



Westinghouse Electric Company
Nuclear Fuel
Columbia Fuel Fabrication Facility
5801 Bluff Road
Hopkins, South Carolina 29061
USA

SCDHEC, BLWM
Kim Kuhn
2600 Bull Street
Columbia, SC 29201

Direct tel: 803.647.1920
Direct fax: 803.695.3964
e-mail: joynerdp@westinghouse.com
Your ref:
Our ref: LTR-RAC-21-46

June 15, 2021

Subject: **May** 2021 CA Progress Report

Ms. Kuhn:

In accordance with Item 19 of Consent Agreement (CA) 19-02-HW, this progress report is being submitted to you, including the following requested information:

- (a) a brief description of the actions which Westinghouse has taken toward achieving compliance with the Consent Agreement during the previous month;
- (b) results of sampling and tests, in tabular summary format received by Westinghouse during the reporting period;
- (c) a brief description of all actions which are scheduled for the next month to achieve compliance with the Consent Agreement, and other information relating to the progress of the work as deemed necessary or requested by the Department; and
- (d) information regarding the percentage of work completed and any delays encountered or anticipated that may affect the approved schedule for implementation of the terms of the Consent Agreement, and a description of efforts made to mitigate delays or avoid anticipated delays.

In response to the above requirements, the following is being reported to the Department since the last progress report submitted on **May 12, 2021**. The following progress report is for work occurring from **May 1-31, 2021**:

- (a) Actions during the previous month:
Westinghouse began implementation of the Final Remedial Investigation (RI) Work Plan on 6/10/19. To comply with **Item 4** of the CA, the following actions were completed this month.
 - Completed the following to support the **Phase II RI** Work Plan:
 - Installed the pressure transducers in monitoring wells W-16 and W-105.

- Installed a site rain gauge to correlate rainfall events with surface water fluctuations and groundwater infiltration.
- Completed groundwater screening sampling from upper zone of the Surficial Aquifer at previous locations (L-45 through L-47). Analytical results are included in this report as **Attachment A**.
- Completed groundwater screening sampling from four additional locations (L-59 through L-62). Analytical results are included in this report as **Attachment A**.
- Conducted confirmatory soil sampling based upon the results of the soil gas survey (SGS) in the Primary Soil Gas Survey Area. Final analytical results are still pending from the external laboratory. A consolidated data table and graphic of sampling locations will be submitted with the next monthly report.
- Developed a scope of work to repair earthen dam and entrance/exit valves.
- Completed the following to support **East Lagoon Closure** Activities:
 - Hosted DHEC officials during a site visit on May 6 for the purpose of observing soil sampling underneath the East Lagoon liner.
 - Completed soil sampling underneath the East Lagoon liner in 16 locations and 10 additional bias locations. Final analytical results are still pending from the external laboratory. A consolidated data table and graphic of sampling locations will be presented with the next monthly report.
 - Completed a survey of sampling locations and the bottom surface elevation of the East Lagoon prior to liner removal and soil excavation.
 - East Lagoon sludge processing:
 - East Lagoon sludge stabilization ~ 100% complete (2900/2900 yd³).
 - East Lagoon sludge removal ~ 100% Complete (2900/2900 yd³).
 - East Lagoon sludge waste shipments ~ 67% complete (12/18 Rail Shipments).

(b) Results of sampling and tests:

- **Groundwater Screening**

Groundwater screening was conducted in May for the upper zone of the Surficial Aquifer at previous locations L-45 through L-47 and at new locations L-59 through L-62 as part of the Phase II RI Work Plan. Analytical results are included in this report as **Attachment A**.

- **Semi-annual Groundwater Sampling (90 wells)**

Tabulated results of the semi-annual groundwater sampling campaign conducted in April 2021 are included as **Attachment B**.

- **Soil Sampling for Dike Wall Adjacent to East Lagoon**

Westinghouse shared with DHEC on a scheduled weekly call (June 3) that in review of East Lagoon soil sampling results it was discovered that a data set was not previously submitted to the department. The soil sampling data was collected to support construction activities to replace the lagoon with an above ground tank. Soil samples were collected at 2' intervals.

Along the north bank of the lagoon several sample locations were collected down to a depth of five feet, with the last sample in each boring representing the 4-5' depth. A consolidated data table and graphic of the sampling locations are included in this monthly report as **Attachment C**.

(c) Brief description of all actions which are scheduled for the next month:

In accordance with **Item 4** of the CA, Westinghouse will continue to implement the Work Plan to include the following actions:

- Meet with the Department to discuss the status and next steps for the Remedial Investigation Work Plan and updated Conceptual Site Model (CSM).
- Complete a civil engineering assessment of the impacted soil that can be safely excavated from the East Lagoon.
- Remove the hypalon liner from the East Lagoon.
- Begin excavation of impacted soil within the East Lagoon footprint (following the site remediation procedure) and package it for off-site shipment and disposal.
- Host a site visit with DHEC on June 15 to observe Sanitary Lagoon sludge sampling to support closure planning.
- Continue to review a technical basis document to comply with the site's remediation procedure for evaluation of site dose/risk assessment of sediments impacted by historical site operations.

(d) Percentage of work completed and any delays encountered or anticipated:

- 70% of Phase II **field** work scope completed.
- Currently there are no anticipated delays.

Respectfully,



Diana P. Joyner
Principal Environmental Engineer
Westinghouse Electric Company, CFFF
803.497.7062 (m)

cc: N. Parr, Environmental Manager
J. Ferguson, EH&S Manager
J. Grant, AECOM Project Manager
ENOVAI Records

Attachment A: Tabulated Groundwater Screening Results and Laboratory Reports

Attachment B: Tabulated Groundwater Wells Analytical Results (90 wells)

Attachment C: Tabulated Soil Sampling Results for Dike Wall Adjacent to East Lagoon

Attachment A

Tabulated Groundwater Screening Results and Laboratory Reports

L-45 through L-47
L-59 through L-62

Attachment A - May 2021 Groundwater Screening Results
 Westinghouse Columbia Fuel Fabrication Facility, Hopkins, SC

Analyte	Group	VOCs	VOCs	VOCs	VOCs	VOCs	VOCs	VOCs
		1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride
		MCL	7	5	70	5	100	5
Location	Depth	Date	Type					
				ug/L	ug/L	ug/L	ug/L	ug/L
L-45	11 - 15 ft	5/17/2021	N	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
L-45	20 - 24 ft	5/17/2021	N	< 1.0	< 1.0	< 1.0	3.2	< 1.0
L-46	14 - 18 ft	5/14/2021	N	< 1.0	< 1.0	< 1.0	52	< 1.0
L-46	22 - 26 ft	5/17/2021	N	< 1.0	< 1.0	< 1.0	66	< 1.0
L-47	16 - 20 ft	5/13/2021	N	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
L-59	16 - 20 ft	5/10/2021	N	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
L-59	31 - 35 ft	5/10/2021	N	< 1.0	< 1.0	< 1.0	1.2	< 1.0
L-59	46 - 50 ft	5/10/2021	N	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
L-60	16 - 20 ft	5/11/2021	N	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
L-60	26 - 30 ft	5/11/2021	N	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
L-60	36 - 40 ft	5/11/2021	N	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
L-61	15 - 19 ft	5/13/2021	N	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
L-61	25 - 29 ft	5/13/2021	N	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
L-61	25 - 29 ft	5/13/2021	FD	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
L-61	35 - 39 ft	5/13/2021	N	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
L-62	26 - 30 ft	5/14/2021	N	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Notes: N - normal sample

FD - field duplicate sample

MCL - Maximum Contaminant Level

ug/L - micrograms per liter

Bold concentrations indicate detections

Concentrations in shaded cells exceed their MCL



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.
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: 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

Sample Summary
Westinghouse Electric Company
Lot Number: WE17044
Project Name: RI Phase II
Project Number:

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

(4 samples)

PACE ANALYTICAL SERVICES, LLC

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

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: 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

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

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**



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 120087

Client <i>Westinghouse</i>	Report to Contact <i>Diane Joyner</i>	Telephone No. / E-mail <i>joyner@westinghouse.com</i>	Quince No.
Address <i>5801 Bluff Rd.</i>	Sampler's Signature <i>Charles K. Lublith</i>	Analyst (check box if more space is needed)	
City <i>Hopkins</i>	State <i>SC</i> Zip Code <i>29061</i>	Page <u>1</u> of <u>1</u>	
Project Name <i>RJ Park II</i>	Printed Name <i>Chuck Lublith</i>	WE17044	
Project No.	PC. No.	Matrix	No. of Contaminants by Presentation Type
(Confidential No. each sample may be contained in one line.)			
L-46-22-26	5/17/21 0922	6 ^e	X
TB-01-051721	5/17/21 0926	6	X
L-45-11-15	5/17/21 1037	6	X
L-45-20-24	5/17/21 1152	6	X
CVOCs			
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush (Specified)	Possible Hazard Information	
		<input checked="" type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable
		<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Corrosive
		<input type="checkbox"/> Poison	<input type="checkbox"/> Unknown
Turn Around Time Required (Please initial required for expedited RTI)			
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush (Specified)	Sample Disposal	
		<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab	
		<input type="checkbox"/> Skin Irritant <input type="checkbox"/> Corrosive	
		<input type="checkbox"/> Poison <input type="checkbox"/> Unknown	
1. Relinquished by <i>Charles K. Lublith</i> Date <u>5/17/21</u> Time <u>1354</u> 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 received by <i>JKL</i> Date <u>5/17/21</u> Time <u>1354</u>			
Note: All samples are retained for four weeks from receipt unless other arrangements are made.			
		LAB USE ONLY Preserved on ice (Circle) <input checked="" type="checkbox"/> No ice pack	
		Received Temp. <u>5.9</u> °C Temp Blank <u>C Y A N</u>	
DISTRIBUTION: WHITE & YELLOW-Rubber Laboratory Sample(s); PINK-Federal 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: 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 5.9 / 5.9 °C NA / NA °C NA / NA °C NA / NA °C %Solid Snap-Cup ID: NA																																																																														
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																																																																														
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> NA</td> <td>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).</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> NA</td> <td>4. Is the commercial courier's packing slip attached to this form?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td>5. Were proper custody procedures (relinquished/received) followed?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td>6. Were sample IDs listed on the COC?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td>7. Were sample IDs listed on all sample containers?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td>8. Was collection date & time listed on the COC?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td>9. Was collection date & time listed on all sample containers?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td>10. Did all container label information (ID, date, time) agree with the COC?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td>11. Were tests to be performed listed on the COC?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td>12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td>13. Was adequate sample volume available?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td>14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td></td> <td>15. Were any samples containers missing/excess (circle one) samples Not listed on COC?</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td><input type="checkbox"/> NA</td> <td>16. 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SR barcode label's applied by: KSC Date: 05/17/2021																																																																														
Comments: <hr/> <hr/> <hr/> <hr/> <hr/>																																																																														



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**



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: 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

Sample Summary
Westinghouse Electric Company
Lot Number: WE14098
Project Name: RI Phase II
Project Number:

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

(3 samples)

PACE ANALYTICAL SERVICES, LLC

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

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

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

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 120086

Client's Name	Report to Contact	Phone	Email	Telephone No./E-mail	Quote No.
Address	Sampler's Signature	Joyce@ <i>westinghouse.com</i>			
City	Printed Name	Analysis (Attach list if more space is needed)			Page <u>1</u> of <u>1</u>
State	Project Name				
Zip Code	R.T. Phase II				
WE14098					
CVAC3					
Project No.	PO. No.	Collection Date(s)	Matrix	No of Contaminants by Fractionation Type	
Sample ID / Description (Comments for each sample may be entered on a new line)	Collection Time (AM/PM)	Acquisition Time (AM/PM)			
L-62-26-30	5/14/21	1127	X	3	X
TB-01-051421	5/14/21	1135	X	2	X
L-46-14-18	5/14/21	1427	X	3	X
L-46-14-18 MS	5/14/21	1427	X	3	X
L-46-14-18 MSD	5/14/21	1427	X	3	X
CVAC3					
Item Around That Required (Enter lab approval required for expedited lab) Sample Discard? <input checked="" type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposed of Lab ✓ Standard <input type="checkbox"/> Rush (Specify) 1. Relinquished by <u>Charles K. Bulloch</u> 2. Relinquished by 3. Relinquished by 4. Relinquished by Note: All samples are retained for four weeks from receipt Unless other arrangements are made.					
Possible Hazard Identification <input checked="" type="checkbox"/> Not-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown GC Requirements (Specify) Date Time 1. Received by <u>1603</u> Date Time Date Time 2. Received by Date Time Date Time 3. Received by Date Time Date Time 4. Lab work performed by <u>Charles K. Bulloch</u> Date Time <u>1603</u> Lab USE ONLY Received on ice (Circle) <input checked="" type="checkbox"/> No Pack <input checked="" type="checkbox"/> Yes Pack <input checked="" type="checkbox"/> Temp Blank <u>72</u>					

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

Equipment Number: NED03W2-G1

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 / 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	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt 7.2 / 7.2 °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: S 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?			
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<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 13. Was adequate sample volume available?			
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<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 15. Were any samples containers missing/excess (circle one) samples Not listed on COC?			
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<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 ₃ /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 #			
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)			
Sample(s) <input type="checkbox"/> NA were received incorrectly preserved and were adjusted accordingly in sample receiving with <input type="checkbox"/> NA mL of circle one: H ₂ SO ₄ , HNO ₃ , HCl, NaOH using SR # <input type="checkbox"/> NA			
Time of preservation <input type="checkbox"/> NA. If more than one preservative is needed, please note in the comments below.			
Sample(s) <input type="checkbox"/> NA were received with bubbles >6 mm in diameter.			
Sample(s) <input type="checkbox"/> NA were received with TRC > 0.5 mg/L (If #19 is no) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na ₂ S ₂ O ₃) with Shealy ID: <input type="checkbox"/> NA			
SR barcode labels applied by: JRG2		Date: 5/14/2021	
Comments: <hr/> <hr/> <hr/> <hr/> <hr/>			



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

Sample Summary
Westinghouse Electric Company
Lot Number: WE14005
Project Name: CVOC
Project Number:

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

(6 samples)

PACE ANALYTICAL SERVICES, LLC

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

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

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

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

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	Q	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

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 120084

PACE ANALYTICAL SERVICES, LLC

Client Westinghouse		Report To Contact <u>Delta Joyner</u>		Telephone No / E-mail <u>delta@westinghouse.com</u>		Quote No.
Address 5801 Black Rd		Sampler's Signature <u>Charles K Shoboth</u>		Analysis (Attach list if more space is needed)		Pages <u>1</u> of <u>1</u>
City Hopkins <u>SC</u>		Printed Name <u>Charles Shoboth</u>				
Project Name RI Phase II						
Project No.	P.O. No.	Collection Date/Time (Military)	Matrix	No. or Containing Samples by Preservative Type	BMO	Remarks / Coaster I.D.
Conditions for each sample may be contained in one line.)						
L-61-15-19	5/13/21	0957 G X	3	X		
TB-01-051321	5/13/21	1000 G X	2	X		
L-61-25-29	5/13/21	1042 G X	3	X		
L-61-35-39	5/13/21	1352 G X	3	X		
L-47-16-20	5/13/21	1502 G X	3	X		
L-61-25-29-Dup	5/13/21	1042 G X	3	X		
Turn Around Time Required (Print lab approval required for expedited TAT.)		Sample Disposal		Possible Hazard Identification		
Standard	Rush (Specify)	Return to Client	Disposal by Lab	<input checked="" type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison
1. Received by <u>Charles K Shoboth</u>	Date <u>5/13/21</u>	Time <u>17:34</u>	1. Received by	Date	Date	Date
2. Relinquished by	Date	Time	2. Received by	Date	Date	Date
3. Relinquished by	Date	Time	3. Received by	Date	Date	Date
4. Relinquished by	Date	Time	4. Laboratory received by	Date <u>5/13/21</u>	Date <u>17:34</u>	Date
Note: All samples are retained for four weeks from receipt unless other arrangements are made.				Lab USE ONLY	No. Ice Pack <u>083</u>	Refrigerator Temp. <u>2-8 °C</u>
				Received on ice (Check)	No. Ice Pack <u>083</u>	Refrigerator Temp. <u>2-8 °C</u>

DISTRIBUTION: WHITE & YELLOW=Return to laboratory with Sample(s); PRINT-F=fax/Email Copy

Document Number: MEDSCN02



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.

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

PACE ANALYTICAL SERVICES, LLC

Sample Summary
Westinghouse Electric Company
Lot Number: WE12020
Project Name: RI Phase II
Project Number:

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

(7 samples)

PACE ANALYTICAL SERVICES, LLC

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

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

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

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
1,2-Dichloroethane		107-06-2		8260D	ND		1.0
1,1-Dichloroethene		75-35-4		8260D	ND		1.0
cis-1,2-Dichloroethene		156-59-2		8260D	ND		1.0
trans-1,2-Dichloroethene		156-60-5		8260D	ND		1.0
Tetrachloroethene		127-18-4		8260D	ND		1.0
Trichloroethene		79-01-6		8260D	ND		1.0
Vinyl chloride		75-01-4		8260D	ND		1.0
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

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: 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

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
1,2-Dichloroethane		107-06-2		8260D	ND	1.0	ug/L
1,1-Dichloroethene		75-35-4		8260D	ND	1.0	ug/L
cis-1,2-Dichloroethene		156-59-2		8260D	ND	1.0	ug/L
trans-1,2-Dichloroethene		156-60-5		8260D	ND	1.0	ug/L
Tetrachloroethene		127-18-4		8260D	ND	1.0	ug/L
Trichloroethene		79-01-6		8260D	ND	1.0	ug/L
Vinyl chloride		75-01-4		8260D	ND	1.0	ug/L
Surrogate	Q	Run 1 % Recovery		Acceptance Limits			Run
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

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
1,2-Dichloroethane		107-06-2		8260D	ND		1.0
1,1-Dichloroethene		75-35-4		8260D	ND		1.0
cis-1,2-Dichloroethene		156-59-2		8260D	ND		1.0
trans-1,2-Dichloroethene		156-60-5		8260D	ND		1.0
Tetrachloroethene		127-18-4		8260D	ND		1.0
Trichloroethene		79-01-6		8260D	ND		1.0
Vinyl chloride		75-01-4		8260D	ND		1.0
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
 ND = Not detected at or above the LOQ N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
 H = Out of holding time W = Reported on wet weight basis
 Q = Surrogate failure L = LCS/LCSD failure
 S = MS/MSD failure

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 120212

PACE ANALYTICAL SERVICES, LLC

Client <u>Westinghouse</u>			Report to Contact <u>Diana Joyner</u>	Telephone No. / E-mail <u>joynear@P.Westinghouse.com</u>	Date/ Mth.																																																																																																					
Address <u>5891 Bluff Rd</u>	Sampler's Signature <u>Jeremy Sennett</u>	City <u>Hopkins</u>	Site # <u>SC 29061</u>	Analysis (attach list if more space is needed)	Page <u>1</u> of <u>1</u>																																																																																																					
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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 #: WEI2020

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																																																																														
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> NA</td> <td>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).</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> NA</td> <td>4. Is the commercial courier's packing slip attached to this form?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td>5. Were proper custody procedures (relinquished/received) followed?</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td>6. 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For VOA and RSK-175 samples, were bubbles present >"pea-size" (<4mm or 6mm in diameter) in any of the VOA vials?</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> NA</td> <td>17. Were all DRO/metals/nutrient samples received at a pH of < 2?</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> NA</td> <td>18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> NA</td> <td>19. Were all applicable Nitrile/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td><input checked="" type="checkbox"/> NA</td> <td>20. 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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" (<4mm 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. 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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 ₂ SO ₄ , HNO ₃ , 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 ₂ S ₂ O ₃) with Shealy ID: NA																																																																														
SR barcode labels applied by: JRG2 Date: 05/12/2021																																																																														
Comments: 																																																																														

Attachment B

Tabulated Groundwater Wells Analytical Results

90 wells

Attachment B

April 2021 Groundwater Analytical Results

Westinghouse Columbia Fuel Fabrication Facility, Hopkins, SC

Notes: MCL - Maximum Contaminant Level

Concentrations in orange shaded cells exceed their MCL

* - site-specific action level

Bold concentrations indicate detections

J - Result below reporting limit

NA - not analyzed

- value is reported as a negative number

- value is below minimum detectable concentration

pCi/L - picocuries per liter

ug/L - micrograms per liter

mg/L - milligrams per liter

SVOCs - semivolatile organic compounds

VOCs - volatile organic compounds

N - Normal sample

FD - Field duplicate sample

Attachment C

Tabulated Soil Sampling Results for Dike Wall Adjacent to East Lagoon

