT-21 14:51	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	1041	2192942	1
Uranium-233/234	U	-0.00124	+/-0.150	0.334	0.500	pCi/L							
Uranium-235/236	U	0.0516	+/-0.145	0.155	0.500	pCi/L							
Uranium-238	U	-0.00835	+/-0.125	0.293	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.36	+/-2.36	3.63	5.00	pCi/L			JXK3	11/20/21	1035	2192941	2
Beta		16.3	+/-3.89	4.40	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		6.30	+/-2.29	3.69	5.00	pCi/L			JJ3	11/21/21	1921	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			88.5	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-103-2021-Q4	Project: WNUC01022
Sample ID: 560266017	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 18-OCT-21 12:22	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
<b>Rad Alpha Spec Analysis</b>												
<b>Alphaspec U, Liquid "As Received"</b>												
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	1041 2192942	1
Uranium-233/234	U	-0.0423	+/-0.120	0.321	0.500	pCi/L						
Uranium-235/236	U	-0.0592	+/-0.112	0.346	0.500	pCi/L						
Uranium-238	U	-0.0575	+/-0.0926	0.295	0.500	pCi/L						
<b>Rad Gas Flow Proportional Counting</b>												
<b>GFPC, Gross Alpha Liquid "As Received"</b>												
Alpha	U	-0.197	+/-1.07	3.08	5.00	pCi/L			JXK3	11/20/21	1035 2192941	2
Beta		7.53	+/-2.63	3.13	5.00	pCi/L						
<b>Rad Liquid Scintillation Analysis</b>												
<b>Liquid Scint Tc99, Liquid "As Received"</b>												
Technetium-99		40.2	+/-2.98	3.75	5.00	pCi/L			JJ3	11/21/21	2013 2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			94.8	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93.9	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-106-2021-Q4	Project: WNUC01022
Sample ID: 560266018	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 18-OCT-21 14:33	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/23/21	1424	2192940	1
Uranium-233/234	U	0.195	+/-0.202	0.291	0.500	pCi/L							
Uranium-235/236	U	0.103	+/-0.148	0.179	0.500	pCi/L							
Uranium-238	U	0.122	+/-0.148	0.199	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.44	+/-2.58	4.54	5.00	pCi/L			JXK3	11/18/21	1547	2192939	2
Beta	U	0.500	+/-1.94	3.39	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	2.54	+/-2.50	4.19	5.00	pCi/L			JJ3	11/21/21	2106	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			91.9	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			86.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-119-2021-Q4	Project: WNUC01022
Sample ID: 560266019	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 18-OCT-21 08:58	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/19/21	1427	2192940	1
Uranium-233/234	U	-0.0417	+/-0.112	0.265	0.500	pCi/L							
Uranium-235/236	U	0.0153	+/-0.102	0.208	0.500	pCi/L							
Uranium-238	U	-0.0336	+/-0.0755	0.201	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.25	+/-2.18	3.38	5.00	pCi/L			JXK3	11/18/21	1547	2192939	2
Beta	U	2.00	+/-2.58	4.35	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.0152	+/-2.19	3.76	5.00	pCi/L			JJ3	11/21/21	2158	2192265	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			93.9	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			92.9	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-101821	Project: WNUC01022
Sample ID: 560266020	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 18-OCT-21 13:25	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/19/21	1427	2192940	1
Uranium-233/234	U	0.0696	+/-0.108	0.177	0.500	pCi/L							
Uranium-235/236	U	-0.0269	+/-0.0775	0.200	0.500	pCi/L							
Uranium-238	U	0.0345	+/-0.0894	0.162	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammasespec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	-0.265	+/-16.6	29.1		pCi/L			MJH1	11/10/21	2336	2191164	2
Bismuth-211	UI	0.000	+/-34.4	33.3		pCi/L							
Bismuth-212	U	4.77	+/-53.9	92.0		pCi/L							
Bismuth-214	U	-2.05	+/-11.5	15.9		pCi/L							
Lead-210	U	893	+/-1060	1240		pCi/L							
Lead-211	U	-71.4	+/-62.5	98.4		pCi/L							
Lead-212	U	0.443	+/-10.9	13.5		pCi/L							
Lead-214	U	12.2	+/-12.5	16.2		pCi/L							
Potassium-40	U	-49.1	+/-47.7	77.6		pCi/L							
Protactinium-231	U	10.4	+/-46.1	84.6		pCi/L							
Protactinium-234	U	4.93	+/-22.9	45.6		pCi/L							
Radium-223	U	-52.5	+/-58.1	96.7		pCi/L							
Radium-226	U	31.8	+/-147	106		pCi/L							
Radium-228	U	-0.265	+/-16.6	29.1		pCi/L							
Thallium-208	U	5.13	+/-5.88	6.29		pCi/L							
Thorium-227	U	-6.56	+/-27.3	41.4		pCi/L							
Thorium-234	U	-132	+/-234	352		pCi/L							
Uranium-235	U	22.3	+/-35.8	34.9		pCi/L							
Uranium-238	U	-132	+/-234	352		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.249	+/-0.664	2.34	5.00	pCi/L			JXK3	11/18/21	1649	2192939	3
Beta	U	-1.39	+/-2.38	4.64	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	139	+/-293	509	700	pCi/L			KXA1	11/19/21	1711	2194929	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	2.16	+/-2.20	3.68	5.00	pCi/L			JJ3	11/21/21	2251	2192265	5

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-101821  
Sample ID: 560266020

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			98	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-101921	Project: WNUC01022
Sample ID: 560266021	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 19-OCT-21 10:53	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/19/21	1427	2192940	1
Uranium-233/234	U	0.0238	+/-0.138	0.274	0.500	pCi/L							
Uranium-235/236	U	0.00841	+/-0.0909	0.188	0.500	pCi/L							
Uranium-238	U	0.0447	+/-0.116	0.210	0.500	pCi/L							
<b>Rad Gamma Spec Analysis</b>													
<b>Gammasespec, Gamma, Liquid NORM/TENORM "As Received"</b>													
Actinium-228	U	6.25	+/-23.9	27.6		pCi/L			MJH1	11/10/21	2336	2191164	2
Bismuth-211	U	-4.37	+/-21.5	34.8		pCi/L							
Bismuth-212	U	-43.9	+/-52.5	75.4		pCi/L							
Bismuth-214	UI	0.000	+/-15.7	14.0		pCi/L							
Lead-210	U	294	+/-556	450		pCi/L							
Lead-211	U	10.6	+/-53.6	101		pCi/L							
Lead-212	U	1.91	+/-6.92	10.7		pCi/L							
Lead-214	U	-2.32	+/-7.75	12.4		pCi/L							
Potassium-40	U	2.18	+/-56.5	83.6		pCi/L							
Protactinium-231	U	9.35	+/-36.2	68.8		pCi/L							
Protactinium-234	U	2.38	+/-22.5	44.2		pCi/L							
Radium-223	U	74.8	+/-93.5	94.5		pCi/L							
Radium-226	U	-2.34	+/-81.8	128		pCi/L							
Radium-228	U	6.25	+/-23.9	27.6		pCi/L							
Thallium-208	UI	0.000	+/-6.20	4.95		pCi/L							
Thorium-227	U	2.27	+/-20.4	35.0		pCi/L							
Thorium-234	U	22.1	+/-149	165		pCi/L							
Uranium-235	U	-0.473	+/-20.3	29.4		pCi/L							
Uranium-238	U	22.1	+/-149	165		pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.351	+/-1.29	2.70	5.00	pCi/L			JXK3	11/18/21	1649	2192939	3
Beta	U	0.916	+/-2.28	4.03	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>LSC, Tritium Distillation, Liquid "As Received"</b>													
Tritium	U	287	+/-313	524	700	pCi/L			KXA1	11/19/21	1732	2194929	4
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.340	+/-2.23	3.97	5.00	pCi/L			AG2	11/21/21	0927	2192266	5

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-101921  
Sample ID: 560266021

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
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The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 901.1	
3	EPA 900.0/SW846 9310	
4	EPA 906.0 Modified	
5	DOE EML HASL-300, Te-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			76.3	(15%-125%)
Technetium-99m Tracer	Liquid Scint Te99, Liquid "As Received"			91.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-102121	Project: WNUC01022
Sample ID: 560266022	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 21-OCT-21 12:33	
Receive Date: 27-OCT-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/23/21	1204	2192940	1
Uranium-233/234	U	0.0223	+/-0.124	0.230	0.500	pCi/L							
Uranium-235/236	U	0.0174	+/-0.0764	0.133	0.500	pCi/L							
Uranium-238	U	0.0282	+/-0.0958	0.174	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.472	+/-1.54	3.13	5.00	pCi/L		JXK3	11/18/21	1649	2192939		2
Beta	U	-0.476	+/-2.48	4.64	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.918	+/-2.17	3.77	5.00	pCi/L		AG2	11/21/21	0945	2192266		3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			46.3	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			96	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## QC Summary

Report Date: November 24, 2021

Page 1 of 5

Westinghouse Electric Company, LLC

PO Drawer R  
Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 560266

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2193213										
QC1204947652	560265016	DUP									
Uranium-234	U	ND	U	ND	ug/L	N/A			SKJ	11/17/21	19:11
Uranium-235	U	ND	U	ND	ug/L	N/A				11/17/21	15:04
Uranium-238	J	0.0704	U	ND	ug/L	200	^				
QC1204947655	560266005	DUP									
Uranium-234	U	ND	U	ND	ug/L	N/A				11/17/21	19:43
Uranium-235	U	ND	U	ND	ug/L	N/A				11/17/21	15:35
Uranium-238	U	ND	U	ND	ug/L	N/A					
QC1204947651	LCS										
Uranium-235	0.360			0.371	ug/L		103	(85%-115%)		11/17/21	15:00
Uranium-238	49.6			50.9	ug/L		103	(85%-115%)			
QC1204956449	LCS										
Uranium-234	0.550			0.564	ug/L		103	(85%-115%)		11/17/21	19:08
QC1204947650	MB										
Uranium-234			U	ND	ug/L					11/17/21	19:06
Uranium-235			U	ND	ug/L					11/17/21	14:59
Uranium-238			U	ND	ug/L						

# GEL LABORATORIES LLC

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## QC Summary

Workorder: 560266

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2193213										
QC1204947653	560265016	MS									
Uranium-235	0.360	U	ND	0.366	ug/L		102	(75%-125%)	SKJ	11/17/21	15:05
Uranium-238	49.6	J	0.0704	51.2	ug/L		103	(75%-125%)			
QC1204947656	560266005	MS									
Uranium-235	0.360	U	ND	0.370	ug/L		103	(75%-125%)		11/17/21	15:36
Uranium-238	49.6	U	ND	51.7	ug/L		104	(75%-125%)			
QC1204956446	560265016	MS									
Uranium-234	0.550	U	ND	0.595	ug/L		108	(75%-125%)		11/17/21	19:13
QC1204956447	560266005	MS									
Uranium-234	0.550	U	ND	0.583	ug/L		106	(75%-125%)		11/17/21	19:45
QC1204947654	560265016	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	19:15
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	15:07
Uranium-238		J	0.0704	U	ND	ug/L	N/A	(0%-10%)			
QC1204947657	560266005	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	19:47
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	15:38
Uranium-238		U	ND	U	ND	ug/L	N/A	(0%-10%)			
Batch	2193217										
QC1204947663	560266009	DUP									
Uranium-234		U	ND	U	ND	ug/L	N/A		SKJ	11/17/21	18:22

# GEL LABORATORIES LLC

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## QC Summary

Workorder: 560266

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2193217										
Uranium-235	U	ND	U	ND	ug/L	N/A			SKJ	11/17/21	14:16
Uranium-238	J	0.0781	U	ND	ug/L	200	^				
QC1204947666	560266019 DUP										
Uranium-234	U	ND	U	ND	ug/L	N/A				11/17/21	18:52
Uranium-235	U	ND	U	ND	ug/L	N/A				11/17/21	14:45
Uranium-238	U	ND	U	ND	ug/L	N/A					
QC1204947662	LCS										
Uranium-235	0.360			0.377	ug/L		105	(85%-115%)		11/17/21	14:12
Uranium-238	49.6			51.4	ug/L		104	(85%-115%)			
QC1204947681	LCS										
Uranium-234	0.550			0.591	ug/L		107	(85%-115%)		11/17/21	18:18
QC1204947661	MB										
Uranium-234			U	ND	ug/L					11/17/21	18:17
Uranium-235			U	ND	ug/L					11/17/21	14:11
Uranium-238			U	ND	ug/L						
QC1204947664	560266009 MS										
Uranium-235	0.360	U	ND	0.370	ug/L		103	(75%-125%)		11/17/21	14:18
Uranium-238	49.6	J	0.0781	50.8	ug/L		102	(75%-125%)			
QC1204947667	560266019 MS										
Uranium-235	0.360	U	ND	0.361	ug/L		100	(75%-125%)		11/17/21	14:47

# GEL LABORATORIES LLC

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## QC Summary

Workorder: 560266

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2193217										
Uranium-238	49.6	U	ND	50.7	ug/L		102	(75%-125%)	SKJ	11/17/21	14:47
QC1204947682	560266009	MS									
Uranium-234	0.550	U	ND	0.575	ug/L		105	(75%-125%)		11/17/21	18:24
QC1204947683	560266019	MS									
Uranium-234	0.550	U	ND	0.571	ug/L		104	(75%-125%)		11/17/21	18:54
QC1204947665	560266009	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	18:25
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	14:19
Uranium-238		J	0.0781	U	ND	ug/L	N/A	(0%-10%)			
QC1204947668	560266019	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	18:55
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	14:48
Uranium-238		U	ND	U	ND	ug/L	N/A	(0%-10%)			

**Notes:**

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated
- N Metals--The Matrix spike sample recovery is not within specified control limits



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

## QC Summary

Report Date: November 24, 2021

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Westinghouse Electric Company, LLC  
 PO Drawer R  
 Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 560266

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Alpha Spec</b>											
Batch	2192940										
QC1204947052	560266019	DUP									
Pct Uranium-235	U	0.000	U	0.000	percent	N/A		N/A	MXS2	11/19/21	14:27
Uranium-233/234	U	-0.0417	U	-0.0262	pCi/L	N/A		N/A			
	Uncertainty	+/-0.112		+/-0.105							
Uranium-235/236	U	0.0153	U	-0.00209	pCi/L	N/A		N/A			
	Uncertainty	+/-0.102		+/-0.0811							
Uranium-238	U	-0.0336	U	0.00422	pCi/L	N/A		N/A			
	Uncertainty	+/-0.0755		+/-0.0803							
QC1204947053	LCS										
Pct Uranium-235				0.950	percent					11/19/21	14:27
Uranium-233/234				12.7	pCi/L						
	Uncertainty			+/-1.03							
Uranium-235/236				0.777	pCi/L						
	Uncertainty			+/-0.287							
Uranium-238	13.3			12.6	pCi/L		94.7	(75%-125%)			
	Uncertainty			+/-1.02							
QC1204947051	MB										
Pct Uranium-235			U	0.000	percent					11/19/21	14:27
Uranium-233/234			U	-0.00461	pCi/L						
	Uncertainty			+/-0.129							
Uranium-235/236			U	0.0350	pCi/L						
	Uncertainty			+/-0.0987							
Uranium-238			U	0.0345	pCi/L						
	Uncertainty			+/-0.0935							

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Alpha Spec</b>											
Batch	2192942										
QC1204947060	560266001 DUP										
Pct Uranium-235	U	0.000	U	0.000	percent	N/A		N/A	MXS2	11/20/21	10:41
Uranium-233/234	U	-0.162	U	-0.102	pCi/L	N/A		N/A			
	Uncertainty	+/-0.108		+/-0.192							
Uranium-235/236	U	0.0386	U	-0.0257	pCi/L	N/A		N/A			
	Uncertainty	+/-0.145		+/-0.114							
Uranium-238	U	-0.0591	U	0.0883	pCi/L	N/A		N/A			
	Uncertainty	+/-0.0953		+/-0.176							
QC1204947061	LCS										
Pct Uranium-235				1.02	percent					11/20/21	10:41
Uranium-233/234				14.5	pCi/L						
	Uncertainty			+/-1.54							
Uranium-235/236				1.01	pCi/L						
	Uncertainty			+/-0.469							
Uranium-238	13.4			15.3	pCi/L		114	(75%-125%)			
	Uncertainty			+/-1.57							
QC1204947059	MB										
Pct Uranium-235			U	0.000	percent					11/20/21	10:41
Uranium-233/234			U	-0.140	pCi/L						
	Uncertainty			+/-0.0955							
Uranium-235/236			U	0.0346	pCi/L						
	Uncertainty			+/-0.130							
Uranium-238			U	0.0206	pCi/L						
	Uncertainty			+/-0.133							
<b>Rad Gamma Spec</b>											
Batch	2191164										
QC1204943338	560265011 DUP										
Actinium-228	U	2.13	U	11.2	pCi/L	N/A		N/A	MJH1	11/10/21	23:15
	Uncertainty	+/-17.7		+/-30.0							

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2191164										
Bismuth-211	U Uncertainty	24.2 +/-33.5	U	42.3 +/-44.9	pCi/L	N/A		N/A	MJH1	11/10/21	23:15
Bismuth-212	U Uncertainty	-26.5 +/-55.9	U	47.6 +/-48.4	pCi/L	N/A		N/A			
Bismuth-214	U Uncertainty	5.94 +/-16.0		33.4 +/-14.7	pCi/L	55.2		(0% - 100%)			
Lead-210	U Uncertainty	-29.6 +/-72.4	U	293 +/-821	pCi/L	N/A		N/A			
Lead-211	U Uncertainty	-33.4 +/-60.8	U	30.7 +/-78.7	pCi/L	N/A		N/A			
Lead-212	U Uncertainty	1.29 +/-10.8	U	2.93 +/-14.0	pCi/L	N/A		N/A			
Lead-214	U Uncertainty	8.78 +/-12.1	UI	0.000 +/-16.3	pCi/L	N/A		N/A			
Potassium-40	U Uncertainty	-16.6 +/-49.4	U	31.4 +/-51.6	pCi/L	N/A		N/A			
Protactinium-231	U Uncertainty	19.1 +/-38.0	U	-23.4 +/-46.1	pCi/L	N/A		N/A			
Protactinium-234	U Uncertainty	-10.6 +/-26.8	U	20.3 +/-27.3	pCi/L	N/A		N/A			
Radium-223	U Uncertainty	36.5 +/-53.6	U	-18.7 +/-62.2	pCi/L	N/A		N/A			
Radium-226	U Uncertainty	45.4 +/-111	U	54.5 +/-167	pCi/L	N/A		N/A			
Radium-228	U Uncertainty	2.13 +/-17.7	U	11.2 +/-30.0	pCi/L	N/A		N/A			
Thallium-208	U Uncertainty	-2.60 +/-5.51	U	1.09 +/-5.39	pCi/L	N/A		N/A			
Thorium-227	U Uncertainty	-12.0 +/-21.6	U	-0.664 +/-24.2	pCi/L	N/A		N/A			

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2191164										
Thorium-234	U Uncertainty	-35.7 +/-90.7	U	235 +/-400	pCi/L	N/A		N/A	MJH1	11/10/21	23:15
Uranium-235	U Uncertainty	14.4 +/-31.2	U	-2.40 +/-26.5	pCi/L	N/A		N/A			
Uranium-238	U Uncertainty	-35.7 +/-90.7	U	235 +/-400	pCi/L	N/A		N/A			
QC1204943339	LCS										
Americium-241	34200 Uncertainty			35300 +/-545	pCi/L		103	(75%-125%)		11/11/21	05:58
Cesium-137	11900 Uncertainty			12500 +/-351	pCi/L		105	(75%-125%)			
Cobalt-60	6700 Uncertainty			6980 +/-297	pCi/L		104	(75%-125%)			
Actinium-228	Uncertainty		U	-100 +/-267	pCi/L						
Bismuth-211	Uncertainty		U	-161 +/-307	pCi/L						
Bismuth-212	Uncertainty		U	111 +/-675	pCi/L						
Bismuth-214	Uncertainty		U	-76.1 +/-97.1	pCi/L						
Lead-210	Uncertainty			3.79E+05 +/-6630	pCi/L						
Lead-211	Uncertainty		U	-354 +/-1190	pCi/L						
Lead-212	Uncertainty		U	-23.9 +/-84.8	pCi/L						
Lead-214	Uncertainty		U	9.55 +/-111	pCi/L						
Potassium-40	Uncertainty		U	-8.14 +/-149	pCi/L						

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gamma Spec											
Batch		2191164									
Protactinium-231			U	372	pCi/L				MJH1	11/11/21	05:58
	Uncertainty			+/-705							
Protactinium-234			U	-48.5	pCi/L						
	Uncertainty			+/-600							
Radium-223			U	31.9	pCi/L						
	Uncertainty			+/-1010							
Radium-226			U	-372	pCi/L						
	Uncertainty			+/-1050							
Radium-228			U	-100	pCi/L						
	Uncertainty			+/-267							
Thallium-208			U	6.02	pCi/L						
	Uncertainty			+/-51.5							
Thorium-227			U	23.4	pCi/L						
	Uncertainty			+/-395							
Thorium-234			U	-184	pCi/L						
	Uncertainty			+/-1000							
Uranium-235			U	-45.0	pCi/L						
	Uncertainty			+/-299							
Uranium-238			U	-184	pCi/L						
	Uncertainty			+/-1000							
QC1204943336 MB											
Actinium-228			U	3.25	pCi/L					11/10/21	23:37
	Uncertainty			+/-7.50							
Bismuth-211			U	-3.07	pCi/L						
	Uncertainty			+/-12.5							
Bismuth-212			U	23.4	pCi/L						
	Uncertainty			+/-20.1							
Bismuth-214			U	0.0878	pCi/L						
	Uncertainty			+/-5.07							
Lead-210			U	295	pCi/L						
	Uncertainty			+/-509							

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gamma Spec</b>											
Batch	2191164										
Lead-211			U	-7.31	pCi/L				MJH1	11/10/21	23:37
	Uncertainty			+/-29.2							
Lead-212			U	-2.98	pCi/L						
	Uncertainty			+/-3.48							
Lead-214			U	6.06	pCi/L						
	Uncertainty			+/-6.61							
Potassium-40			U	3.64	pCi/L						
	Uncertainty			+/-35.1							
Protactinium-231			U	16.5	pCi/L						
	Uncertainty			+/-20.3							
Protactinium-234			U	0.554	pCi/L						
	Uncertainty			+/-13.7							
Radium-223			U	20.8	pCi/L						
	Uncertainty			+/-27.4							
Radium-226			U	-63.1	pCi/L						
	Uncertainty			+/-49.8							
Radium-228			U	3.25	pCi/L						
	Uncertainty			+/-7.50							
Thallium-208			U	-1.72	pCi/L						
	Uncertainty			+/-2.14							
Thorium-227			U	9.99	pCi/L						
	Uncertainty			+/-15.2							
Thorium-234			U	-111	pCi/L						
	Uncertainty			+/-128							
Uranium-235			U	-7.35	pCi/L						
	Uncertainty			+/-11.1							
Uranium-238			U	-111	pCi/L						
	Uncertainty			+/-128							

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	2192939										
QC1204947047	560266019		DUP								
Alpha	U	2.25	U	-0.0361	pCi/L	N/A		N/A	JJK3	11/18/21	15:55
	Uncertainty	+/-2.18		+/-1.12							
Beta	U	2.00	U	1.01	pCi/L	N/A		N/A			
	Uncertainty	+/-2.58		+/-2.19							
QC1204947050	LCS										
Alpha		115		99.8	pCi/L		86.5	(75%-125%)		11/18/21	15:54
	Uncertainty			+/-9.79							
Beta		432		466	pCi/L		108	(75%-125%)			
	Uncertainty			+/-16.2							
QC1204947046	MB										
Alpha			U	0.124	pCi/L					11/18/21	15:55
	Uncertainty			+/-0.835							
Beta			U	-0.728	pCi/L						
	Uncertainty			+/-2.48							
QC1204947048	560266019		MS								
Alpha	247 U	2.25		215	pCi/L		87.1	(75%-125%)		11/18/21	15:54
	Uncertainty	+/-2.18		+/-22.1							
Beta	925 U	2.00		971	pCi/L		105	(75%-125%)			
	Uncertainty	+/-2.58		+/-33.8							
QC1204947049	560266019		MSD								
Alpha	240 U	2.25		222	pCi/L	3.01	92.4	(0%-20%)		11/18/21	15:54
	Uncertainty	+/-2.18		+/-22.5							
Beta	899 U	2.00		964	pCi/L	0.747	107	(0%-20%)			
	Uncertainty	+/-2.58		+/-33.4							
Batch	2192941										
QC1204947055	560266003		DUP								
Alpha	U	2.06	U	1.07	pCi/L	N/A		N/A	JJK3	11/20/21	10:34
	Uncertainty	+/-2.09		+/-1.76							
Beta		33.4		24.8	pCi/L	29.5*		(0%-20%)			
	Uncertainty	+/-4.80		+/-4.32							
QC1204947058	LCS										
Alpha		115		95.2	pCi/L		83	(75%-125%)		11/20/21	10:34
	Uncertainty			+/-9.54							

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	2192941										
Beta	429			472	pCi/L		110	(75%-125%)	JXK3	11/20/21	10:34
	Uncertainty			+/-16.3							
QC1204947054	MB										
Alpha			U	-0.399	pCi/L					11/20/21	10:34
	Uncertainty			+/-0.820							
Beta			U	-0.0384	pCi/L						
	Uncertainty			+/-2.10							
QC1204947056	560266003 MS										
Alpha	244	U	2.06	278	pCi/L		114	(75%-125%)		11/20/21	10:34
	Uncertainty		+/-2.09	+/-26.6							
Beta	912		33.4	1010	pCi/L		107	(75%-125%)			
	Uncertainty		+/-4.80	+/-34.6							
QC1204947057	560266003 MSD										
Alpha	251	U	2.06	289	pCi/L	3.81	115	(0%-20%)		11/20/21	10:34
	Uncertainty		+/-2.09	+/-27.2							
Beta	938		33.4	1030	pCi/L	2.2	107	(0%-20%)			
	Uncertainty		+/-4.80	+/-35.4							
<b>Rad Liquid Scintillation</b>											
Batch	2192265										
QC1204945602	560266019 DUP										
Technetium-99		U	-0.0152	U	-0.201	pCi/L	N/A		N/A	JJ3	11/22/21 00:35
	Uncertainty		+/-2.19		+/-2.16						
QC1204945603	LCS										
Technetium-99	124			119	pCi/L		95.9	(75%-125%)		11/22/21	01:28
	Uncertainty			+/-3.98							
QC1204945601	MB										
Technetium-99				U	-1.26	pCi/L				11/21/21	23:43
	Uncertainty				+/-2.10						
Batch	2192266										
QC1204945605	560265021 DUP										
Technetium-99			72.9		74.2	pCi/L	1.8	(0%-20%)	AG2	11/21/21	10:20
	Uncertainty		+/-5.26		+/-5.34						

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Liquid Scintillation</b>											
Batch 2192266											
QC1204945606	LCS										
Technetium-99	127			120	pCi/L		93.8	(75%-125%)	AG2	11/21/21	10:37
	Uncertainty			+/-6.58							
QC1204945604	MB										
Technetium-99			U	0.500	pCi/L					11/21/21	10:02
	Uncertainty			+/-2.20							
Batch 2194929											
QC1204951333	560265011	DUP									
Tritium	U	103	U	170	pCi/L	N/A			N/A KXA1	11/19/21	18:15
	Uncertainty	+/-295		+/-304							
QC1204951335	LCS										
Tritium	5490			5550	pCi/L		101	(75%-125%)		11/19/21	18:58
	Uncertainty			+/-600							
QC1204951332	MB										
Tritium			U	221	pCi/L					11/19/21	17:54
	Uncertainty			+/-308							
QC1204951334	560265011	MS									
Tritium	5510	U	103	5540	pCi/L		101	(75%-125%)		11/19/21	18:37
	Uncertainty		+/-295	+/-605							

**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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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
N1	See case narrative										
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										
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.

**Technical Case Narrative  
Westinghouse Electric Company PO  
SDG #: 560266**

## **Metals**

**Product:** Determination of Metals by ICP-MS

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-MA-E-014 REV# 35

**Analytical Batch:** 2193213

**Preparation Method:** EPA 200.2

**Preparation Procedure:** GL-MA-E-016 REV# 18

**Preparation Batch:** 2193212

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560266001	W-66-2021-Q4
560266002	W-66-2021-Q4-Dup
560266003	W-67-2021-Q4
560266004	W-68-2021-Q4
560266005	W-69-2021-Q4
560266006	W-70-2021-Q4
560266007	W-71-2021-Q4
560266008	W-71-2021-Q4-Dup
1204947650	Method Blank (MB)ICP-MS
1204947651	Laboratory Control Sample (LCS)
1204956449	Laboratory Control Sample (LCS)
1204947654	560265016(W-47-2021-Q4L) Serial Dilution (SD)
1204947657	560266005(W-69-2021-Q4L) Serial Dilution (SD)
1204947652	560265016(W-47-2021-Q4D) Sample Duplicate (DUP)
1204947655	560266005(W-69-2021-Q4D) Sample Duplicate (DUP)
1204947653	560265016(W-47-2021-Q4S) Matrix Spike (MS)
1204947656	560266005(W-69-2021-Q4S) Matrix Spike (MS)
1204956446	560265016(W-47-2021-Q4S) Matrix Spike (MS)
1204956447	560266005(W-69-2021-Q4S) Matrix Spike (MS)

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

### **Data Summary:**

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, with the following exceptions.

### **Calibration Information**

#### **ICSA/ICSAB Statement**

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

**Product:** Determination of Metals by ICP-MS

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-MA-E-014 REV# 35

**Analytical Batch:** 2193217

**Preparation Method:** EPA 200.2

**Preparation Procedure:** GL-MA-E-016 REV# 18

**Preparation Batch:** 2193216

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560266009	W-85-2021-Q4
560266010	W-86-2021-Q4
560266011	W-88-2021-Q4
560266012	W-89-2021-Q4
560266013	W-90-2021-Q4
560266014	W-91-2021-Q4
560266015	W-92-2021-Q4
560266016	W-98-2021-Q4
560266017	W-103-2021-Q4
560266018	W-106-2021-Q4
560266019	W-119-2021-Q4
560266020	EB-01-101821
560266021	EB-01-101921
560266022	EB-01-102121
1204947661	Method Blank (MB)ICP-MS
1204947662	Laboratory Control Sample (LCS)
1204947681	Laboratory Control Sample (LCS)
1204947665	560266009(W-85-2021-Q4L) Serial Dilution (SD)
1204947668	560266019(W-119-2021-Q4L) Serial Dilution (SD)
1204947663	560266009(W-85-2021-Q4D) Sample Duplicate (DUP)
1204947666	560266019(W-119-2021-Q4D) Sample Duplicate (DUP)
1204947664	560266009(W-85-2021-Q4S) Matrix Spike (MS)
1204947667	560266019(W-119-2021-Q4S) Matrix Spike (MS)
1204947682	560266009(W-85-2021-Q4S) Matrix Spike (MS)
1204947683	560266019(W-119-2021-Q4S) Matrix Spike (MS)

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

**Data Summary:**

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, with the following exceptions.

**Calibration Information**

**ICSA/ICSAB Statement**

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

**Product: Inorganic Calculations**

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-GC-E-107 REV# 10

**Analytical Batch:** 2199267

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560266001	W-66-2021-Q4
560266002	W-66-2021-Q4-Dup
560266003	W-67-2021-Q4
560266004	W-68-2021-Q4
560266005	W-69-2021-Q4
560266006	W-70-2021-Q4
560266007	W-71-2021-Q4
560266008	W-71-2021-Q4-Dup
560266009	W-85-2021-Q4
560266010	W-86-2021-Q4
560266011	W-88-2021-Q4
560266012	W-89-2021-Q4
560266013	W-90-2021-Q4
560266014	W-91-2021-Q4
560266015	W-92-2021-Q4
560266016	W-98-2021-Q4
560266017	W-103-2021-Q4
560266018	W-106-2021-Q4
560266019	W-119-2021-Q4
560266020	EB-01-101821
560266021	EB-01-101921
560266022	EB-01-102121

**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.

## **Radiochemistry**

**Product:** Alphaspec U, Liquid

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

**Analytical Procedure:** GL-RAD-A-011 REV# 28

**Analytical Batch:** 2192940

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560266018	W-106-2021-Q4
560266019	W-119-2021-Q4
560266020	EB-01-101821
560266021	EB-01-101921
560266022	EB-01-102121
1204947051	Method Blank (MB)

1204947052                    560266019(W-119-2021-Q4) Sample Duplicate (DUP)  
1204947053                    Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Technical Information**

**Recounts**

Samples 560266018 (W-106-2021-Q4) and 560266022 (EB-01-102121) were recounted due to a suspected false positive. The recounts are reported.

**Product: Alphaspec U, Liquid**

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

**Analytical Procedure:** GL-RAD-A-011 REV# 28

**Analytical Batch:** 2192942

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560266001	W-66-2021-Q4
560266002	W-66-2021-Q4-Dup
560266003	W-67-2021-Q4
560266004	W-68-2021-Q4
560266005	W-69-2021-Q4
560266006	W-70-2021-Q4
560266007	W-71-2021-Q4
560266008	W-71-2021-Q4-Dup
560266009	W-85-2021-Q4
560266010	W-86-2021-Q4
560266011	W-88-2021-Q4
560266012	W-89-2021-Q4
560266013	W-90-2021-Q4
560266014	W-91-2021-Q4
560266015	W-92-2021-Q4
560266016	W-98-2021-Q4
560266017	W-103-2021-Q4
1204947059	Method Blank (MB)
1204947060	560266001(W-66-2021-Q4) Sample Duplicate (DUP)
1204947061	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Quality Control (QC) Information**

**RDL Met**

Sample did not meet the detection limit. Sample was counted the maximum count time in order to achieve the lowest MDAs possible.

Sample	Analyte	Value
560266010 (W-86-2021-Q4)	Uranium-233/234	Result -0.181 < MDA 0.607 > RDL 0.5 pCi/L

**Technical Information**

**Recounts**

Samples 560266008 (W-71-2021-Q4-Dup) and 560266010 (W-86-2021-Q4) were recounted due to high MDCs. The recounts are reported.

**Miscellaneous Information**

**Additional Comments**

The tracer peak centroid for samples 560266003 (W-67-2021-Q4) and 560266017 (W-103-2021-Q4) are greater than 50 keV from the expected library energy value for the tracer; however, the tracer yield requirement was met and the tracer peaks are within the tracer region of interest.

**Product: Gammascpec, Gamma, Liquid NORM/TENORM**

**Analytical Method:** EPA 901.1

**Analytical Procedure:** GL-RAD-A-013 REV# 27

**Analytical Batch:** 2191164

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560266020	EB-01-101821
560266021	EB-01-101921
1204943336	Method Blank (MB)
1204943338	560265011(W-41R-2021-Q4) Sample Duplicate (DUP)
1204943339	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.

## Qualifier Information

Qualifier	Reason	Analyte	Sample	Client Sample
UI	Results are considered a false positive due to high counting uncertainty.	Bismuth-211	560266020	EB-01-101821
		Lead-214	1204943338	W-41R-2021-Q4(560265011DUP)
		Thallium-208	560266021	EB-01-101921
UI	Results are considered a false positive due to low abundance.	Bismuth-214	560266021	EB-01-101921

### **Product: GFPC, Gross Alpha Liquid**

**Analytical Method:** EPA 900.0/SW846 9310

**Analytical Procedure:** GL-RAD-A-001 REV# 20

**Analytical Batch:** 2192939

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560266018	W-106-2021-Q4
560266019	W-119-2021-Q4
560266020	EB-01-101821
560266021	EB-01-101921
560266022	EB-01-102121
1204947046	Method Blank (MB)
1204947047	560266019(W-119-2021-Q4) Sample Duplicate (DUP)
1204947048	560266019(W-119-2021-Q4) Matrix Spike (MS)
1204947049	560266019(W-119-2021-Q4) Matrix Spike Duplicate (MSD)
1204947050	Laboratory Control Sample (LCS)

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

### **Data Summary:**

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, with the following exceptions.

### **Preparation Information**

#### **Homogenous Matrix**

Sample 560266018 (W-106-2021-Q4) water has brown tint.

### **Technical Information**

**Gross Alpha/Beta Preparation Information**

High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating.

**Miscellaneous Information****Additional Comments**

The matrix spike and matrix spike duplicate, 1204947048 (W-119-2021-Q4MS) and 1204947049 (W-119-2021-Q4MSD), aliquots were reduced to conserve sample volume.

**Product: GFPC, Gross Alpha Liquid**

**Analytical Method:** EPA 900.0/SW846 9310

**Analytical Procedure:** GL-RAD-A-001 REV# 20

**Analytical Batch:** 2192941

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560266001	W-66-2021-Q4
560266002	W-66-2021-Q4-Dup
560266003	W-67-2021-Q4
560266004	W-68-2021-Q4
560266005	W-69-2021-Q4
560266006	W-70-2021-Q4
560266007	W-71-2021-Q4
560266008	W-71-2021-Q4-Dup
560266009	W-85-2021-Q4
560266010	W-86-2021-Q4
560266011	W-88-2021-Q4
560266012	W-89-2021-Q4
560266013	W-90-2021-Q4
560266014	W-91-2021-Q4
560266015	W-92-2021-Q4
560266016	W-98-2021-Q4
560266017	W-103-2021-Q4
1204947054	Method Blank (MB)
1204947055	560266003(W-67-2021-Q4) Sample Duplicate (DUP)
1204947056	560266003(W-67-2021-Q4) Matrix Spike (MS)
1204947057	560266003(W-67-2021-Q4) Matrix Spike Duplicate (MSD)
1204947058	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

### Quality Control (QC) Information

#### **Duplication Criteria between QC Sample and Duplicate Sample**

The Sample and the Duplicate, (See Below), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with the value listed below.

Sample	Analyte	Value
1204947055 (W-67-2021-Q4DUP)	Beta	RPD 29.5* (0.00%-20.00%) RER 1.81 (0-3)

### Technical Information

#### **Negative > 3 sigma TPU**

Sample result was more negative than the three sigma TPU. The background control chart was examined and the detector was determined to be fully functional.

Sample	Analyte	Value
560266005 (W-69-2021-Q4)	Beta	Negative Result > 3 sigma value

#### **Gross Alpha/Beta Preparation Information**

High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating.

### Miscellaneous Information

#### **Additional Comments**

The matrix spike and matrix spike duplicate, 1204947056 (W-67-2021-Q4MS) and 1204947057 (W-67-2021-Q4MSD), aliquots were reduced to conserve sample volume.

#### **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:** 2192265

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560266001	W-66-2021-Q4
560266002	W-66-2021-Q4-Dup
560266003	W-67-2021-Q4
560266004	W-68-2021-Q4
560266005	W-69-2021-Q4
560266006	W-70-2021-Q4
560266007	W-71-2021-Q4

560266008	W-71-2021-Q4-Dup
560266009	W-85-2021-Q4
560266010	W-86-2021-Q4
560266011	W-88-2021-Q4
560266012	W-89-2021-Q4
560266013	W-90-2021-Q4
560266014	W-91-2021-Q4
560266015	W-92-2021-Q4
560266016	W-98-2021-Q4
560266017	W-103-2021-Q4
560266018	W-106-2021-Q4
560266019	W-119-2021-Q4
560266020	EB-01-101821
1204945601	Method Blank (MB)
1204945602	560266019(W-119-2021-Q4) Sample Duplicate (DUP)
1204945603	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:** 2192266

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560266021	EB-01-101921
560266022	EB-01-102121
1204945604	Method Blank (MB)
1204945605	560265021(W-64-2021-Q4) Sample Duplicate (DUP)
1204945606	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:** LSC, Tritium Distillation, Liquid

**Analytical Method:** EPA 906.0 Modified

**Analytical Procedure:** GL-RAD-A-002 REV# 24

**Analytical Batch:** 2194929

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560266020	EB-01-101821
560266021	EB-01-101921
1204951332	Method Blank (MB)
1204951333	560265011(W-41R-2021-Q4) Sample Duplicate (DUP)
1204951334	560265011(W-41R-2021-Q4) Matrix Spike (MS)
1204951335	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.

**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.

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code	Field Filtered	Sample Matrix	Should this sample be considered:		Sample Analysis Requested <sup>(6)</sup> (Fill in the number of containers for each test)							Comments
						Yes, please supply isotopic info)	(7) Known or possible Hazards	Total number of containers	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)	Gamma TENORM	
W-66-2021-Q4	10/18/2021	1040	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-66-2021-Q4-Dup	10/18/2021	1040	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-67-2021-Q4	10/18/2021	1124	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-68-2021-Q4	10/19/2021	0913	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-69-2021-Q4	10/21/2021	1223	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-70-2021-Q4	10/21/2021	1127	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-71-2021-Q4	10/21/2021	1324	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942
W-71-2021-Q4-Dup	10/21/2021	1324	G	N	GW			2	X	X	X	X	X	X	Preservative Lot #201942

**Chain of Custody Signatures**

Relinquished By (Signed)	Date	Received by (signed)	Date	Time
<i>[Signature]</i>	10/27/2021	<i>[Signature]</i>	10/27/2021	0947
<i>[Signature]</i>	10/27/2021	<i>[Signature]</i>	10/27/2021	1545
<i>[Signature]</i>	10/27/2021	<i>[Signature]</i>	10/27/2021	1545

Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4  
 Additional Remarks:  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 4 °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other

**For sample shipping and delivery details, see Sample Receipt & Review form (SRR).**

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  
 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=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal  
 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

**7) KNOWN OR POSSIBLE HAZARDS**

Characteristic Hazards	Listed Waste	Other
FL = Flammable/Ignitable CO = Corrosive RE = Reactive	LW = Listed Waste (F, K, P and U-listed wastes.) Waste code(s):	OT = Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:
TSCA Regulated PCB = Polychlorinated biphenyls		

**RCRA Metals**  
 As = Arsenic Hg = Mercury  
 Ba = Barium Se = Selenium  
 Cd = Cadmium Ag = Silver  
 Cr = Chromium MR = Misc. RCRA metals  
 Pb = Lead

Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

**GEL Laboratories LLC**  
 Chemistry | Radiochemistry | Radiobiassay | Specialty Analytics  
 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171  
 Fax: (843) 766-1178

**Chain of Custody and Analytical Request**  
**GEL Project Manager: S. Hogan**

**GEL Work Order Number:** \_\_\_\_\_  
 Phone # 803.647.1920  
 Fax # 803.695.3964

Project # \_\_\_\_\_ of \_\_\_\_\_  
 GEL Quote # \_\_\_\_\_  
 CO Number (1) \_\_\_\_\_  
 PO # 4500822910 Line 2

Client Name: Westinghouse  
 Project/Site Name: \_\_\_\_\_  
 Address: 5801 Bluff Road, Hopkins, SC 29061

Contacted By: Randy Crews *Randy Crews*  
 Send Results To: joynerdp@westinghouse.com

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (a)	Field Filtered (b)	Sample Matrix (c)	Should this sample be considered:		Sample Analysis Requested (6) (Fill in the number of containers for each test)						Comments		
						Yes, please supply isotopic info.	(7) Known or possible Hazards	Total number of containers	ISO U (By individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)		Gamma TENORM	NI
W-85-2021-Q4	10/22/2021	1113	G	N	GW			2	X	X	X	X	X	X	X	Preservative Lot #201942
W-86-2021-Q4	10/22/2021	0923	G	N	GW			2	X	X	X	X	X	X	X	Preservative Lot #201942
W-88-2021-Q4	10/21/2021	1112	G	N	GW			2	X	X	X	X	X	X	X	Preservative Lot #201942
W-89-2021-Q4	10/21/2021	1208	G	N	GW			2	X	X	X	X	X	X	X	Preservative Lot #201942
W-90-2021-Q4	10/20/2021	1127	G	N	GW			2	X	X	X	X	X	X	X	Preservative Lot #201942
W-91-2021-Q4	10/20/2021	1220	G	N	GW			2	X	X	X	X	X	X	X	Preservative Lot #201942
W-92-2021-Q4	10/22/2021	1201	G	N	GW			2	X	X	X	X	X	X	X	Preservative Lot #201942
W-98-2021-Q4	10/19/2021	1451	G	N	GW			2	X	X	X	X	X	X	X	Preservative Lot #201942

**Chain of Custody Signatures**  
 Relinquished By (Signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 Received by (signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 1. R. Crews (Secure Location) 10/27/2021 0947  
 2. *Randy Crews* 10/27/21 1545  
 3. \_\_\_\_\_ 1545

Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4  
 Additional Remarks: \_\_\_\_\_  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 4 °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other.

**TAT Requested: Normal: X Rush: Specify:**

**> For sample shipping and delivery details, see Sample Receipt & Review form (SRR).**

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  
 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, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal  
 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

**7.) KNOWN OR POSSIBLE HAZARDS**  
 Characteristic Hazards: \_\_\_\_\_  
 FL = Flammable/Ignitable  
 CO = Corrosive  
 RE = Reactive  
 TSCA Regulated  
 PCB = Polychlorinated biphenyls

**RCRA Metals**  
 As = Arsenic Hg = Mercury  
 Ba = Barium Se = Selenium  
 Cd = Cadmium Ag = Silver  
 Cr = Chromium MR = Misc. RCRA metals  
 Pb = Lead

**Listed Waste**  
 LW = Listed Waste  
 (F, K, P and U-listed wastes.)  
 Waste code(s): \_\_\_\_\_

**Other**  
 OT = Other / Unknown  
 (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)  
 Description: \_\_\_\_\_

Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)



SH

**SAMPLE RECEIPT & REVIEW FORM**

Client: <u>WNUC</u>		SDG/AR/COC/Work Order: <u>560259/560265/560266</u>			
Received By: <u>BE</u>		Date Received: <u>10/27/21</u>			
Carrier and Tracking Number		Circle Applicable: FedEx Express    FedEx Ground    UPS    Field Services <u>Courier</u> Other			
Suspected Hazard Information		*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.			
A) Shipped as a DOT Hazardous?		Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___			
B) Did the client designate the samples are to be received as radioactive?		COC notation or radioactive stickers on containers equal client designation.			
C) Did the RSO classify the samples as radioactive?		Maximum Net Counts Observed* (Observed Counts - Area Background Counts): <u>0</u> CPM/mR/Hr Classified as: <u>Rad 1</u> Rad 2 Rad 3			
D) Did the client designate samples are hazardous?		COC notation or hazard labels on containers equal client designation.			
E) Did the RSO identify possible hazards?		If D or E is yes, select Hazards below. PCB's    Flammable    Foreign Soil    RCRA    Asbestos    Beryllium    Other: _____			
Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	/			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)?*	/			Preservation Method: <u>Wet Ice</u> Ice Packs Dry ice <u>None</u> Other: *all temperatures are recorded in Celsius    TEMP: <u>4</u>
4	Daily check performed and passed on IR temperature gun?	/			Temperature Device Serial #: <u>IR2-21</u> Secondary Temperature Device Serial # (If Applicable): _____
5	Sample containers intact and sealed?	/			Circle Applicable: Seals broken    Damaged container    Leaking container    Other (describe)
6	Samples requiring chemical preservation at proper pH?	/			Sample ID's and Containers Affected: If Preservation added, Lot#: _____
7	Do any samples require Volatile Analysis?	/			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?	/			ID'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?	/			Circle Applicable: No dates on containers    No times on containers    COC missing info    Other (describe)
11	Number of containers received match number indicated on COC?	/			Circle Applicable: No container count on COC    Other (describe)
12	Are sample containers identifiable as GEL provided by use of GEL labels?	/			
13	COC form is properly signed in relinquished/received sections?	/			Circle Applicable: Not relinquished    Other (describe)
Comments (Use Continuation Form if needed):					

PM (or PMA) review: Initials NRG Date 10/27/21 Page 1 of 1

**List of current GEL Certifications as of 24 November 2021**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
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
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
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	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122021-36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780



November 24, 2021

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

Re: Ground Water Well Liquid Analysis  
Work Order: 560980

Dear Ms. Teague:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on November 03, 2021. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

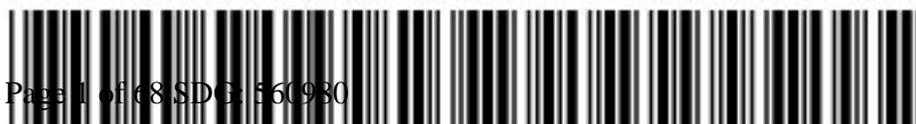
Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at [www.gel.com](http://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. 4523.

Sincerely,

Samuel Hogan  
Project Manager

Purchase Order: 4500822910 Line 2  
Enclosures



**GEL LABORATORIES LLC**

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

**Certificate of Analysis Report  
for**

WNUC010 Westinghouse Electric Company PO (4500822910)

Client SDG: 560980 GEL Work Order: 560980

**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
- J See case narrative for an explanation
- J Value is estimated
- 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, Samuel Hogan.



Reviewed by \_\_\_\_\_

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-3A-2021-Q4  
Sample ID: 560980001  
Matrix: Ground Water  
Collect Date: 25-OCT-21 09:57  
Receive Date: 03-NOV-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1157	2195676	1
Uranium-238	J	0.0700	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1638	2195676	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1638	2195676	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.0700	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195672

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

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Client Sample ID:	W-4R-2021-Q4	Project:	WNUC01022
Sample ID:	560980002	Client ID:	WNUC010
Matrix:	Ground Water		
Collect Date:	25-OCT-21 09:03		
Receive Date:	03-NOV-21		
Collector:	Client		

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Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1204	2195676	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1645	2195676	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1645	2195676	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195672

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-20-2021-Q4  
Sample ID: 560980003  
Matrix: Ground Water  
Collect Date: 26-OCT-21 11:03  
Receive Date: 03-NOV-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1206	2195676	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1647	2195676	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1647	2195676	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195672

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-25-2021-Q4  
Sample ID: 560980004  
Matrix: Ground Water  
Collect Date: 26-OCT-21 12:09  
Receive Date: 03-NOV-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1211	2195676	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1652	2195676	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1652	2195676	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195672

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit



# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-95-2021-Q4  
Sample ID: 560980006  
Matrix: Ground Water  
Collect Date: 26-OCT-21 11:13  
Receive Date: 03-NOV-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1214	2195676	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1655	2195676	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1655	2195676	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195672

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-96-2021-Q4  
Sample ID: 560980007  
Matrix: Ground Water  
Collect Date: 25-OCT-21 08:55  
Receive Date: 03-NOV-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1216	2195676	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1657	2195676	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1657	2195676	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195672

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-97-2021-Q4  
Sample ID: 560980008  
Matrix: Ground Water  
Collect Date: 25-OCT-21 13:50  
Receive Date: 03-NOV-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1223	2195676	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1704	2195676	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1704	2195676	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195672

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-97-2021-Q4-Dup      Project: WNUC01022  
Sample ID: 560980009      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 25-OCT-21 13:50  
Receive Date: 03-NOV-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1228	2195676	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1710	2195676	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1710	2195676	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195672

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-104-2021-Q4  
Sample ID: 560980010  
Matrix: Ground Water  
Collect Date: 25-OCT-21 11:46  
Receive Date: 03-NOV-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1230	2195676	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1711	2195676	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1711	2195676	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195672

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-105-2021-Q4      Project: WNUC01022  
Sample ID: 560980011      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 25-OCT-21 11:26  
Receive Date: 03-NOV-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1232	2195676	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1713	2195676	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1713	2195676	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195672

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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



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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-108-2021-Q4      Project: WNUC01022  
Sample ID: 560980013      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 25-OCT-21 13:20  
Receive Date: 03-NOV-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1235	2195676	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1717	2195676	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1717	2195676	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195672

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-108-2021-Q4-Dup Project: WNUC01022  
Sample ID: 560980014 Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 25-OCT-21 13:20  
Receive Date: 03-NOV-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1237	2195676	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1718	2195676	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1718	2195676	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195672

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

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Client Sample ID:	W-109-2021-Q4	Project:	WNUC01022
Sample ID:	560980015	Client ID:	WNUC010
Matrix:	Ground Water		
Collect Date:	26-OCT-21 09:57		
Receive Date:	03-NOV-21		
Collector:	Client		

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Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1238	2195676	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1720	2195676	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1720	2195676	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

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Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195672

The following Analytical Methods were performed:

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Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-110-2021-Q4      Project: WNUC01022  
Sample ID: 560980016      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 26-OCT-21 13:23  
Receive Date: 03-NOV-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1130	2195679	1
Uranium-238	J	0.0693	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1610	2195679	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1610	2195679	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.0693	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195678

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-111-2021-Q4  
Sample ID: 560980017  
Matrix: Ground Water  
Collect Date: 26-OCT-21 11:59  
Receive Date: 03-NOV-21  
Collector: Client

Project: WNUC01022  
Client ID: WNUC010

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1140	2195679	1
Uranium-238	J	0.136	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1620	2195679	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1620	2195679	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.136	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195678

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

DF: Dilution Factor  
DL: Detection Limit  
MDA: Minimum Detectable Activity  
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level  
PF: Prep Factor  
RL: Reporting Limit  
SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-112-2021-Q4      Project: WNUC01022  
Sample ID: 560980018      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 26-OCT-21 09:30  
Receive Date: 03-NOV-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1142	2195679	1
Uranium-238	J	0.137	0.0670	0.200	ug/L	1.00	1					
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1622	2195679	2
Calculation for Total U "See Parent Products"												
Total Uranium	J	0.137	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195678

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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



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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205  
Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-125-2021-Q4      Project: WNUC01022  
Sample ID: 560980020      Client ID: WNUC010  
Matrix: Ground Water  
Collect Date: 25-OCT-21 12:15  
Receive Date: 03-NOV-21  
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
200.8/200.2 Isotopic Uranium "As Received"												
Uranium-235	U	ND	0.0100	0.0700	ug/L	1.00	1	SKJ	11/17/21	1145	2195679	1
Uranium-238	U	ND	0.0670	0.200	ug/L	1.00	1	SKJ	11/17/21	1625	2195679	2
Uranium-234	U	ND	0.0100	0.0500	ug/L	1.00	1	SKJ	11/17/21	1625	2195679	2
Calculation for Total U "See Parent Products"												
Total Uranium	U	ND	0.0670	0.200	ug/L			BAJ	11/19/21	1018	2199267	3

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CD3	11/15/21	1615	2195678

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 200.8	
2	EPA 200.8	
3	EPA 200.8	

### Notes:

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-3A-2021-Q4	Project: WNUC01022
Sample ID: 560980001	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 25-OCT-21 09:57	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0634	2194595	1
Uranium-233/234	U	-0.0992	+/-0.157	0.429	0.500	pCi/L							
Uranium-235/236	U	-0.0241	+/-0.106	0.278	0.500	pCi/L							
Uranium-238	U	0.0616	+/-0.142	0.225	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.10	+/-2.10	3.23	5.00	pCi/L			JXK3	11/19/21	1912	2194593	2
Beta		5.86	+/-3.04	4.47	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.986	+/-2.02	3.51	5.00	pCi/L			AG2	11/21/21	1435	2194669	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			88.7	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95.2	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-4R-2021-Q4	Project: WNUC01022
Sample ID: 560980002	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 25-OCT-21 09:03	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0634	2194595	1
Uranium-233/234	U	-0.172	+/-0.183	0.529	0.500	pCi/L							
Uranium-235/236	U	0.0179	+/-0.204	0.433	0.500	pCi/L							
Uranium-238	U	-0.0253	+/-0.220	0.489	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.170	+/-1.28	3.08	5.00	pCi/L			JXK3	11/19/21	1912	2194593	2
Beta	U	0.278	+/-1.67	3.16	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.442	+/-2.09	3.57	5.00	pCi/L			AG2	11/21/21	1527	2194669	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			82.6	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93.2	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-20-2021-Q4	Project: WNUC01022
Sample ID: 560980003	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 26-OCT-21 11:03	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0811	2194595	1
Uranium-233/234	U	-0.108	+/-0.0931	0.345	0.500	pCi/L							
Uranium-235/236	U	-0.0114	+/-0.0987	0.229	0.500	pCi/L							
Uranium-238	U	-0.0262	+/-0.119	0.299	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.485	+/-1.59	3.32	5.00	pCi/L			JXK3	11/20/21	1030	2194593	2
Beta	U	-2.48	+/-2.08	4.49	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-1.52	+/-2.12	3.70	5.00	pCi/L			AG2	11/21/21	1620	2194669	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			92	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			89	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-25-2021-Q4	Project: WNUC01022
Sample ID: 560980004	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 26-OCT-21 12:09	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0811	2194595	1
Uranium-233/234	U	-0.0793	+/-0.153	0.406	0.500	pCi/L							
Uranium-235/236	U	-0.0118	+/-0.102	0.237	0.500	pCi/L							
Uranium-238	U	0.0224	+/-0.144	0.295	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.419	+/-1.68	3.49	5.00	pCi/L			JXK3	11/20/21	1030	2194593	2
Beta	U	0.964	+/-2.29	4.08	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.257	+/-2.10	3.61	5.00	pCi/L			AG2	11/21/21	1712	2194669	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			91.4	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-94-2021-Q4	Project: WNUC01022
Sample ID: 560980005	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 26-OCT-21 10:24	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0811	2194595	1
Uranium-233/234	U	-0.0297	+/-0.165	0.383	0.500	pCi/L							
Uranium-235/236	U	-0.0343	+/-0.104	0.291	0.500	pCi/L							
Uranium-238	U	-0.0262	+/-0.118	0.298	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	3.82	+/-2.96	4.22	5.00	pCi/L			JXK3	11/20/21	1030	2194593	2
Beta		5.78	+/-3.05	4.47	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.930	+/-2.02	3.51	5.00	pCi/L			AG2	11/21/21	1804	2194669	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			94.1	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			95.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-95-2021-Q4	Project: WNUC01022
Sample ID: 560980006	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 26-OCT-21 11:13	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925	2194595	1
Uranium-233/234	U	-0.127	+/-0.120	0.380	0.500	pCi/L							
Uranium-235/236	U	-0.0106	+/-0.0913	0.212	0.500	pCi/L							
Uranium-238	U	-0.0428	+/-0.0811	0.250	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	2.57	+/-2.33	3.35	5.00	pCi/L		JXK3	11/19/21	1912	2194593		2
Beta		3.99	+/-2.60	3.97	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-1.47	+/-2.00	3.50	5.00	pCi/L		AG2	11/21/21	1857	2194669		3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			78.3	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-96-2021-Q4	Project: WNUC01022
Sample ID: 560980007	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 25-OCT-21 08:55	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925	2194594	1
Uranium-233/234	U	0.0564	+/-0.184	0.348	0.500	pCi/L							
Uranium-235/236	U	0.0586	+/-0.135	0.214	0.500	pCi/L							
Uranium-238	U	-0.0449	+/-0.0724	0.231	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.893	+/-2.20	4.20	5.00	pCi/L			JXK3	11/20/21	1036	2194592	2
Beta	U	2.22	+/-2.26	3.71	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-2.85	+/-2.17	3.83	5.00	pCi/L			AG2	11/21/21	1030	2194675	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			90.9	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			92.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-97-2021-Q4	Project: WNUC01022
Sample ID: 560980008	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 25-OCT-21 13:50	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925	2194594	1
Uranium-233/234	U	-0.0995	+/-0.112	0.347	0.500	pCi/L							
Uranium-235/236	U	0.0222	+/-0.123	0.237	0.500	pCi/L							
Uranium-238	U	-0.0235	+/-0.106	0.268	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.69	+/-2.30	3.97	5.00	pCi/L			JXK3	11/20/21	1036	2194592	2
Beta		10.3	+/-3.54	4.72	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		14.7	+/-2.28	3.36	5.00	pCi/L			AG2	11/21/21	1949	2194669	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			86.8	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			98.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-97-2021-Q4-Dup	Project: WNUC01022
Sample ID: 560980009	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 25-OCT-21 13:50	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925	2194594	1
Uranium-233/234	U	0.0789	+/-0.196	0.359	0.500	pCi/L							
Uranium-235/236	U	-0.0427	+/-0.0988	0.293	0.500	pCi/L							
Uranium-238	U	-0.0259	+/-0.0782	0.220	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.808	+/-1.50	2.88	5.00	pCi/L			JXK3	11/20/21	1138	2194592	2
Beta		12.9	+/-3.58	4.61	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99		15.9	+/-2.31	3.38	5.00	pCi/L			AG2	11/21/21	2041	2194669	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			96.7	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			98.5	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-104-2021-Q4	Project: WNUC01022
Sample ID: 560980010	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 25-OCT-21 11:46	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925	2194594	1
Uranium-233/234	U	0.111	+/-0.171	0.274	0.500	pCi/L							
Uranium-235/236	U	0.0696	+/-0.137	0.190	0.500	pCi/L							
Uranium-238	U	0.0806	+/-0.128	0.177	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.457	+/-1.68	3.52	5.00	pCi/L			JXK3	11/20/21	1138	2194592	2
Beta	U	4.20	+/-2.80	4.41	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	1.71	+/-2.18	3.67	5.00	pCi/L			AG2	11/21/21	2134	2194669	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			91.1	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			90.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-105-2021-Q4	Project: WNUC01022
Sample ID: 560980011	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 25-OCT-21 11:26	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925	2194594	1
Uranium-233/234	U	-0.0131	+/-0.224	0.521	0.500	pCi/L							
Uranium-235/236	U	-0.0227	+/-0.195	0.453	0.500	pCi/L							
Uranium-238	U	0.0794	+/-0.271	0.503	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.634	+/-2.06	4.20	5.00	pCi/L			JXK3	11/20/21	1138	2194592	2
Beta	U	2.20	+/-2.77	4.70	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	0.544	+/-2.14	3.66	5.00	pCi/L			AG2	11/21/21	2226	2194669	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer	Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer		Alphaspec U, Liquid "As Received"			39.2	(15%-125%)
Technetium-99m Tracer		Liquid Scint Tc99, Liquid "As Received"			92.5	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-107-2021-Q4	Project: WNUC01022
Sample ID: 560980012	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 26-OCT-21 12:55	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925	2194594	1
Uranium-233/234	U	-0.0331	+/-0.109	0.287	0.500	pCi/L							
Uranium-235/236	U	0.125	+/-0.181	0.218	0.500	pCi/L							
Uranium-238	U	0.0573	+/-0.151	0.272	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.64	+/-1.90	3.06	5.00	pCi/L			JXK3	11/20/21	1158	2194592	2
Beta	U	3.52	+/-2.84	4.61	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.00232	+/-2.02	3.47	5.00	pCi/L			AG2	11/21/21	2318	2194669	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			82	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			97.2	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-108-2021-Q4	Project: WNUC01022
Sample ID: 560980013	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 25-OCT-21 13:20	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925	2194594	1
Uranium-233/234	U	0.00115	+/-0.150	0.321	0.500	pCi/L							
Uranium-235/236	U	0.000	+/-0.0793	0.118	0.500	pCi/L							
Uranium-238	U	-0.0280	+/-0.121	0.293	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.96	+/-1.83	2.58	5.00	pCi/L			JXK3	11/20/21	1159	2194592	2
Beta	U	2.55	+/-2.35	3.84	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-1.35	+/-2.16	3.76	5.00	pCi/L			AG2	11/21/21	1121	2194675	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			94.3	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93.5	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-108-2021-Q4-Dup	Project: WNUC01022
Sample ID: 560980014	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 25-OCT-21 13:20	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925	2194594	1
Uranium-233/234	U	0.142	+/-0.184	0.291	0.500	pCi/L							
Uranium-235/236	U	0.0368	+/-0.126	0.233	0.500	pCi/L							
Uranium-238	U	-0.0195	+/-0.0881	0.222	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.173	+/-1.09	2.71	5.00	pCi/L		JXK3	11/20/21	1158	2194592		2
Beta	U	1.92	+/-2.77	4.72	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-3.11	+/-2.20	3.90	5.00	pCi/L		AG2	11/21/21	1213	2194675		3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			104	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			91.8	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-109-2021-Q4	Project: WNUC01022
Sample ID: 560980015	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 26-OCT-21 09:57	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925	2194594	1
Uranium-233/234	U	0.125	+/-0.150	0.217	0.500	pCi/L							
Uranium-235/236	U	0.0839	+/-0.149	0.242	0.500	pCi/L							
Uranium-238	U	0.0414	+/-0.109	0.196	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	1.47	+/-1.66	2.67	5.00	pCi/L			JXK3	11/20/21	1158	2194592	2
Beta	U	-0.0129	+/-2.44	4.40	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-2.09	+/-2.10	3.68	5.00	pCi/L			AG2	11/21/21	1304	2194675	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			104	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "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	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-110-2021-Q4	Project: WNUC01022
Sample ID: 560980016	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 26-OCT-21 13:23	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
<b>Rad Alpha Spec Analysis</b>												
<b>Alphaspec U, Liquid "As Received"</b>												
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925 2194594	1
Uranium-233/234	U	0.185	+/-0.275	0.445	0.500	pCi/L						
Uranium-235/236	U	-0.0283	+/-0.125	0.327	0.500	pCi/L						
Uranium-238	U	0.170	+/-0.237	0.353	0.500	pCi/L						
<b>Rad Gas Flow Proportional Counting</b>												
<b>GFPC, Gross Alpha Liquid "As Received"</b>												
Alpha		2.35	+/-1.76	2.20	5.00	pCi/L			JXK3	11/20/21	1158 2194592	2
Beta	U	0.581	+/-2.47	4.37	5.00	pCi/L						
<b>Rad Liquid Scintillation Analysis</b>												
<b>Liquid Scint Tc99, Liquid "As Received"</b>												
Technetium-99	U	-0.997	+/-2.15	3.72	5.00	pCi/L			AG2	11/21/21	1356 2194675	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			58.3	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			94.2	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-111-2021-Q4	Project: WNUC01022
Sample ID: 560980017	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 26-OCT-21 11:59	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925	2194594	1
Uranium-233/234	U	0.0169	+/-0.176	0.367	0.500	pCi/L							
Uranium-235/236	U	0.0932	+/-0.160	0.140	0.500	pCi/L							
Uranium-238	U	0.0769	+/-0.153	0.249	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	0.989	+/-1.97	3.65	5.00	pCi/L			JXK3	11/20/21	1134	2194592	2
Beta	U	1.15	+/-1.88	3.24	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-3.04	+/-2.12	3.76	5.00	pCi/L			AG2	11/21/21	1448	2194675	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			75.6	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93.9	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-112-2021-Q4	Project: WNUC01022
Sample ID: 560980018	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 26-OCT-21 09:30	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925	2194594	1
Uranium-233/234	U	-0.00762	+/-0.143	0.315	0.500	pCi/L							
Uranium-235/236	U	0.0195	+/-0.108	0.208	0.500	pCi/L							
Uranium-238	U	0.00122	+/-0.0901	0.200	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.214	+/-1.32	3.46	5.00	pCi/L			JXK3	11/20/21	1134	2194592	2
Beta	U	-3.42	+/-1.87	4.36	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.760	+/-2.30	3.99	5.00	pCi/L			AG2	11/22/21	0715	2194675	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			91.5	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			97.7	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-124-2021-Q4	Project: WNUC01022
Sample ID: 560980019	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 25-OCT-21 12:55	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925	2194594	1
Uranium-233/234	U	-0.0122	+/-0.157	0.352	0.500	pCi/L							
Uranium-235/236	U	0.0128	+/-0.134	0.280	0.500	pCi/L							
Uranium-238	U	0.0297	+/-0.133	0.260	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.259	+/-1.43	3.56	5.00	pCi/L			JXK3	11/20/21	1134	2194592	2
Beta	U	1.59	+/-2.37	4.08	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-1.69	+/-2.10	3.66	5.00	pCi/L			AG2	11/21/21	1631	2194675	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			82.8	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			96.3	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-125-2021-Q4	Project: WNUC01022
Sample ID: 560980020	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 25-OCT-21 12:15	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
<b>Rad Alpha Spec Analysis</b>												
<b>Alphaspec U, Liquid "As Received"</b>												
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0925 2194594	1
Uranium-233/234	U	0.0880	+/-0.172	0.302	0.500	pCi/L						
Uranium-235/236	U	0.0279	+/-0.105	0.176	0.500	pCi/L						
Uranium-238	U	0.0250	+/-0.125	0.249	0.500	pCi/L						
<b>Rad Gas Flow Proportional Counting</b>												
<b>GFPC, Gross Alpha Liquid "As Received"</b>												
Alpha	U	2.74	+/-2.91	4.62	5.00	pCi/L			JXK3	11/20/21	1134 2194592	2
Beta		6.77	+/-2.93	4.14	5.00	pCi/L						
<b>Rad Liquid Scintillation Analysis</b>												
<b>Liquid Scint Tc99, Liquid "As Received"</b>												
Technetium-99	U	1.15	+/-2.20	3.72	5.00	pCi/L			AG2	11/21/21	1722 2194675	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			98.4	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			96.6	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: W-126-2021-Q4	Project: WNUC01022
Sample ID: 560980021	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 25-OCT-21 10:16	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
<b>Rad Alpha Spec Analysis</b>												
<b>Alphaspec U, Liquid "As Received"</b>												
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0927 2194594	1
Uranium-233/234	U	-0.182	+/-0.130	0.433	0.500	pCi/L						
Uranium-235/236	U	-0.0761	+/-0.107	0.351	0.500	pCi/L						
Uranium-238	U	-0.0147	+/-0.137	0.318	0.500	pCi/L						
<b>Rad Gas Flow Proportional Counting</b>												
<b>GFPC, Gross Alpha Liquid "As Received"</b>												
Alpha		4.23	+/-2.91	3.39	5.00	pCi/L			JXK3	11/20/21	1134 2194592	2
Beta		4.02	+/-2.35	3.32	5.00	pCi/L						
<b>Rad Liquid Scintillation Analysis</b>												
<b>Liquid Scint Tc99, Liquid "As Received"</b>												
Technetium-99	U	-1.13	+/-2.19	3.80	5.00	pCi/L			AG2	11/21/21	1814 2194675	3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			100	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			93	(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
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

# GEL LABORATORIES LLC

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

## Certificate of Analysis

Report Date: November 24, 2021

Company : Westinghouse Electric Company, LLC  
Address : PO Drawer R

Columbia, South Carolina 29205

Contact: Ms. Cynthia Teague  
Project: Ground Water Well Liquid Analysis

Client Sample ID: EB-01-102621	Project: WNUC01022
Sample ID: 560980022	Client ID: WNUC010
Matrix: Ground Water	
Collect Date: 26-OCT-21 13:44	
Receive Date: 03-NOV-21	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
<b>Rad Alpha Spec Analysis</b>													
<b>Alphaspec U, Liquid "As Received"</b>													
Pct Uranium-235	U	0.000				percent			MXS2	11/20/21	0928	2194594	1
Uranium-233/234	U	-0.0956	+/-0.140	0.411	0.500	pCi/L							
Uranium-235/236	U	0.111	+/-0.220	0.357	0.500	pCi/L							
Uranium-238	U	-0.0948	+/-0.108	0.368	0.500	pCi/L							
<b>Rad Gas Flow Proportional Counting</b>													
<b>GFPC, Gross Alpha Liquid "As Received"</b>													
Alpha	U	-0.0626	+/-0.648	2.11	5.00	pCi/L		JXK3	11/20/21	1134	2194592		2
Beta	U	-2.15	+/-1.66	3.92	5.00	pCi/L							
<b>Rad Liquid Scintillation Analysis</b>													
<b>Liquid Scint Tc99, Liquid "As Received"</b>													
Technetium-99	U	-0.642	+/-2.25	3.88	5.00	pCi/L		AG2	11/21/21	1906	2194675		3

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	DOE EML HASL-300, U-02-RC Modified	
2	EPA 900.0/SW846 9310	
3	DOE EML HASL-300, Tc-02-RC Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Uranium-232 Tracer	Alphaspec U, Liquid "As Received"			82.2	(15%-125%)
Technetium-99m Tracer	Liquid Scint Tc99, Liquid "As Received"			89.9	(15%-125%)

**Notes:**

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

Column headers are defined as follows:

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

# GEL LABORATORIES LLC

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

## QC Summary

Report Date: November 24, 2021

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Westinghouse Electric Company, LLC  
 PO Drawer R  
 Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 560980

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2195676										
QC1204953048	560980001	DUP									
Uranium-234	U	ND	U	ND	ug/L	N/A			SKJ	11/17/21	16:40
Uranium-235	U	ND	U	ND	ug/L	N/A				11/17/21	11:59
Uranium-238	J	0.0700	U	ND	ug/L	200	^				
QC1204953051	560980007	DUP									
Uranium-234	U	ND	U	ND	ug/L	N/A				11/17/21	16:59
Uranium-235	U	ND	U	ND	ug/L	N/A				11/17/21	12:18
Uranium-238	U	ND	U	ND	ug/L	N/A					
QC1204953047	LCS										
Uranium-235	0.360			0.362	ug/L		100	(85%-115%)		11/17/21	11:56
Uranium-238	49.6			50.8	ug/L		102	(85%-115%)			
QC1204953059	LCS										
Uranium-234	0.550			0.569	ug/L		103	(85%-115%)		11/17/21	16:36
QC1204953046	MB										
Uranium-234			U	ND	ug/L					11/17/21	16:34
Uranium-235			U	ND	ug/L					11/17/21	11:54
Uranium-238			U	ND	ug/L						

# GEL LABORATORIES LLC

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## QC Summary

Workorder: **560980**

Page 2 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2195676										
QC1204953049	560980001	MS									
Uranium-235	0.360	U	ND	0.367	ug/L		102	(75%-125%)	SKJ	11/17/21	12:01
Uranium-238	49.6	J	0.0700	50.2	ug/L		101	(75%-125%)			
QC1204953052	560980007	MS									
Uranium-235	0.360	U	ND	0.374	ug/L		104	(75%-125%)		11/17/21	12:20
Uranium-238	49.6	U	ND	51.4	ug/L		104	(75%-125%)			
QC1204953060	560980001	MS									
Uranium-234	0.550	U	ND	0.566	ug/L		103	(75%-125%)		11/17/21	16:41
QC1204953061	560980007	MS									
Uranium-234	0.550	U	ND	0.562	ug/L		102	(75%-125%)		11/17/21	17:01
QC1204953050	560980001	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	16:43
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	12:02
Uranium-238		J	0.0700	U	ND	ug/L	N/A	(0%-10%)			
QC1204953053	560980007	SDILT									
Uranium-234		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	17:03
Uranium-235		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/17/21	12:21
Uranium-238		U	ND	U	ND	ug/L	N/A	(0%-10%)			
Batch	2195679										
QC1204953064	560980016	DUP									
Uranium-234		U	ND	U	ND	ug/L	N/A		SKJ	11/17/21	16:11

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## QC Summary

Workorder: 560980

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Metals Analysis - ICPMS</b>											
Batch	2195679										
Uranium-235	U	ND	U	ND	ug/L	N/A			SKJ	11/17/21	11:32
Uranium-238	J	0.0693	U	ND	ug/L	200	^				
QC1204953063	LCS										
Uranium-235	0.360			0.370	ug/L		103	(85%-115%)		11/17/21	11:28
Uranium-238	49.6			51.3	ug/L		103	(85%-115%)			
QC1204953067	LCS										
Uranium-234	0.550			0.565	ug/L		103	(85%-115%)		11/17/21	16:08
QC1204953062	MB										
Uranium-234			U	ND	ug/L					11/17/21	16:06
Uranium-235			U	ND	ug/L					11/17/21	11:27
Uranium-238			U	ND	ug/L						
QC1204953065	560980016 MS										
Uranium-235	0.360	U	ND	0.375	ug/L		104	(75%-125%)		11/17/21	11:33
Uranium-238	49.6	J	0.0693	51.4	ug/L		103	(75%-125%)			
QC1204953068	560980016 MS										
Uranium-234	0.550	U	ND	0.573	ug/L		104	(75%-125%)		11/17/21	16:13
QC1204953066	560980016 SDILT										
Uranium-234	U	ND	U	ND	ug/L	N/A		(0%-10%)		11/17/21	16:15
Uranium-235	U	ND	U	ND	ug/L	N/A		(0%-10%)		11/17/21	11:35
Uranium-238	J	0.0693	U	ND	ug/L	N/A		(0%-10%)			

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## QC Summary

Workorder: 560980

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

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J See case narrative for an explanation
- J Value is estimated
- N Metals--The Matrix spike sample recovery is not within specified control limits
- N/A RPD or %Recovery limits do not apply.
- N1 See case narrative
- 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
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- 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.

# GEL LABORATORIES LLC

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## QC Summary

Report Date: November 24, 2021

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Westinghouse Electric Company, LLC  
 PO Drawer R  
 Columbia, South Carolina

Contact: Ms. Cynthia Teague

Workorder: 560980

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Alpha Spec</b>											
Batch	2194594										
QC1204950461	560980007	DUP									
Pct Uranium-235	U	0.000	U	0.000	percent	N/A		N/A	MXS2	11/20/21	09:29
Uranium-233/234	U	0.0564	U	-0.0613	pCi/L	N/A		N/A			
	Uncertainty	+/-0.184		+/-0.122							
Uranium-235/236	U	0.0586	U	0.172	pCi/L	N/A		N/A			
	Uncertainty	+/-0.135		+/-0.218							
Uranium-238	U	-0.0449	U	-0.0269	pCi/L	N/A		N/A			
	Uncertainty	+/-0.0724		+/-0.122							
QC1204950462	LCS										
Pct Uranium-235				0.823	percent					11/20/21	09:29
Uranium-233/234				12.5	pCi/L						
	Uncertainty			+/-1.44							
Uranium-235/236				0.711	pCi/L						
	Uncertainty			+/-0.401							
Uranium-238	13.1			13.3	pCi/L		102	(75%-125%)			
	Uncertainty			+/-1.48							
QC1204950460	MB										
Pct Uranium-235			U	0.000	percent					11/20/21	09:29
Uranium-233/234			U	0.0112	pCi/L						
	Uncertainty			+/-0.152							
Uranium-235/236			U	0.0402	pCi/L						
	Uncertainty			+/-0.151							
Uranium-238			U	-0.0308	pCi/L						
	Uncertainty			+/-0.0929							

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## QC Summary

Workorder: **560980**

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Alpha Spec</b>											
Batch	2194595										
QC1204950464	560980001 DUP										
Pct Uranium-235	U	0.000	U	0.000	percent	N/A		N/A	MXS2	11/20/21	09:25
Uranium-233/234	U	-0.0992	U	-0.0850	pCi/L	N/A		N/A			
	Uncertainty	+/-0.157		+/-0.175							
Uranium-235/236	U	-0.0241	U	-0.0272	pCi/L	N/A		N/A			
	Uncertainty	+/-0.106		+/-0.120							
Uranium-238	U	0.0616	U	0.174	pCi/L	N/A		N/A			
	Uncertainty	+/-0.142		+/-0.226							
<b>QC1204950465 LCS</b>											
Pct Uranium-235				0.793	percent					11/20/21	09:25
Uranium-233/234				13.6	pCi/L						
	Uncertainty			+/-1.31							
Uranium-235/236				0.670	pCi/L						
	Uncertainty			+/-0.334							
Uranium-238	13.2			13.0	pCi/L		98.5	(75%-125%)			
	Uncertainty			+/-1.28							
<b>QC1204950463 MB</b>											
Pct Uranium-235			U	0.000	percent					11/20/21	09:25
Uranium-233/234			U	0.0784	pCi/L						
	Uncertainty			+/-0.221							
Uranium-235/236			U	-0.0287	pCi/L						
	Uncertainty			+/-0.127							
Uranium-238			U	-0.0464	pCi/L						
	Uncertainty			+/-0.107							
<b>Rad Gas Flow</b>											
Batch	2194592										
QC1204950451	560980007 DUP										
Alpha	U	0.893	U	0.340	pCi/L	N/A		N/A	JXK3	11/20/21	11:34
	Uncertainty	+/-2.20		+/-1.60							

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## QC Summary

Workorder: 560980

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	2194592										
Beta	U	2.22	U	-0.369	pCi/L	N/A		N/A	JXK3	11/20/21	11:34
	Uncertainty	+/-2.26		+/-2.61							
QC1204950454	LCS										
Alpha		120		110	pCi/L		91.8	(75%-125%)		11/20/21	11:36
	Uncertainty			+/-10.6							
Beta		449		483	pCi/L		108	(75%-125%)			
	Uncertainty			+/-16.5							
QC1204950450	MB										
Alpha			U	-0.0515	pCi/L					11/20/21	11:34
	Uncertainty			+/-1.11							
Beta			U	-0.103	pCi/L						
	Uncertainty			+/-2.58							
QC1204950452	560980007 MS										
Alpha	497 U	0.893		483	pCi/L		97.2	(75%-125%)		11/20/21	11:34
	Uncertainty	+/-2.20		+/-48.5							
Beta	1860 U	2.22		1960	pCi/L		105	(75%-125%)			
	Uncertainty	+/-2.26		+/-68.9							
QC1204950453	560980007 MSD										
Alpha	559 U	0.893		497	pCi/L	2.71	88.9	(0%-20%)		11/20/21	11:36
	Uncertainty	+/-2.20		+/-50.0							
Beta	2090 U	2.22		2190	pCi/L	11.4	105	(0%-20%)			
	Uncertainty	+/-2.26		+/-76.0							
Batch	2194593										
QC1204950456	560980001 DUP										
Alpha	U	2.10	U	1.24	pCi/L	N/A		N/A	JXK3	11/20/21	10:29
	Uncertainty	+/-2.10		+/-1.45							
Beta		5.86	U	1.30	pCi/L	127*		(0% - 100%)			
	Uncertainty	+/-3.04		+/-2.21							
QC1204950459	LCS										
Alpha		121		99.9	pCi/L		82.5	(75%-125%)		11/20/21	10:29
	Uncertainty			+/-10.7							
Beta		454		459	pCi/L		101	(75%-125%)			
	Uncertainty			+/-16.4							

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## QC Summary

Workorder: **560980**

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Gas Flow</b>											
Batch	2194593										
QC1204950455	MB										
Alpha			U	2.10	pCi/L				JXK3	11/20/21	10:29
	Uncertainty			+/-1.80							
Beta			U	0.583	pCi/L						
	Uncertainty			+/-1.73							
QC1204950457	560980001	MS									
Alpha	491 U	2.10		464	pCi/L		94.6	(75%-125%)		11/20/21	10:29
	Uncertainty	+/-2.10		+/-45.0							
Beta	1840	5.86		1860	pCi/L		101	(75%-125%)			
	Uncertainty	+/-3.04		+/-66.8							
QC1204950458	560980001	MSD									
Alpha	478 U	2.10		475	pCi/L	2.36	99.3	(0%-20%)		11/20/21	10:29
	Uncertainty	+/-2.10		+/-49.7							
Beta	1790	5.86		1830	pCi/L	1.85	102	(0%-20%)			
	Uncertainty	+/-3.04		+/-67.0							
<b>Rad Liquid Scintillation</b>											
Batch	2194669										
QC1204950702	560980001	DUP									
Technetium-99	U	-0.986	U	-0.387	pCi/L	N/A			N/A	AG2	11/22/21 01:03
	Uncertainty	+/-2.02		+/-2.06							
QC1204950704	LCS										
Technetium-99	127			125	pCi/L		97.8	(75%-125%)		11/22/21	01:55
	Uncertainty			+/-4.01							
QC1204950701	MB										
Technetium-99			U	0.493	pCi/L					11/22/21	00:11
	Uncertainty			+/-2.10							
Batch	2194675										
QC1204950718	560980007	DUP									
Technetium-99	U	-2.85	U	-1.44	pCi/L	N/A			N/A	AG2	11/21/21 20:49
	Uncertainty	+/-2.17		+/-2.20							
QC1204950719	LCS										
Technetium-99	127			125	pCi/L		98.5	(75%-125%)		11/21/21	21:41
	Uncertainty			+/-4.42							

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## QC Summary

Workorder: 560980

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
<b>Rad Liquid Scintillation</b>											
Batch	2194675										
QC1204950717	MB										
Technetium-99			U	-1.31	pCi/L				AG2	11/21/21	19:58
	Uncertainty			+/-2.01							

### 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.
- NI See case narrative
- 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
- 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

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## QC Summary

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<u>Parmname</u>	<u>NOM</u>	<u>Sample Qual</u>	<u>QC</u>	<u>Units</u>	<u>RPD%</u>	<u>REC%</u>	<u>Range</u>	<u>Anlst</u>	<u>Date</u>	<u>Time</u>
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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.

**Technical Case Narrative  
Westinghouse Electric Company PO  
SDG #: 560980**

**Metals**

**Product:** Determination of Metals by ICP-MS

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-MA-E-014 REV# 35

**Analytical Batch:** 2195676

**Preparation Method:** EPA 200.2

**Preparation Procedure:** GL-MA-E-016 REV# 18

**Preparation Batch:** 2195672

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560980001	W-3A-2021-Q4
560980002	W-4R-2021-Q4
560980003	W-20-2021-Q4
560980004	W-25-2021-Q4
560980005	W-94-2021-Q4
560980006	W-95-2021-Q4
560980007	W-96-2021-Q4
560980008	W-97-2021-Q4
560980009	W-97-2021-Q4-Dup
560980010	W-104-2021-Q4
560980011	W-105-2021-Q4
560980012	W-107-2021-Q4
560980013	W-108-2021-Q4
560980014	W-108-2021-Q4-Dup
560980015	W-109-2021-Q4
1204953046	Method Blank (MB)ICP-MS
1204953047	Laboratory Control Sample (LCS)
1204953059	Laboratory Control Sample (LCS)
1204953050	560980001(W-3A-2021-Q4L) Serial Dilution (SD)
1204953053	560980007(W-96-2021-Q4L) Serial Dilution (SD)
1204953048	560980001(W-3A-2021-Q4D) Sample Duplicate (DUP)
1204953051	560980007(W-96-2021-Q4D) Sample Duplicate (DUP)
1204953049	560980001(W-3A-2021-Q4S) Matrix Spike (MS)
1204953052	560980007(W-96-2021-Q4S) Matrix Spike (MS)
1204953060	560980001(W-3A-2021-Q4S) Matrix Spike (MS)
1204953061	560980007(W-96-2021-Q4S) Matrix Spike (MS)

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

**Data Summary:**

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, with the following exceptions.

**Calibration Information**

**ICSA/ICSAB Statement**

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

**Product: Determination of Metals by ICP-MS**

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-MA-E-014 REV# 35

**Analytical Batch:** 2195679

**Preparation Method:** EPA 200.2

**Preparation Procedure:** GL-MA-E-016 REV# 18

**Preparation Batch:** 2195678

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560980016	W-110-2021-Q4
560980017	W-111-2021-Q4
560980018	W-112-2021-Q4
560980019	W-124-2021-Q4
560980020	W-125-2021-Q4
560980021	W-126-2021-Q4
560980022	EB-01-102621
1204953062	Method Blank (MB) <b>ICP-MS</b>
1204953063	Laboratory Control Sample (LCS)
1204953067	Laboratory Control Sample (LCS)
1204953066	560980016(W-110-2021-Q4L) Serial Dilution (SD)
1204953064	560980016(W-110-2021-Q4D) Sample Duplicate (DUP)
1204953065	560980016(W-110-2021-Q4S) Matrix Spike (MS)
1204953068	560980016(W-110-2021-Q4S) Matrix Spike (MS)

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

**Data Summary:**

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, with the following exceptions.

**Calibration Information**

**ICSA/ICSAB Statement**

For the ICP-MS analysis, the ICSA solution contains analyte concentrations which are verified trace impurities indigenous to the purchased standard.

**Product: Inorganic Calculations**

**Analytical Method:** EPA 200.8

**Analytical Procedure:** GL-GC-E-107 REV# 10

**Analytical Batch:** 2199267

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
560980001	W-3A-2021-Q4
560980002	W-4R-2021-Q4
560980003	W-20-2021-Q4
560980004	W-25-2021-Q4
560980005	W-94-2021-Q4
560980006	W-95-2021-Q4
560980007	W-96-2021-Q4
560980008	W-97-2021-Q4
560980009	W-97-2021-Q4-Dup
560980010	W-104-2021-Q4
560980011	W-105-2021-Q4
560980012	W-107-2021-Q4
560980013	W-108-2021-Q4
560980014	W-108-2021-Q4-Dup
560980015	W-109-2021-Q4
560980016	W-110-2021-Q4
560980017	W-111-2021-Q4
560980018	W-112-2021-Q4
560980019	W-124-2021-Q4
560980020	W-125-2021-Q4
560980021	W-126-2021-Q4
560980022	EB-01-102621

**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.

## **Radiochemistry**

**Product:** Alphaspec U, Liquid

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

**Analytical Procedure:** GL-RAD-A-011 REV# 28

**Analytical Batch:** 2194594

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
560980007	W-96-2021-Q4
560980008	W-97-2021-Q4
560980009	W-97-2021-Q4-Dup
560980010	W-104-2021-Q4
560980011	W-105-2021-Q4
560980012	W-107-2021-Q4
560980013	W-108-2021-Q4
560980014	W-108-2021-Q4-Dup
560980015	W-109-2021-Q4
560980016	W-110-2021-Q4

560980017	W-111-2021-Q4
560980018	W-112-2021-Q4
560980019	W-124-2021-Q4
560980020	W-125-2021-Q4
560980021	W-126-2021-Q4
560980022	EB-01-102621
1204950460	Method Blank (MB)
1204950461	560980007(W-96-2021-Q4) Sample Duplicate (DUP)
1204950462	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Miscellaneous Information**

**Manual Integration**

Manual integration of alpha spectroscopy spectra 560980008 (W-97-2021-Q4) was performed to fully separate counts in Regions of Interest which would have been biased.

**Additional Comments**

The tracer peak centroid for samples 560980008 (W-97-2021-Q4) and 560980022 (EB-01-102621) are greater than 50 keV from the expected library energy value for the tracer; however, the tracer yield requirement was met and the tracer peaks are within the tracer region of interest.

**Product: Alphaspec U, Liquid**

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

**Analytical Procedure:** GL-RAD-A-011 REV# 28

**Analytical Batch:** 2194595

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560980001	W-3A-2021-Q4
560980002	W-4R-2021-Q4
560980003	W-20-2021-Q4
560980004	W-25-2021-Q4
560980005	W-94-2021-Q4
560980006	W-95-2021-Q4
1204950463	Method Blank (MB)
1204950464	560980001(W-3A-2021-Q4) Sample Duplicate (DUP)
1204950465	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: GFPC, Gross Alpha Liquid**

**Analytical Method:** EPA 900.0/SW846 9310

**Analytical Procedure:** GL-RAD-A-001 REV# 20

**Analytical Batch:** 2194592

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560980007	W-96-2021-Q4
560980008	W-97-2021-Q4
560980009	W-97-2021-Q4-Dup
560980010	W-104-2021-Q4
560980011	W-105-2021-Q4
560980012	W-107-2021-Q4
560980013	W-108-2021-Q4
560980014	W-108-2021-Q4-Dup
560980015	W-109-2021-Q4
560980016	W-110-2021-Q4
560980017	W-111-2021-Q4
560980018	W-112-2021-Q4
560980019	W-124-2021-Q4
560980020	W-125-2021-Q4
560980021	W-126-2021-Q4
560980022	EB-01-102621
1204950450	Method Blank (MB)
1204950451	560980007(W-96-2021-Q4) Sample Duplicate (DUP)
1204950452	560980007(W-96-2021-Q4) Matrix Spike (MS)
1204950453	560980007(W-96-2021-Q4) Matrix Spike Duplicate (MSD)
1204950454	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Technical Information**

**Gross Alpha/Beta Preparation Information**

High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium,

polonium and cesium may be lost during sample heating.

**Miscellaneous Information**

**Additional Comments**

The matrix spike and matrix spike duplicate, 1204950452 (W-96-2021-Q4MS) and 1204950453 (W-96-2021-Q4MSD), aliquots were reduced to conserve sample volume.

**Product: GFPC, Gross Alpha Liquid**

**Analytical Method:** EPA 900.0/SW846 9310

**Analytical Procedure:** GL-RAD-A-001 REV# 20

**Analytical Batch:** 2194593

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560980001	W-3A-2021-Q4
560980002	W-4R-2021-Q4
560980003	W-20-2021-Q4
560980004	W-25-2021-Q4
560980005	W-94-2021-Q4
560980006	W-95-2021-Q4
1204950455	Method Blank (MB)
1204950456	560980001(W-3A-2021-Q4) Sample Duplicate (DUP)
1204950457	560980001(W-3A-2021-Q4) Matrix Spike (MS)
1204950458	560980001(W-3A-2021-Q4) Matrix Spike Duplicate (MSD)
1204950459	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Quality Control (QC) Information**

**Duplication Criteria between QC Sample and Duplicate Sample**

The Sample and the Duplicate, (See Below), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with the value listed below.

<b>Sample</b>	<b>Analyte</b>	<b>Value</b>
1204950456 (W-3A-2021-Q4DUP)	Beta	RPD 127* (0.0%-100.0%) RER 2.3 (0-3)

**Technical Information**

**Gross Alpha/Beta Preparation Information**

High hygroscopic salt content in evaporated samples can cause the sample mass to fluctuate due to moisture

absorption. To minimize this interference, the salts are converted to oxides by heating the sample under a flame until a dull red color is obtained. The conversion to oxides stabilizes the sample weight and ensures that proper alpha/beta efficiencies are assigned for each sample. Volatile radioisotopes of carbon, hydrogen, technetium, polonium and cesium may be lost during sample heating.

**Miscellaneous Information**

**Additional Comments**

The matrix spike and matrix spike duplicate, 1204950457 (W-3A-2021-Q4MS) and 1204950458 (W-3A-2021-Q4MSD), aliquots were reduced to conserve sample volume.

**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:** 2194669

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560980001	W-3A-2021-Q4
560980002	W-4R-2021-Q4
560980003	W-20-2021-Q4
560980004	W-25-2021-Q4
560980005	W-94-2021-Q4
560980006	W-95-2021-Q4
560980008	W-97-2021-Q4
560980009	W-97-2021-Q4-Dup
560980010	W-104-2021-Q4
560980011	W-105-2021-Q4
560980012	W-107-2021-Q4
1204950701	Method Blank (MB)
1204950702	560980001(W-3A-2021-Q4) Sample Duplicate (DUP)
1204950704	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:** 2194675

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

<b><u>GEL Sample ID#</u></b>	<b><u>Client Sample Identification</u></b>
560980007	W-96-2021-Q4
560980013	W-108-2021-Q4
560980014	W-108-2021-Q4-Dup
560980015	W-109-2021-Q4
560980016	W-110-2021-Q4
560980017	W-111-2021-Q4
560980018	W-112-2021-Q4
560980019	W-124-2021-Q4
560980020	W-125-2021-Q4
560980021	W-126-2021-Q4
560980022	EB-01-102621
1204950717	Method Blank (MB)
1204950718	560980007(W-96-2021-Q4) Sample Duplicate (DUP)
1204950719	Laboratory Control Sample (LCS)

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

**Data Summary:**

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, with the following exceptions.

**Technical Information**

**Recounts**

Sample 560980018 (W-112-2021-Q4) was recounted due to results more negative than the three sigma TPU. The second count is reported.

**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.

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered:		Sample Analysis Requested (5) (Fill in the number of containers for each test)						Preservative Type (6)	Comments
						Yes, please supply isotopic info.	(7) Known or possible Hazards	Total number of containers	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)		
W-3A-2021-Q4	10/25/2021	0957	G	N	GW			2	X	X	X	X	X	*	Preservative Lot #201942 *Must perform Gamma TENORM if gross beta is > 50 pCi/L
W-3A-2021-Q4-MS	10/25/2021	0957	G	N	GW			2	X	X	X	X	X	*	Preservative Lot #201942
W-3A-2021-Q4-MSD	10/25/2021	0957	G	N	GW			2	X	X	X	X	X	*	Preservative Lot #201942
W-4R-2021-Q4	10/25/2021	0903	G	N	GW			2	X	X	X	X	X	*	Preservative Lot #201942
W-20-2021-Q4	10/26/2021	1103	G	N	GW			2	X	X	X	X	X	*	Preservative Lot #207555 *Must perform Gamma TENORM if gross beta is > 50 pCi/L
W-25-2021-Q4	10/26/2021	1209	G	N	GW			2	X	X	X	X	X	*	Preservative Lot #207555

**Chain of Custody Signatures**  
 Relinquished By (Signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 Received by (signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 1. Randy Crews 11/03/2021 0948  
 2. DDO 11/3/21 1538  
 3. \_\_\_\_\_  
 Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4  
 Additional Remarks:  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 21 °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other:

**For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)**  
 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  
 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 = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal  
 5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B 7-170A - 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  
 7.) **KNOWN OR POSSIBLE HAZARDS**  
 Characteristic Hazards  
 FL = Flammable/Ignitable  
 CO = Corrosive  
 RE = Reactive  
 Listed Waste  
 LW = Listed Waste  
 (F, K, P and U-listed wastes.)  
 Waste code(s):  
 Other  
 OT = Other / Unknown  
 (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)  
 Description:  
 TSCA Regulated  
 PCB = Polychlorinated biphenyls  
 RCRA Metals  
 As = Arsenic Hg = Mercury  
 Ba = Barium Se = Selenium  
 Cd = Cadmium Ag = Silver  
 Cr = Chromium MR = Misc. RCRA metals  
 Pb = Lead  
 Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

Page 2 of 4  
 Project # NIPDES Groundwater Wells  
 Quote #:  
 Job Number (1):  
 Order # 4500822910 Line 2  
 Client Name: Westinghouse  
 Project/Site Name:

GEL Laboratories, LLC  
 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171  
 Fax: (843) 766-1178

**GEL Laboratories LLC**  
 Chemistry | Radiochemistry | Radiobiassay | Specialty Analytics  
**Chain of Custody and Analytical Request**  
 GEL Project Manager: S. Hogan  
 Phone # 803.647.1920  
 Fax # 803.695.3964  
 Address: 5801 Bluff Road, Hopkins, SC 29061  
 Contacted By: Randy Crews *Randy Crews* Send Results To: joynerdp@westinghouse.com

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (1)	Field Filtered (2)	Sample Matrix (3)	Sample Analysis Requested (5) (Fill in the number of containers for each test)							Comments
						Should this sample be considered: (7) Known or possible Hazards (Yes, please supply isotopic info.)	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)	Gamma TENORM	
W-94-2021-Q4	10/26/2021	1024	G	N	GW		X	X	X	X	X	X	Preservative Lot #207555
W-95-2021-Q4	10/26/2021	1113	G	N	GW		X	X	X	X	X	X	Preservative Lot #207555
W-96-2021-Q4	10/25/2021	0855	G	N	GW		X	X	X	X	X	X	Preservative Lot #201942
W-96-2021-Q4-MS	10/25/2021	0855	G	N	GW		X	X	X	X	X	X	Preservative Lot #201942
W-96-2021-Q4-MSD	10/25/2021	0855	G	N	GW		X	X	X	X	X	X	Preservative Lot #201942
W-97-2021-Q4	10/25/2021	1350	G	N	GW		X	X	X	X	X	X	Preservative Lot #201942
W-97-2021-Q4-Dup	10/25/2021	1350	G	N	GW		X	X	X	X	X	X	Preservative Lot #201942
W-104-2021-Q4	10/25/2021	1146	G	N	GW		X	X	X	X	X	X	Preservative Lot #201942

**Chain of Custody Signatures**

Relinquished By (Signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received by (signed) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

1. R. Crews (Secure Location) 11/3/2021 0948 *Randy Crews* 11/3/21 1132 AM 1538

2. *Randy Crews* 11/3/21 1538

3. \_\_\_\_\_

TAT Requested: Normal:  Rush:  Specify: \_\_\_\_\_

Fax Results:  Yes  No

Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4

Additional Remarks: \_\_\_\_\_

For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 21 °C

Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other: \_\_\_\_\_

**For sample shipping and delivery details, see Sample Receipt & Review form (SRR.)**

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

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 = Misc Liquid, SO = Soil, SD = Sediment, SL = Sludge, SS = Solid Waste, O = Oil, F = Filter, P = Wipe, U = Urine, F = Fecal, N = Nasal

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

7.) **KNOWN OR POSSIBLE HAZARDS**

<b>RCRA Metals</b>	<b>Characteristic Hazards</b>	<b>Listed Waste</b>
As = Arsenic Ba = Barium Cd = Cadmium Cr = Chromium Pb = Lead	FL = Flammable/ignitable CO = Corrosive RE = Reactive	LW = Listed Waste (F, K, P and U-listed wastes.) Waste code(s):
Hg = Mercury Se = Selenium Ag = Silver MR = Misc. RCRA metals	TSCA Regulated PCB = Polychlorinated biphenyls	Other OT = Other / Unknown (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.) Description:

Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

**GEL Laboratories LLC**  
 Chemistry | Radiochemistry | Radiobiology | Speciality Analytics  
**Chain of Custody and Analytical Request**  
 GEL Work Order Number:                       
 Phone # 803.647.1920  
 Fax # 803.695.3964  
 GEL Laboratories, LLC  
 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171  
 Fax: (843) 766-1178

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (b)	Field Filtered (b)	Sample Matrix (a)	Should this sample be considered:		Sample Analysis Requested (6) (Fill in the number of containers for each test)							Comments			
						(7) Known or possible Hazards	Radioactive (if yes, please supply isotopic info.)	Total number of containers	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)	Gamma TENORM		NI	NI	NI
W-105-2021-Q4	10/25/2021	1126	G	N	GW			2	X	X	X	X	X					Preservative Lot #201942
W-107-2021-Q4	10/26/2021	1255	G	N	GW			2	X	X	X	X	X					Preservative Lot #207555
W-108-2021-Q4	10/25/2021	1320	G	N	GW			2	X	X	X	X	X					Preservative Lot #201942
W-108-2021-Q4-Dup	10/25/2021	1320	G	N	GW			2	X	X	X	X	X					Preservative Lot #201942
W-109-2021-Q4	10/26/2021	0957	G	N	GW			2	X	X	X	X	X					Preservative Lot #207555
W-110-2021-Q4	10/26/2021	1323	G	N	GW			2	X	X	X	X	X					Preservative Lot #207555
W-111-2021-Q4	10/26/2021	1159	G	N	GW			2	X	X	X	X	X					Preservative Lot #207555
W-112-2021-Q4	10/26/2021	0930	G	N	GW			2	X	X	X	X	X					Preservative Lot #207555

**Chain of Custody Signatures**

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
<u>[Signature]</u>	11/3/2021	0948	<u>[Signature]</u>	11/3/21	1132
<u>[Signature]</u>	11/3/21	1538	<u>[Signature]</u>	11/3/21	1538

TAT Requested: Normal:  Rush:  Specify:                       
 Fax Results:  Yes  No  
 Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4  
 Additional Remarks:                       
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 21 °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other:                     

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  
 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=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal  
 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, Hex = Hexane, ST = Sodium Thiosulfate. If no preservative is added = leave field blank  
 7.) **KNOWN OR POSSIBLE HAZARDS**  
 Characteristic Hazards:                       
 FL = Flammable/Ignitable  
 CO = Corrosive  
 RE = Reactive  
 Listed Waste:                       
 LW = Listed Waste  
 (F,K,P and U-listed wastes.)  
 Waste code(s):                       
 TSCA Regulated:                       
 PCB = Polychlorinated biphenyls  
 RCRA Metals:                       
 As = Arsenic Hg= Mercury  
 Ba = Barium Se= Selenium  
 Cd = Cadmium Ag= Silver  
 Cr = Chromium MR= Misc. RCRA metals  
 Pb = Lead  
 Other:                       
 OT= Other / Unknown  
 (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)  
 Description:                       
 Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

GEL Laboratories, LLC  
 Chemistry | Radiochemistry | Radiobiology | Speciality Analytics  
 2040 Savage Road  
 Charleston, SC 29407  
 Phone: (843) 556-8171  
 Fax: (843) 766-1178

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code	Field Filtered	Sample Matrix	Radiative (if yes, please supply isotopic info.)	Should this sample be considered:	Total number of containers	ISO U (by individual isotope, ICP-MS)	gross alpha	gross beta	Tc-99	Total U (by ICP-MS)	Gamma TENORM	Trinium	Comments
W-124-2021-Q4	10/25/2021	1255	G	N	GW	(7) Known or possible Hazards		2	X	X	X	X	X			Preservative Lot #201942
W-125-2021-Q4	10/25/2021	1215	G	N	GW			2	X	X	X	X	X			Preservative Lot #201942
W-126-2021-Q4	10/25/2021	1016	G	N	GW			2	X	X	X	X	X			Preservative Lot #201942
EB-01-102621	10/26/2021	1344	G	N	GW			2	X	X	X	X	X			Preservative Lot #207555

Chain of Custody Signatures		
Relinquished By (Signed)	Date	Time
<i>[Signature]</i>	11/3/2021	0948
<i>[Signature]</i>	11/3/21	1530

For sample shipping and delivery details, see Sample Receipt & Review form (SRR)

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

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, ML=Misc Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal

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

7.) **KNOWN OR POSSIBLE HAZARDS**

RCRA Metals	As = Arsenic	Hg = Mercury	Se = Selenium
Ba = Barium	Cd = Cadmium	Cr = Chromium	MR = Misc. RCRA metals
Pb = Lead	Ag = Silver	PCB = Polychlorinated biphenyls	

**Characteristics Hazards**

FL = Flammable/Ignitable  
 CO = Corrosive  
 RE = Reactive

**Listed Waste**

LW = Listed Waste  
 (F, K, P and U-listed wastes.)  
 Waste code(s):

**Other**

OT = Other / Unknown  
 (i.e.: High/low pH, asbestos, beryllium, irritants, other misc. health hazards, etc.)  
 Description:

**TAT Requested: Normal: X Rush: Specify: (Subject to Surcharge)**

Fax Results:  Yes  No

Select Deliverable:  C of A  QC Summary  Level 1  Level 2  Level 3  Level 4

Additional Remarks:  
 For Lab Receiving Use Only: Custody Seal Intact?  Yes  No Cooler Temp: 21 °C  
 Sample Collection Time Zone:  Eastern  Pacific  Central  Mountain  Other:

Please provide any additional details below regarding handling and/or disposal concerns. (i.e.: Origin of sample(s), type of site collected from, odd matrices, etc.)

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Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: WNUC SDG/AR/COC/Work Order: 560 980

Received By: BE Date Received: 11/03/21

Carrier and Tracking Number  
Circle Applicable:  
FedEx Express FedEx Ground UPS Field Services Courier Other

Suspected Hazard Information Yes No \*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.

A) Shipped as a DOT Hazardous? Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes \_\_\_ No \_\_\_

B) Did the client designate the samples are to be received as radioactive? COC notation or radioactive stickers on containers equal client designation.

C) Did the RSO classify the samples as radioactive? Maximum Net Counts Observed\* (Observed Counts - Area Background Counts): CPM mR/Hr Classified as Rad 1 Rad 2 Rad 3

D) Did the client designate samples are hazardous? COC notation or hazard labels on containers equal client designation.

E) Did the RSO identify possible hazards? If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Preservation Method: Wet Ice Ice Packs Dry ice <u>None</u> Other: TEMP: <u>21</u> *all temperatures are recorded in Celsius
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>IR2-21</u> Secondary Temperature Device Serial # (If Applicable):
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#:
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided by use of GEL labels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials STB Date 11/4/21 Page 1 of 1

**List of current GEL Certifications as of 24 November 2021**

<b>State</b>	<b>Certification</b>
Alabama	42200
Alaska	17-018
Alaska Drinking Water	SC00012
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
Massachusetts PFAS Approv	Letter
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122021-1
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	2019-165
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
Sanitation Districts of L	9255651
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-21-19
Utah NELAP	SC000122021-36
Vermont	VT87156
Virginia NELAP	460202
Washington	C780