



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  
ENOVIA 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**

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### **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

Group				VOCs	VOCs	VOCs	VOCs	VOCs	VOCs	VOCs
Analyte				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	2
Units				ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Location	Depth	Date	Type							
L-45	11 - 15 ft	5/17/2021	N	< 1.0	< 1.0	< 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	< 1.0	< 1.0
L-46	14 - 18 ft	5/14/2021	N	< 1.0	< 1.0	< 1.0	52	< 1.0	< 1.0	< 1.0
L-46	22 - 26 ft	5/17/2021	N	< 1.0	< 1.0	< 1.0	66	< 1.0	5.0	< 1.0
L-47	16 - 20 ft	5/13/2021	N	< 1.0	< 1.0	< 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	< 1.0	< 1.0
L-59	31 - 35 ft	5/10/2021	N	< 1.0	< 1.0	< 1.0	1.2	< 1.0	< 1.0	< 1.0
L-59	46 - 50 ft	5/10/2021	N	< 1.0	< 1.0	< 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	< 1.0	< 1.0
L-60	26 - 30 ft	5/11/2021	N	< 1.0	< 1.0	< 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	< 1.0	< 1.0
L-61	15 - 19 ft	5/13/2021	N	< 1.0	< 1.0	< 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	< 1.0	< 1.0
L-61	25 - 29 ft	5/13/2021	FD	< 1.0	< 1.0	< 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	< 1.0	< 1.0
L-62	26 - 30 ft	5/14/2021	N	< 1.0	< 1.0	< 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



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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**



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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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<b>Sample Number</b>	<b>Sample ID</b>	<b>Matrix</b>	<b>Date Sampled</b>	<b>Date Received</b>
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: <b>Westinghouse Electric Company</b>	Laboratory ID: <b>WE17044-001</b>
Description: <b>L-46-22-26</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>05/17/2021 0922</b>	Project Name: <b>RI Phase II</b>
Date Received: <b>05/17/2021</b>	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
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>8260D</b>	<b>66</b>		<b>1.0</b>	<b>ug/L</b>	<b>1</b>
<b>Trichloroethene</b>	<b>79-01-6</b>	<b>8260D</b>	<b>5.0</b>		<b>1.0</b>	<b>ug/L</b>	<b>1</b>
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: <b>Westinghouse Electric Company</b>	Laboratory ID: <b>WE17044-002</b>
Description: <b>TB-01-051721</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>05/17/2021 0926</b>	Project Name: <b>RI Phase II</b>
Date Received: <b>05/17/2021</b>	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: <b>Westinghouse Electric Company</b>	Laboratory ID: <b>WE17044-003</b>
Description: <b>L-45-11-15</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>05/17/2021 1037</b>	Project Name: <b>RI Phase II</b>
Date Received: <b>05/17/2021</b>	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: <b>Westinghouse Electric Company</b>	Laboratory ID: <b>WE17044-004</b>
Description: <b>L-45-20-24</b>	Matrix: <b>Aqueous</b>
Date Sampled: <b>05/17/2021 1152</b>	Project Name: <b>RI Phase II</b>
Date Received: <b>05/17/2021</b>	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
<b>Tetrachloroethene</b>	<b>127-18-4</b>	<b>8260D</b>	<b>3.2</b>		<b>1.0</b>	<b>ug/L</b>	<b>1</b>
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



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

Issuing Authority: Pace ENV - WCDC

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: 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: KSC Date: 05/17/2021	
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: **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

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

**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>	State: <u>SC</u>	Zip Code: <u>29061</u>	Purified Name: <u>Chuck Subbath</u>	Barcode:		WE14098
Project Name: <u>R.I Phase II</u>	P.O. No.		Matrix:		Fluorimetry / Cooler I.D.	
Project No.	Sample ID / Description	Collection Date	Collection Time (M:SS)	No. of Containers by Preservative Type	Possible Hazard Identification	
	(Containers for each sample may be transferred to one line)				<input checked="" type="checkbox"/> Not-Hazardous <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown	
	L-62-26-30	5/14/21	1127	3	1. Received by: <u>Charles K Subbath</u> Date: <u>5/14/21</u> Time: <u>1603</u>	
	TB-01-051421	5/14/21	1135	2	2. Received by: _____ Date: _____ Time: _____	
	L-46-14-18	5/14/21	1427	3	3. Received by: _____ Date: _____ Time: _____	
	L-46-14-18 MS	5/14/21	1427	3	4. Lab samples received in _____ Date: <u>5/14/21</u> Time: <u>1603</u>	
	L-46-14-18 MSD	5/14/21	1427	3	Received on ice (Circle) <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> for Pack <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	
Item Around Time Required (Filter lab approval required for expedited IAL) Sample Disposal: <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Dispose by Lab						
1. Requisitioned by: <u>Charles K Subbath</u> Date: <u>5/14/21</u> Time: <u>1603</u>						
2. Requisitioned by: _____ Date: _____ Time: _____						
3. Requisitioned by: _____ Date: _____ Time: _____						
4. Requisitioned 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 Sample(s); PINK - Field/Client Copy  
 Document Number: INE002092-01



**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: 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**



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: 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.

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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

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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:

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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: 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

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Chain of Custody  
and  
Miscellaneous Documents



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 www.pacelabs.com

**Number 120084**

Client: <b>Westinghouse</b>		Report to Contact: <b>Diana Joyner</b>		Telephone No. / E-mail: <b>joymor@westinghouse.com</b>		Quote No.	
Address: <b>5801 Bluff Rd</b>		Sampler's Signature: <b>Charles K Suddeth</b>		Analyst (Attach list if more spaces is needed)		Page <b>1</b> of <b>1</b>	
City: <b>Hopkins</b>		Project Name: <b>R-I Phase II</b>		Barcode:		<b>WE14005</b>	
State: <b>SC</b>		Zip Code: <b>29061</b>		Matrix: <b>CWCs</b>		BKG	
Project No.		R.O. No.		No of Containers by Respective Type		Remarks / Cooler I.D.	
Sample ID / Description (Contains for each sample may be combined on one line.)		Collection Date(s)		Collection Time (Military)			
L-61-15-19		5/13/21		0957		3	
TB-01-051321		5/13/21		1000		2	
L-61-25-29		5/13/21		1042		3	
L-61-35-39		5/13/21		1352		3	
L-47-16-20		5/13/21		1502		3	
L-61-25-29-DUP		5/13/21		1042		3	
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 checked="" type="checkbox"/> Disposal by Lab		<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Poison <input type="checkbox"/> Unknown			
1. Relinquished by: <b>Charles K Suddeth</b>		Date: <b>5/13/21</b> Time: <b>1734</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 required by		Date: Time	
Note: All samples are retained for four weeks from receipt unless other arrangements are made.		LAD USE ONLY		Received on ice (Circle) <input checked="" type="checkbox"/> No Ice Pack		Receival Temp. <b>2.8</b> °C	

Document Number: KE0002-01

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: 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: <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>2.8</u> / <u>2.8</u> °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>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 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) <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>JRG2</u> Date: <u>5/14/2021</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: **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

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

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**

Client: <b>Westinghouse</b>		Report to Contact: <b>Diana Jayner</b>		Telephone No. / E-mail: <b>jayner@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)	Matrix	Agitation	1. Non-Hazard	2. Skin Irritant	3. Flammable	4. OC Requirements (Specify)
L-59-10-20	5/10/21	1512	G	X				
L-59-31-35	5/10/21	1606	G	X				
L-59-46-50	5/10/21	1715	G	X				
L-60-10-20	5/11/21	1201	G	X				
L-60-26-30	5/11/21	1244	G	X				
L-60-36-40	5/11/21	1349	G	X				
Trip blank								
Turn Around Time Required (Prior lab approval required for expedited TAT):		Sample Disposal:		Possible Hazard Identification:				
<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				
1. Requisitioned by: <i>Jeremy Grant</i>		Date: <b>5/11/21</b>	Time: <b>1440</b>	1. Received by:		Date:	Time:	
2. Requisitioned by:		Date:	Time:	2. Received by:		Date:	Time:	
3. Requisitioned by:		Date:	Time:	3. Received by:		Date:	Time:	
4. Requisitioned by:		Date:	Time:	4. Laboratory received by: <i>Jeremy Grant</i>		Date: <b>5/11/21</b>	Time: <b>1740</b>	
Note: All samples are retained for four weeks from receipt unless other arrangements are made.		LAB USE ONLY		Placed on ice (Check): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Receipt Temp: <b>2.5</b> °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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## **Attachment B**

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### **Tabulated Groundwater Wells Analytical Results**

90 wells

**Attachment B**  
**April 2021 Groundwater Analytical Results**  
**Westinghouse Columbia Fuel Fabrication Facility, Hopkins, SC**

Group	Analyte	MCL	note	Units	Well		W-3A	W-4	W-6	W-7A	W-10	W-11	W-13R	W-14	W-15	W-16	W-17	W-18R
					4/13/2021 12:45:00	4/16/2021 12:41:00												
					PM	PM	4/23/2021 8:36:00 AM	4/23/2021 10:50:00	4/15/2021 11:03:00	4/5/2021 11:22:00 AM	4/5/2021 9:29:00 AM	4/5/2021 2:45:00 PM	4/6/2021 9:33:00 AM	4/15/2021 3:06:00 PM	4/15/2021 10:13:00	4/16/2021 8:14:00 AM	4/13/2021 9:38:00 AM	4/13/2021 11:33:00
					N	N	N	N	N	N	N	N	N	N	N	N	N	N
					Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Radiological	Alpha particles	15	*	pCi/L	-0.815 ## [2.72]	-0.557 ## [3.6]	0.898 # [3.3]	11.9 [2.98]	47.2 [38]	6.63 [15.34]	0.0413 # [5.94]	12.8 [33]	1.01 # [11.84]	2.66 # [3.56]	3.99 [9.04]	0.459 # [5.82]	3.45 [5.94]	13.2 [25.6]
Radiological	Beta particles	50	*	pCi/L	3.75 # [6.42]	2.18 # [15.76]	2.38 # [9.94]	17.5 [47.6]	1270 [2580]	96.1 [264]	49.1 [165]	450 [4180]	24.8 [147.4]	13.7 [16.38]	128 [340]	9.35 [34.4]	331 [864]	54.7 [324]
Radiological	Tritium			pCi/L		15.3 # [97.2]	42.9 # [9.11]			95.9 # [12.1]	-24.7 ## [4.92]		95.3 # [22.2]		-91.9 ## [4.51]	-130 ## [25]		-87.4 ## [31.8]
Radiological	Technetium-99	900		pCi/L	0.682 # [1.3]	3.57 # [21.2]	-0.252 ## [2.23]	14.6 [51.8]	2830 [4300]	192 [422]	93.4 [226]	1260 [6760]	38.1 [258]	-0.321 ## [4.56]	213 [542]	8.70 [17.9]	851 [1488]	175 [608]
Radiological	Uranium-233/234			pCi/L	0.127 # [0.1622]	0.0778 # [0.258]	-0.176 ## [0.202]	0.484 [0.644]	0.471 # [0.896]	0.0644 # [1.218]	0.0289 # [0.158]	-0.0708 ## [0.262]	0.0718 # [1.94]	0.156 # [0.65]	-0.0207 ## [0.216]	-0.0111 ## [0.066]	0.0740 # [0.386]	3.83 [6.54]
Radiological	Uranium-235/236			pCi/L	-0.00478 ## [0.161]	-0.0305 ## [0.0978]	0.0527 # [0.1362]	0.0587 [0.294]	0.0858 # [0.1182]	0.0135 # [0.266]	0.108 # [0.14]	0.0362 # [0.0482]	0 # [0.1936]	-0.0118 ## [0.0992]	0 # [0.1042]	-0.0125 ## [0.00326]	0 # [0.1458]	0.306 [0.612]
Radiological	Uranium-238			pCi/L	0.0704 # [0.00266]	0.0864 # [0.144]	-0.0853 ## [0.147]	0.601 [0.406]	-0.0139 ## [0.444]	0.331 [0.636]	-0.115 ## [0.1424]	-0.0383 ## [0.222]	0.0118 # [0.778]	0.0904 # [0.456]	-0.00872 ## [0.1158]	-0.0505 ## [0.0932]	0.0923 # [0.0878]	1.44 [4.42]
Radiological	Percent Uranium-235			%	0 # [0]	0 # [0]	0 # [0]	1.49 [22]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [1.226]	0 # [0]	0 # [0]	0 # [0]	3.20 [2.44]	
Radiological	Uranium-234			ug/L	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]
Radiological	Uranium-235			ug/L	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.116]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	0.0720 [0.0968]
Radiological	Uranium-238			ug/L	< 0.200 [0.34]	0.0834 J [0.26]	< 0.200 [0.33]	1.14 [0.318]	0.280 [0.5]	0.671 [1.454]	0.120 J [0.234]	0.0828 J [0.36]	0.130 J [0.252]	0.203 [0.484]	< 0.200 [0.368]	< 0.200 [0.268]	0.103 J [0.218]	4.25 [8.84]
Radiological	Total Uranium Isotopes	30		ug/L	< 0.200 [0.34]	0.0834 J [0.26]	< 0.200 [0.33]	1.14 [0.318]	0.280 [0.504]	0.671 [1.454]	0.120 J [0.234]	0.0828 J [0.36]	0.130 J [0.252]	0.203 [0.484]	< 0.200 [0.368]	< 0.200 [0.268]	0.103 J [0.218]	4.33 [8.94]
Chemical	Fluoride	4		mg/L	< 0.100 [0.108]	0.128 [0.202]			< 0.100 [0.252]	5.37 [12.06]	3.29 [6.24]	< 0.100 [0.032]	5.19 [14.66]	< 0.100 [0.124]	2.19 [4.08]	8.44 [17.46]	2.20 [4.42]	4.89 [11.24]
Chemical	Nitrate as N	10		mg/L	1.8 [4.2]	9.7 [40]	< 0.020 [6.4]	0.12 [5.2]	180 [320]	410 [720]	20 [94]	28 [112]	15 [52]	0.25 [4.2]	30 [64]	3.3 [6.8]	16 [30]	470 [1600]
Chemical	Ammonia as N			mg/L	< 0.100 [0.033]	< 0.100 [0.1064]			76.5 [340.6]	63.9 [99.4]	6.76 [11.9]	3.06 [8.88]	22.4 [51.4]	3.04 [7.6]	9.55 [26.8]	10.7 [29.8]	4.92 [14.22]	58.5 [132.6]
SVOcs	1,1'-Biphenyl			ug/L	< 0.80 [6]	< 0.80 [8.8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]
SVOcs	2,4,5-Trichlorophenol			ug/L	< 0.80 [6]	< 0.80 [8.8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]
SVOcs	2,4,6-Trichlorophenol			ug/L	< 0.80 [6]	< 0.80 [8.8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]
SVOcs	2,4-Dichlorophenol			ug/L	< 0.80 [12]	< 0.80 [14]	< 0.80 [14]	< 0.80 [12]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]
SVOcs	2,4-Dimethylphenol			ug/L	< 0.80 [6]	< 0.80 [8.8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]
SVOcs	2,4-Dinitrophenol			ug/L	< 4.0 [40]	< 4.0 [44]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]
SVOcs	2,4-Dinitrotoluene			ug/L	< 1.6 [12.8]	< 1.6 [17.8]	< 1.6 [13.4]	< 1.6 [12.8]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [13.4]	< 1.6 [13.4]
SVOcs	2,6-Dinitrotoluene			ug/L	< 1.6 [12.8]	< 1.6 [17.8]	< 1.6 [13.4]	< 1.6 [12.8]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [13.4]	< 1.6 [13.4]
SVOcs	2-Chloronaphthalene			ug/L	< 0.80 [6]	< 0.80 [8.8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]
SVOcs	2-Chlorophenol			ug/L	< 0.80 [6]	< 0.80 [8.8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]
SVOcs	2-Methylnaphthalene			ug/L	< 0.16 [1.28]	< 0.16 [4.8]	< 0.16 [1.34]	< 0.16 [1.28]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.42]	< 0.16 [1.42]	< 0.16 [1.42]	< 0.16 [1.34]	< 0.16 [1.42]	< 0.16 [1.42]	< 0.16 [1.34]	< 0.16 [1.34]
SVOcs	2-Methylphenol			ug/L	< 0.80 [6]	< 0.80 [8.8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]
SVOcs	2-Nitroaniline			ug/L	< 1.6 [12.8]	< 1.6 [17.8]	< 1.6 [13.4]	< 1.6 [12.8]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [13.4]	< 1.6 [13.4]
SVOcs	2-Nitrophenol			ug/L	< 1.6 [6.8]	< 1.6 [12.6]	< 1.6 [7]	< 1.6 [6.8]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7.4]	< 1.6 [7.4]	< 1.6 [7.4]	< 1.6 [7.4]	< 1.6 [7.4]	< 1.6 [7.4]	< 1.6 [7.4]	< 1.6 [7.4]
SVOcs	3,3'-Dichlorobenzidine			ug/L	< 4.0 [8]	< 4.0 [24]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]
SVOcs	3-Nitroaniline			ug/L	< 1.6 [12.8]	< 1.6 [17.8]	< 1.6 [13.4]	< 1.6 [12.8]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [13.4]	< 1.6 [13.4]
SVOcs	4,6-Dinitro-2-methylphenol			ug/L	< 4.0 [40]	< 4.0 [44]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]
SVOcs	4-Bromophenyl phenyl ether			ug/L	< 0.80 [6]	< 0.80 [8.8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]
SVOcs	4-Chloro-3-methylphenol			ug/L	< 0.80 [6]	< 0.80 [8.8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]
SVOcs	4-Chloroaniline			ug/L	< 0.80 [12]	< 0.80 [14]	< 0.80 [14]	< 0.80 [12]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]
SVOcs	4-Chlorophenyl phenyl ether			ug/L	< 0.80 [6]	< 0.80 [8.8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]
SVOcs	4-Methylphenol			ug/L	< 1.6 [6.8]	< 1.6 [12.6]	< 1.6 [7]	< 1.6 [6.8]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7.4]	< 1.6 [7.4]	< 1.6 [7.4]	< 1.6 [7.4]	< 1.6 [7.4]	< 1.6 [7.4]	< 1.6 [7.4]	< 1.6 [7.4]
SVOcs	4-Nitroaniline			ug/L	< 1.6 [12.8]	< 1.6 [17.8]	< 1.6 [13.4]	< 1.6 [12.8]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [14.2]	< 1.6 [13.4]	< 1.6 [13.4]
SVOcs	4-Nitrophenol			ug/L	< 4.0 [40]	< 4.0 [44]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]
SVOcs	Acenaphthene			ug/L	< 0.16 [1.28]	< 0.16 [4.8]	< 0.16 [1.34]	< 0.16 [1.28]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.42]	< 0.16 [1.42]	< 0.16 [1.42]	< 0.16 [1.34]	< 0.16 [1.42]	< 0.16 [1.42]	< 0.16 [1.34]	< 0.16 [1.34]
SVOcs	Acenaphthylene			ug/L	< 0.16 [1.28]	< 0.16 [4.8]	< 0.16 [1.34]	< 0.16 [1.28]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.42]	< 0.16 [1.42]	< 0.16 [1.42]	< 0.16 [1.34]	< 0.16 [1.42]	< 0.16 [1.42]	< 0.16 [1.34]	< 0.16 [1.34]
SVOcs	Acetophenone			ug/L	< 0.80 [6]	< 0.80 [8.8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [8]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]
SVOcs	Anthracene			ug/L	< 0.16 [1.28]	< 0.16 [4.8]	<											



**Attachment B**  
**April 2021 Groundwater Analytical Results**  
**Westinghouse Columbia Fuel Fabrication Facility, Hopkins, SC**

Group	Analyte	MCL	note	Units	Well		W-19B	W-19B	W-20	W-22	W-23R	W-24	W-24	W-25	W-26	W-26	W-27	W-28	W-29	W-30
					4/20/2021 10:39:00 AM	4/20/2021 10:50:00 AM	4/22/2021 3:42:00 PM	4/15/2021 12:13:00 PM	4/14/2021 2:12:00 PM	4/23/2021 9:20:00 AM	4/23/2021 9:20:00 AM	4/23/2021 9:20:00 AM	4/22/2021 1:55:00 PM	4/16/2021 12:11:00 PM	4/16/2021 12:11:00 PM	4/21/2021 2:50:00 PM	4/7/2021 2:48:00 PM	4/8/2021 9:40:00 AM	4/8/2021 1:37:00 PM	
Radiological	Alpha particles	15	*	pCi/L	1.58 # [3.08]	-0.297 ## [3.08]	2.27 # [2.84]	1.68 # [12.48]	-0.600 ## [15.76]	0.118 # [5.04]	0.190 # [5.04]	2.58 # [7.74]	0.543 # [2.62]	0.684 # [2.62]	1.10 # [6.74]	1.58 # [7.12]	1.81 # [9.24]	12.4 [66.4]		
Radiological	Beta particles	50	*	pCi/L	1.02 # [2.76]	3.35 [2.76]	2.46 # [5.06]	19.0 [108]	0.790 # [9.78]	0.365 # [7.66]	1.96 # [7.66]	5.69 [12.04]	7.92 [19.96]	7.18 [19.96]	4.71 [19.16]	4.44 # [26.2]	7.40 [14.74]	29.8 [68.2]		
Radiological	Tritium			pCi/L				94.2 # [32.4]		-73.4 ## [62.2]	-219 ## [62.2]		-61.0 ## [46.4]	53.1 # [46.4]				-256 ## [41.2]	-123 ## [11.1]	
Radiological	Technetium-99	900		pCi/L	-1.81 ## [7.44]	-1.85 ## [7.44]	1.17 # [4.66]	26.3 [151.6]	-2.39 ## [13.9]	1.99 # [11.5]	1.33 # [11.5]	0.358 # [9.81]	6.43 [20.4]	6.14 [20.4]	3.08 # [47]	1.87 # [4.28]	5.21 [4.32]	43.7 [58.2]		
Radiological	Uranium-233/234			pCi/L	-0.0829 ## [0.344]	-0.0433 ## [0.344]	-0.103 ## [0.638]	0.927 [3.86]	-0.0220 ## [1.248]	-0.130 ## [0.1948]	-0.0564 ## [0.1948]	-0.255 ## [0.54]	0.00774 # [0.1694]	-0.133 ## [0.1694]	-0.138 ## [0.1326]	1.02 [1.418]	0.672 [1.766]	11.0 [43.6]		
Radiological	Uranium-235/236			pCi/L	-0.00902 ## [0.1564]	0 # [0.1564]	-0.0615 ## [0.06]	0.0249 # [0.458]	-0.0586 ## [0.42]	0.0503 # [0.127]	-0.0363 ## [0.127]	0 # [0.0946]	0.0255 # [0.075]	-0.0434 ## [0.075]	-0.254 ## [0.1498]	0.0388 # [0.1858]	0.00665 # [0.0596]	0.525 [3.12]		
Radiological	Uranium-238			pCi/L	-0.0161 ## [0.1312]	-0.0173 ## [0.1312]	-0.116 ## [0.218]	0.0993 # [1.454]	0.0426 # [0.812]	0.0407 # [0.1042]	0.0522 # [0.1042]	-0.0371 ## [0.47]	0.150 # [0.0978]	-0.0620 ## [0.0978]	-0.0684 ## [0.107]	0.326 [0.404]	0.384 [1.232]	2.80 [13.56]		
Radiological	Percent Uranium-235			%	0 # [3.36]	0 # [3.36]	0 # [0]	0 # [4.6]	0 # [2.58]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [7.6]	0 # [0]	0 # [0]	2.83 [6.5]		
Radiological	Uranium-234			ug/L	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]
Radiological	Uranium-235			ug/L	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	0.0125 J [0.0276]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	0.0168 J [0.052]	0.0120 J [0.0542]	0.182 [0.564]	
Radiological	Uranium-238			ug/L	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.354]	0.606 [1.428]	0.201 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.358]	< 0.200 [0.358]	< 0.200 [0.358]	0.136 J [0.388]	0.879 [1.352]	0.938 [3.74]	7.70 [23.6]	
Radiological	Total Uranium Isotopes	30		ug/L	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.354]	0.619 [1.456]	0.201 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.44]	< 0.200 [0.358]	< 0.200 [0.358]	0.136 J [0.388]	0.895 [1.374]	0.950 [3.8]	7.89 [24.2]		
Chemical	Fluoride	4		mg/L	< 0.100 [0.086]	< 0.100 [0.086]	< 0.100 [0.086]	4.10 [9.08]	< 0.100 [0.092]			< 0.100 [0.246]	1.58 [2.84]	1.53 [2.84]	3.19 [7.7]	6.30 [10.88]	3.10 [8.26]	11.0 [17.7]		
Chemical	Nitrate as N	10		mg/L	3.4 [8]	3.8 [8]	< 0.020 [0.114]	57 [240]	0.65 [1.36]	< 0.020 [0.138]	< 0.020 [0.138]		3.4 [6.2]	3.0 [6.2]	< 0.020 [0.09]	6.0 [11]	9.9 [64]	83 [134]		
Chemical	Ammonia as N			mg/L	< 0.100 [0.04]	< 0.100 [0.04]	0.171 [0.0816]	24.3 [76.2]	< 0.100 [0.0458]			0.217 [2.28]	1.55 [3.3]	0.824 [3.3]	5.44 [13.54]	0.100 [0.446]	9.04 [33]	1.37 [2.88]		
SVOCs	1,1'-Biphenyl			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2,4,5-Trichlorophenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2,4,6-Trichlorophenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2,4-Dichlorophenol			ug/L	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [12]	< 0.80 [14]	< 0.80 [14]	< 0.80 [12]	< 0.80 [13.2]	< 0.80 [13.2]	< 0.80 [14]	< 0.80 [12]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]
SVOCs	2,4-Dimethylphenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2,4-Dinitrophenol			ug/L	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [42]	< 4.0 [42]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]
SVOCs	2,4-Dinitrotoluene			ug/L	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [16.8]	< 1.6 [16.8]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]
SVOCs	2,6-Dinitrotoluene			ug/L	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [16.8]	< 1.6 [16.8]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]
SVOCs	2-Chloronaphthalene			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2-Chlorophenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2-Methylnaphthalene			ug/L	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [1.38]	< 0.16 [1.28]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.28]	< 0.16 [4.6]	< 0.16 [4.6]	< 0.16 [1.38]	< 0.16 [1.28]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]
SVOCs	2-Methylphenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2-Nitroaniline			ug/L	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [16.8]	< 1.6 [16.8]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]
SVOCs	2-Nitrophenol			ug/L	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7]	< 1.6 [7.2]	< 1.6 [6.8]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [6.8]	< 1.6 [12]	< 1.6 [12]	< 1.6 [7.2]	< 1.6 [6.8]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7.2]
SVOCs	3,3'-Dichlorobenzidine			ug/L	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [22]	< 4.0 [22]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]
SVOCs	3-Nitroaniline			ug/L	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [16.8]	< 1.6 [16.8]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]
SVOCs	4,6-Dinitro-2-methylphenol			ug/L	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [42]	< 4.0 [42]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]
SVOCs	4-Bromophenyl phenyl ether			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	4-Chloro-3-methylphenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	4-Chloroaniline			ug/L	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [12]	< 0.80 [14]	< 0.80 [14]	< 0.80 [12]	< 0.80 [13.2]	< 0.80 [13.2]	< 0.80 [14]	< 0.80 [12]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]
SVOCs	4-Chlorophenyl phenyl ether			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	4-Methylphenol			ug/L	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7]	< 1.6 [7.2]	< 1.6 [6.8]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [6.8]	< 1.6 [12]	< 1.6 [12]	< 1.6 [7.2]	< 1.6 [6.8]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7.2]
SVOCs	4-Nitroaniline			ug/L	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [16.8]	< 1.6 [16.8]	< 1.6 [13.8]	< 1.6 [12.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]
SVOCs	4-Nitrophenol			ug/L	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [42]	< 4.0 [42]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]
SVOCs	Acenaphthene			ug/L	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [1.38]	< 0.16 [1.28]	< 0.16 [1.38]	< 0.16 [1.38]	<								



**Attachment B**  
**April 2021 Groundwater Analytical Results**  
**Westinghouse Columbia Fuel Fabrication Facility, Hopkins, SC**

Well	Date	Type	Units	W-32	W-33	W-35	W-36	W-37	W-38	W-39	W-40	W-41R	W-42	W-43	W-44	W-45	W-46	
				4/5/2021 1:20:00 PM	4/16/2021 9:26:00 AM	4/13/2021 2:15:00 PM	4/13/2021 1:37:00 PM	4/9/2021 12:35:00 PM	4/8/2021 10:40:00 AM	4/20/2021 12:47:00 PM	4/12/2021 10:34:00 AM	4/16/2021 1:38:00 PM	4/19/2021 12:43:00 PM	4/20/2021 2:13:00 PM	4/19/2021 1:40:00 PM	4/13/2021 9:05:00 AM	4/20/2021 9:21:00 AM	
Group	Analyte	MCL	note	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	
Radiological	Alpha particles	15	*	pCi/L	-0.0900 ## [13.42]	0.128 ## [11.46]	1.04 ## [2.12]	0.726 # [3.54]	1.12 # [2.04]	1.86 # [2.26]	1.23 # [14.36]	-0.103 ## [4.94]	3.20 # [11.3]	-0.275 ## [15.82]	-0.428 ## [8.44]	1.37 # [12.78]	2.03 # [13.2]	0.790 # [1.416]
Radiological	Beta particles	50	*	pCi/L	124 [364]	4.32 [22]	0.973 # [4.72]	-0.561 ## [3.58]	1.68 # [3.24]	0.331 # [6.06]	8.67 [33.6]	0.664 # [8.44]	12.4 [36.6]	3.00 # [23.4]	0.0965 # [13.08]	6.74 [12.32]	3.68 [27.8]	36.9 [76.8]
Radiological	Tritium			pCi/L	196 # [15.2]	-73.4 ## [61.8]								-102 ## [171.6]	-46.4 ## [47.5]	5.90 # [39.1]		
Radiological	Technetium-99	900		pCi/L	245 [624]	0.779 # [56.6]	-1.67 ## [0.977]	-1.18 ## [3.67]	2.34 # [9.07]	-1.34 ## [8.96]	11.1 [50.4]	-2.16 ## [5.64]	10.2 [51.4]	-0.315 ## [6.64]	1.50 # [35.4]	-0.671 ## [32.6]	-2.47 ## [17.24]	62.5 [110.6]
Radiological	Uranium-233/234			pCi/L	0.0839 # [0.602]	-0.0419 ## [0.664]	-0.0592 ## [0.45]	-0.0786 ## [0.282]	-0.0145 ## [0.1024]	0.0861 # [0.544]	-0.0582 ## [1.122]	-0.00107 ## [0.356]	-0.0657 ## [0.458]	-0.0934 ## [0.914]	-0.0278 ## [0.56]	-0.0721 ## [0.68]	0.619 [7.46]	0.0235 # [0.332]
Radiological	Uranium-235/236			pCi/L	-0.0140 ## [0.056]	-0.0322 ## [0.1846]	-0.0177 ## [0.1434]	-0.0181 ## [0.1346]	-0.0119 ## [0.022]	0.0289 # [0.1662]	0.0428 # [0.558]	0.0512 # [0.216]	-0.00711 ## [0.1672]	0.0505 # [0.366]	-0.0102 ## [0.246]	0.0367 # [0.294]	-0.00391 ## [0.442]	0.0931 # [0.1076]
Radiological	Uranium-238			pCi/L	0.107 # [0.332]	0.0101 # [0.822]	0.00375 # [0.358]	0.000977 # [0.0892]	-0.0227 ## [0.1258]	0.0157 # [0.334]	0.00970 # [0.378]	0.0293 # [0.35]	0.00805 # [0.152]	-0.0128 ## [0.926]	0.00138 # [0.56]	-0.0655 ## [0.238]	0.0543 # [2.14]	-0.00685 ## [0.25]
Radiological	Percent Uranium-235			%	0 # [0]	0 # [0]	0 # [0]	0 # [7.76]	0 # [0]	0 # [6.36]	0 # [16.36]	0 # [0]	0 # [7.56]	0 # [8.72]	0 # [0]	0 # [6.78]	0 # [5.2]	
Radiological	Uranium-234			ug/L	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]
Radiological	Uranium-235			ug/L	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.0978]	< 0.0700 [0.14]
Radiological	Uranium-238			ug/L	0.158 J [0.462]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.358]	0.0986 J [0.302]	< 0.200 [0.4]	< 0.200 [0.376]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	0.382 [2.02]	< 0.200 [0.4]
Radiological	Total Uranium Isotopes	30		ug/L	0.158 J [0.462]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.358]	0.0986 J [0.302]	< 0.200 [0.4]	< 0.200 [0.376]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	0.382 [2.06]	< 0.200 [0.4]
Chemical	Fluoride	4		mg/L	4.00 [7.1]	0.138 [0.278]	< 0.100 [0.046]	< 0.100 [0.08]	< 0.100 [0.1246]	0.285 [0.404]	< 0.100 [0.056]	0.129 [0.3]	< 0.100 [0.1]	1.30 [3.54]	< 0.100 [0.1526]	< 0.100 [0.09]	0.649 [1.216]	< 0.100 [0.062]
Chemical	Nitrate as N	10		mg/L	8.4 [20]	3.1 [7.6]	0.053 [0.28]	1.7 [6.2]	3.0 [14.6]	5.3 [19.6]	1.3 [6.8]	4.1 [120]	2.7 [8.2]	7.4 [18.4]		0.24 [0.68]	7.3 [16]	
Chemical	Ammonia as N			mg/L	40.4 [63]	0.101 [0.032]	< 0.100 [0.0326]	< 0.100 [0.04]	< 0.100 [0.0656]	< 0.100 [0.0638]	< 0.100 [0.0438]	< 0.100 [0.2]	0.114 [0.0456]	< 0.100 [0.772]	< 0.100 [0.0502]	< 0.100 [0.0364]	0.781 [3.26]	< 0.100 [0.1522]
SVOcs	1,1'-Biphenyl			ug/L	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	2.2 [9.4]	< 0.80 [6]
SVOcs	2,4,5-Trichlorophenol			ug/L	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8.6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	2,4,6-Trichlorophenol			ug/L	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8.6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	2,4-Dichlorophenol			ug/L	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [13.2]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]
SVOcs	2,4-Dimethylphenol			ug/L	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8.6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	2,4-Dinitrophenol			ug/L	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [42]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]
SVOcs	2,4-Dinitrotoluene			ug/L	< 1.6 [14.2]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [17]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [13.8]	< 1.6 [13.4]
SVOcs	2,6-Dinitrotoluene			ug/L	< 1.6 [14.2]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [17]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [13.8]	< 1.6 [13.4]
SVOcs	2-Chloronaphthalene			ug/L	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8.6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	2-Chlorophenol			ug/L	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8.6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	2-Methylnaphthalene			ug/L	< 0.16 [1.42]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [4.8]	< 0.16 [1.34]	< 0.16 [1.42]	< 0.16 [1.38]	3.1 [15.6]	< 0.16 [1.34]
SVOcs	2-Methylphenol			ug/L	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8.6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	2-Nitroaniline			ug/L	< 1.6 [14.2]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [17]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [13.4]
SVOcs	2-Nitrophenol			ug/L	< 1.6 [7.4]	< 1.6 [7.2]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7]	< 1.6 [12.4]	< 1.6 [7.4]	< 1.6 [7]	< 1.6 [7.2]	< 1.6 [7]	< 1.6 [7]
SVOcs	3,3'-Dichlorobenzidine			ug/L	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [24]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]
SVOcs	3-Nitroaniline			ug/L	< 1.6 [14.2]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [17]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [13.4]
SVOcs	4,6-Dinitro-2-methylphenol			ug/L	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [42]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]
SVOcs	4-Bromophenyl phenyl ether			ug/L	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8.6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	4-Chloro-3-methylphenol			ug/L	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8.6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	4-Chloroaniline			ug/L	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [13.2]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]
SVOcs	4-Chlorophenyl phenyl ether			ug/L	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8.6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	4-Methylphenol			ug/L	< 1.6 [7.4]	< 1.6 [7.2]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7]	< 1.6 [12.4]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7.2]	< 1.6 [7]	< 1.6 [7]
SVOcs	4-Nitroaniline			ug/L	< 1.6 [14.2]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [17]	< 1.6 [13.4]	< 1.6 [14.2]	< 1.6 [13.8]	< 1.6 [13.4]	< 1.6 [13.4]
SVOcs	4-Nitrophenol			ug/L	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [42]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]
SVOcs	Acenaphthene			ug/L	< 0.16 [1.42]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [4.8]	< 0.16 [1.34]	< 0.16 [1.42]	< 0.16 [1.38]	1.3 [2.6]	< 0.16 [1.34]
SVOcs	Acenaphthylene			ug/L	< 0.16 [1.42]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [4.8]	< 0.16 [1.34]	< 0.16 [1.42]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [1.34]
SVOcs	Acetophenone			ug/L	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8.6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	Anthracene			ug/L	< 0.16 [1.42]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.38]								

Attachment B

April 2021 Groundwater Analytical Results

Westinghouse Columbia Fuel Fabrication Facility, Hopkins, SC

Well					W-32	W-33	W-35	W-36	W-37	W-38	W-39	W-40	W-41R	W-42	W-43	W-44	W-45	W-46
Date					4/5/2021 1:20:00 PM	4/16/2021 9:26:00 AM	4/13/2021 2:15:00 PM	4/13/2021 1:37:00 PM	4/9/2021 12:35:00 PM	4/8/2021 10:40:00 AM	4/20/2021 12:47:00 PM	4/12/2021 10:34:00 AM	4/16/2021 1:38:00 PM	4/19/2021 12:43:00 PM	4/20/2021 2:13:00 PM	4/19/2021 1:40:00 PM	4/13/2021 9:05:00 AM	4/20/2021 9:21:00 AM
Group	Analyte	MCL	note	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
SVOCs	Pentachlorophenol (SIM)	1		ug/L	< 0.97 [32]	< 0.95 [30]	< 0.94 [20]	< 0.94 [20]	< 0.95 [20]	< 0.94 [40]	< 0.94 [40]	< 0.94 [28]	< 0.95 [40]	< 0.95 [20]	< 0.95 [40]	< 0.95 [40]	< 0.98 [20]	< 0.94 [20]
SVOCs	Phenanthrene			ug/L	< 0.16 [1.42]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [4.8]	< 0.16 [1.34]	< 0.16 [1.42]	< 0.16 [1.38]	0.70 [2.2]	< 0.16 [1.34]
SVOCs	Phenol			ug/L	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [8.6]	< 0.80 [6]	< 0.80 [8]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	Pyrene			ug/L	< 0.16 [1.42]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [4.8]	< 0.16 [1.34]	< 0.16 [1.42]	< 0.16 [1.38]	< 0.16 [1.34]	< 0.16 [1.34]
VOCs	(1-Methylethyl)-Benzene			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [6]	< 1.0 [2]	1.2 [5]	< 1.0 [4]
VOCs	1,1,1-Trichloroethane	200		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	1,1,2,2-Tetrachloroethane			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	1,1,2-Trichlor-1,2,2-trifluoroethane			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [6]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	1,1,2-Trichloroethane	5		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	1,1-Dichloroethane			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	1,1-Dichloroethene	7		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	1,2,4-Trichlorobenzene	70		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [6]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	1,2-Dibromo-3-chloropropane	0.2		ug/L	< 1.0 [1.8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [1.68]	< 1.0 [1.8]	< 5.0 [6]	< 1.0 [3]	< 1.0 [4]	< 1.0 [2]	< 1.0 [3.8]	< 1.0 [1.8]	< 1.0 [3]	< 1.0 [4]
VOCs	1,2-Dibromo-3-chloropropane (8011)	0.2		ug/L	< 0.020 [1.8]	< 0.020 [4]	< 0.020 [4]	< 0.019 [2]	< 0.020 [1.68]	< 0.019 [1.8]	< 0.019 [6]	< 0.020 [3]	< 0.020 [4]	< 0.020 [2]	< 0.020 [3.8]	< 0.019 [1.8]	< 0.020 [3]	< 0.020 [4]
VOCs	1,2-Dibromoethane	0.05		ug/L	< 1.0 [1.8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [1.68]	< 1.0 [1.8]	< 5.0 [6]	< 1.0 [3]	< 1.0 [4]	< 1.0 [2]	< 1.0 [3.8]	< 1.0 [1.8]	< 1.0 [3]	< 1.0 [4]
VOCs	1,2-Dibromoethane (8011)	0.05		ug/L	< 0.020 [1.8]	< 0.020 [4]	< 0.020 [4]	< 0.019 [2]	< 0.020 [1.68]	< 0.019 [1.8]	< 0.019 [6]	< 0.020 [3]	< 0.020 [4]	< 0.020 [2]	< 0.020 [3.8]	< 0.019 [1.8]	< 0.020 [3]	< 0.020 [4]
VOCs	1,2-Dichlorobenzene	600		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	1,2-Dichloroethane	5		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	1,2-Dichloropropane	5		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	1,3-Dichlorobenzene			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	1,4-Dichlorobenzene	75		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	2-Butanone			ug/L	< 10 [20]	< 10 [40]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 50 [80]	< 10 [20]	< 10 [40]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]
VOCs	2-Hexanone			ug/L	< 10 [20]	< 10 [40]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 50 [80]	< 10 [20]	< 10 [40]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]
VOCs	4-Methyl-2-pentanone			ug/L	< 10 [20]	< 10 [40]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 50 [80]	< 10 [20]	< 10 [40]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]
VOCs	Acetone			ug/L	< 20 [40]	< 20 [100]	< 20 [40]	< 20 [40]	< 20 [40]	< 20 [40]	< 100 [140]	< 20 [40]	< 20 [80]	< 20 [40]	< 20 [40]	< 20 [40]	< 20 [40]	< 20 [40]
VOCs	Benzene	5		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4.4]	< 1.0 [4]
VOCs	Bromodichloromethane			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	Bromoform			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	Bromomethane			ug/L	< 2.0 [4]	< 2.0 [10]	< 2.0 [6]	< 2.0 [6]	< 2.0 [4]	< 2.0 [4]	< 10 [14]	< 2.0 [6]	< 2.0 [8]	< 2.0 [6]	< 2.0 [6]	< 2.0 [4]	< 2.0 [6]	< 2.0 [6]
VOCs	Carbon disulfide			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	Carbon tetrachloride	5		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	Chlorobenzene	100		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	Chloroethane			ug/L	< 2.0 [4]	< 2.0 [10]	< 2.0 [6]	< 2.0 [6]	< 2.0 [4]	< 2.0 [4]	< 10 [14]	< 2.0 [6]	< 2.0 [8]	< 2.0 [6]	< 2.0 [6]	< 2.0 [4]	< 2.0 [6]	< 2.0 [6]
VOCs	Chloroform			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	Chloromethane			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	cis-1,2-Dichloroethene	70		ug/L	< 1.0 [2]	1.7 [5.2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	13 [19]	< 1.0 [4]	2.7 [5.2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	cis-1,3-Dichloropropene			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [6]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	Cyclohexane			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [6]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	Dibromochloromethane			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	Dichlorodifluoromethane			ug/L	< 2.0 [4]	< 2.0 [10]	< 2.0 [6]	< 2.0 [6]	< 2.0 [4]	< 2.0 [4]	< 10 [14]	< 2.0 [6]	< 2.0 [8]	< 2.0 [6]	< 2.0 [6]	< 2.0 [4]	< 2.0 [6]	< 2.0 [6]
VOCs	Ethylbenzene	700		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	2.5 [8.4]	< 1.0 [4]
VOCs	Methyl acetate			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [6]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	Methyl tert-butyl ether			ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [6]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	Methylcyclohexane			ug/L	< 5.0 [10]	< 5.0 [24]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]	< 25 [36]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]
VOCs	Methylene chloride	5		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [6]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	Styrene	100		ug/L	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [2]	< 5.0 [8]	< 1.0 [4]	< 1.0 [6]	< 1.0 [4]	< 1.0 [4]	< 1.0 [2]	< 1.0 [4]	< 1.0 [4]
VOCs	Tetrachloroethene	5		ug/L														

## Attachment B

## April 2021 Groundwater Analytical Results

## Westinghouse Columbia Fuel Fabrication Facility, Hopkins, SC

		Well		W-47	W-48	W-49	W-50	W-51	W-52	W-53	W-54	W-55	W-56	W-57	W-58	W-59	W-60	
		Date		4/15/2021 11:49:00	4/19/2021 2:36:00 PM	4/19/2021 3:20:00 AM	4/12/2021 1:04:00 PM	4/13/2021 10:42:00 AM	4/12/2021 3:28:00 PM	4/12/2021 3:14:00 PM	4/9/2021 1:10:00 PM	4/9/2021 11:17:00 AM	4/9/2021 11:02:00 AM	4/8/2021 1:27:00 PM	4/8/2021 11:58:00 AM	4/9/2021 9:55:00 AM	4/14/2021 9:03:00 AM	
		Type		AM	N	N	N	N	N	N	N	N	N	N	N	N	N	
Group	Analyte	MCL	note	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	
Radiological	Alpha particles	15	*	pCi/L	2.33 # [5.1]	1.76 # [1.596]	-0.954 ## [5.38]	2.28 # [4.12]	-0.342 ## [2.56]	1.37 # [1.166]	0.771 # [0.1356]	0.357 # [0.734]	232 [754]	102 [386]	-0.0399 ## [5.98]	0.823 # [8]	17.0 [86.4]	2.07 # [1.104]
Radiological	Beta particles	50	*	pCi/L	52.0 [133]	12.6 [20.8]	7.26 [6.54]	1.57 # [2.86]	4.56 [4.6]	-0.303 ## [5.44]	3.45 # [3.52]	1.63 # [4.92]	35.3 [131]	19.5 [80.2]	3.27 # [5.66]	2.07 # [6.62]	6.84 [28.4]	7.69 [3.34]
Radiological	Tritium			pCi/L	-53.8 ## [83.6]	49.3 # [39.7]												
Radiological	Technetium-99	900		pCi/L	90.1 [179]	16.4 [48.4]	-0.730 ## [1.88]	-1.00 ## [1.56]	-0.0688 ## [2.6]	-1.25 ## [8.3]	-1.28 ## [4.75]	-1.85 ## [3.92]	0.411 # [3.95]	-2.10 ## [2.35]	-1.44 ## [9.59]	-3.04 ## [2.28]	6.86 [17.04]	-2.59 ## [8.98]
Radiological	Uranium-233/234			pCi/L	-0.0234 ## [0.212]	-0.0332 ## [0.228]	-0.0532 ## [0.394]	0.0632 ## [0.852]	0.0240 # [0.0978]	-0.0114 ## [0.364]	0.00350 # [0.238]	-0.000431 ## [0.472]	207 [506]	84.5 [288]	0.0633 # [0.32]	1.38 [4.5]	10.7 [58]	-0.00272 ## [0.306]
Radiological	Uranium-235/236			pCi/L	0.0802 # [0.00222]	0.0465 # [0.348]	0.0396 # [0.1112]	-0.00533 ## [0.274]	0.0167 # [0.0832]	-0.0110 ## [0.1312]	-0.00411 ## [0.1316]	0.00768 # [0.1654]	9.64 [28.6]	3.90 [15.84]	0.0285 # [0.1608]	0.0251 # [0.394]	0.490 [3.5]	-0.0125 ## [0.1614]
Radiological	Uranium-238			pCi/L	-0.0533 ## [0.1736]	-0.0361 ## [0.1376]	0.0236 # [0.222]	-0.127 ## [0.348]	0.0587 # [0.00973]	-0.0177 ## [0.0864]	0.0319 # [0.00403]	0.0468 # [0.246]	41.9 [109.4]	17.9 [62.8]	-0.0262 ## [0.1986]	0.208 # [1.266]	2.02 [13.28]	-0.0101 ## [0.25]
Radiological	Percent Uranium-235			%	0 # [0]	0 # [16.86]	0 # [0]	0 # [12]	0 # [0]	0 # [62.4]	0 # [0]	0 # [6.58]	3.45 [7.7]	3.28 [7.4]	0 # [0]	0 # [4.16]	3.63 [7.5]	0 # [4.52]
Radiological	Uranium-234			ug/L	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	0.0320 J [0.09]	0.0140 J [0.0842]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]
Radiological	Uranium-235			ug/L	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	3.53 [10.04]	1.38 [6.16]	< 0.0700 [0.14]	0.0244 J [0.0804]	0.200 [1.106]	< 0.0700 [0.14]
Radiological	Uranium-238			ug/L	< 0.200 [0.312]	< 0.200 [0.356]	< 0.200 [0.208]	0.117 J [0.256]	0.0737 J [0.4]	< 0.200 [0.35]	< 0.200 [0.4]	< 0.200 [0.4]	99.6 [306]	40.0 [192.8]	< 0.200 [0.364]	0.741 [2.62]	6.57 [36.2]	< 0.200 [0.4]
Radiological	Total Uranium Isotopes	30		ug/L	< 0.200 [0.312]	< 0.200 [0.356]	< 0.200 [0.208]	0.117 J [0.256]	0.0737 J [0.4]	< 0.200 [0.35]	< 0.200 [0.4]	< 0.200 [0.4]	103 [316]	41.4 [198.6]	< 0.200 [0.364]	0.765 [2.7]	6.77 [37.2]	< 0.200 [0.4]
Chemical	Fluoride	4		mg/L	4.26 [8.5]	0.370 [0.66]	0.129 [0.076]	< 0.100 [0.156]	0.191 [0.388]	0.913 [2.26]	< 0.100 [0.126]	0.117 [0.374]	< 0.100 [0.11]	0.298 [0.538]	< 0.100 [0.146]	< 0.100 [0.256]	2.86 [7.36]	< 0.100 [0.106]
Chemical	Nitrate as N	10		mg/L	33 [98]	4.8 [8.8]	0.088 [0.094]	< 0.020 [0.058]	0.088 [0.094]	2.1 [3.2]	0.070 [1.18]	1.8 [5]	1.3 [6.6]	2.6 [9.6]	2.3 [10]	3.9 [22]	13 [40]	< 0.020 [0.106]
Chemical	Ammonia as N			mg/L	12.1 [31.8]	< 0.100 [0.118]	< 0.100 [0.0332]	< 0.100 [0.0456]	0.206 [0.382]	< 0.100 [0.0508]	< 0.100 [0.129]	< 0.100 [0.026]	< 0.100 [0.0336]	< 0.100 [0.0736]	< 0.100 [0.0358]	5.51 [21.8]	7.05 [22]	< 0.100 [0.1226]
SVOCs	1,1'-Biphenyl			ug/L	< 0.80 [18]	< 0.80 [8.4]	< 0.80 [6]	< 0.80 [6]	5.0 [24]	3.5 [7.8]	2.4 [8.4]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2,4,5-Trichlorophenol			ug/L	< 0.80 [18]	< 0.80 [8.4]	< 0.80 [6]	< 0.80 [6]	< 0.80 [12]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2,4,6-Trichlorophenol			ug/L	< 0.80 [18]	< 0.80 [8.4]	< 0.80 [6]	< 0.80 [6]	< 0.80 [12]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2,4-Dichlorophenol			ug/L	< 0.80 [40]	< 0.80 [13.2]	< 0.80 [14]	< 0.80 [12]	< 0.80 [20]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]
SVOCs	2,4-Dimethylphenol			ug/L	< 0.80 [18]	< 0.80 [8.4]	< 0.80 [6]	< 0.80 [6]	< 0.80 [12]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2,4-Dinitrophenol			ug/L	< 4.0 [100]	< 4.0 [42]	< 4.0 [40]	< 4.0 [40]	< 4.0 [60]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]
SVOCs	2,4-Dinitrotoluene			ug/L	< 1.6 [38]	< 1.6 [16.8]	< 1.6 [13.4]	< 1.6 [12.8]	< 1.6 [24]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]
SVOCs	2,6-Dinitrotoluene			ug/L	< 1.6 [38]	< 1.6 [16.8]	< 1.6 [13.4]	< 1.6 [12.8]	< 1.6 [24]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]
SVOCs	2-Chloronaphthalene			ug/L	< 0.80 [18]	< 0.80 [8.4]	< 0.80 [6]	< 0.80 [6]	< 0.80 [12]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2-Chlorophenol			ug/L	< 0.80 [18]	< 0.80 [8.4]	< 0.80 [6]	< 0.80 [6]	< 0.80 [12]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2-Methylnaphthalene			ug/L	< 0.16 [3.8]	< 0.16 [4.6]	< 0.16 [1.34]	< 0.16 [1.28]	< 0.16 [5]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.34]
SVOCs	2-Methylphenol			ug/L	< 0.80 [18]	< 0.80 [8.4]	< 0.80 [6]	< 0.80 [6]	< 0.80 [12]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2-Nitroaniline			ug/L	< 1.6 [38]	< 1.6 [16.8]	< 1.6 [13.4]	< 1.6 [12.8]	< 1.6 [24]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]
SVOCs	2-Nitrophenol			ug/L	< 1.6 [19.2]	< 1.6 [12]	< 1.6 [7]	< 1.6 [6.8]	< 1.6 [12]	< 1.6 [7.2]	< 1.6 [12.6]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7]
SVOCs	3,3'-Dichlorobenzidine			ug/L	< 4.0 [20]	< 4.0 [24]	< 4.0 [8]	< 4.0 [8]	< 4.0 [14]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]
SVOCs	3-Nitroaniline			ug/L	< 1.6 [38]	< 1.6 [16.8]	< 1.6 [13.4]	< 1.6 [12.8]	< 1.6 [24]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]
SVOCs	4,6-Dinitro-2-methylphenol			ug/L	< 4.0 [100]	< 4.0 [42]	< 4.0 [40]	< 4.0 [40]	< 4.0 [60]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]
SVOCs	4-Bromophenyl phenyl ether			ug/L	< 0.80 [18]	< 0.80 [8.4]	< 0.80 [6]	< 0.80 [6]	< 0.80 [12]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	4-Chloro-3-methylphenol			ug/L	< 0.80 [18]	< 0.80 [8.4]	< 0.80 [6]	< 0.80 [6]	< 0.80 [12]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	4-Chloroaniline			ug/L	< 0.80 [40]	< 0.80 [13.2]	< 0.80 [14]	< 0.80 [12]	< 0.80 [20]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]
SVOCs	4-Chlorophenyl phenyl ether			ug/L	< 0.80 [18]	< 0.80 [8.4]	< 0.80 [6]	< 0.80 [6]	< 0.80 [12]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	4-Methylphenol			ug/L	< 1.6 [19.2]	< 1.6 [12]	< 1.6 [7]	< 1.6 [6.8]	< 1.6 [12.6]	< 1.6 [7.2]	< 1.6 [12.6]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7.2]	< 1.6 [7]
SVOCs	4-Nitroaniline			ug/L	< 1.6 [38]	< 1.6 [16.8]	< 1.6 [13.4]	< 1.6 [12.8]	< 1.6 [24]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.8]	< 1.6 [13.4]
SVOCs	4-Nitrophenol			ug/L	< 4.0 [100]	< 4.0 [42]	< 4.0 [40]	< 4.0 [40]	< 4.0 [60]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]
SVOCs	Acenaphthene			ug/L	< 0.16 [3.8]	< 0.16 [4.6]	< 0.16 [1.34]	< 0.16 [1.28]	< 0.16 [2.6]	< 0.16 [1.38]	0.16 [1.56]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.34]
SVOCs	Acenaphthylene			ug/L	< 0.16 [3.8]	< 0.16 [4.6]	< 0.16 [1.34]	< 0.16 [1.28]	< 0.16 [2.4]	< 0.16 [1.38]	< 0.16 [1.46]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.38]	< 0.16 [1.34]
SVOCs	Acetophenone			ug/L	< 0.80 [18]	< 0.80 [8.4]	< 0.80 [6]	< 0.80 [6]	< 0.80 [12]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	Anthracene																	



**Attachment B**  
**April 2021 Groundwater Analytical Results**  
**Westinghouse Columbia Fuel Fabrication Facility, Hopkins, SC**

Group	Analyte	MCL	note	Well Date Type	W-61	W-62	W-63	W-64	W-65	W-66	W-67	W-68	W-69	W-70	W-71	W-72	W-73	W-74
					4/14/2021 10:29:00 AM N	4/19/2021 10:52:00 AM N	4/16/2021 9:54:00 AM N	4/15/2021 1:19:00 PM N	4/20/2021 9:48:00 AM N	4/20/2021 11:16:00 AM N	4/14/2021 11:53:00 AM N	4/19/2021 12:10:00 PM N	4/22/2021 9:07:00 AM N	4/22/2021 10:26:00 AM N	4/22/2021 11:55:00 AM N	4/12/2021 1:27:00 PM N	4/8/2021 2:50:00 PM N	4/12/2021 9:32:00 AM N
Radiological	Alpha particles	15	*	pCi/L	0.0623 # [2.48]	1.05 # [3.14]	1.08 # [4.14]	0.887 # [6.7]	<b>2.38 [3.22]</b>	0.233 # [1.062]	0.655 # [3.18]	-0.450 ## [3.44]	-0.0203 ## [3.02]	0.441 # [3.86]	2.30 # [5.66]	0.513 # [4.4]	0.363 # [0.432]	<b>3.13 # [2.08]</b>
Radiological	Beta particles	50	*	pCi/L	3.91 # [7.28]	2.23 # [3.52]	<b>10.3 [10.68]</b>	<b>42.1 [113]</b>	0.340 # [3.8]	3.80 # [5.34]	<b>45.5 [119]</b>	2.66 # [3.72]	0.783 # [2.44]	3.93 # [4.22]	4.92 # [10.68]	<b>9.59 [15.3]</b>	2.14 # [4.96]	2.91 # [5.08]
Radiological	Tritium			pCi/L														
Radiological	Technetium-99	900		pCi/L	-1.18 ## [5.28]	-1.71 ## [7.81]	<b>9.63 [0.586]</b>	<b>84.0 [141]</b>	-1.37 ## [5.25]	0.453 # [7.44]	<b>83.4 [179.6]</b>	-1.50 ## [8.25]	-0.693 ## [2.75]	0.850 # [13.46]	-0.0212 ## [8.42]	-1.81 ## [4.49]	-0.250 ## [8.44]	-0.0447 ## [7.18]
Radiological	Uranium-233/234			pCi/L	-0.113 ## [0.394]	-0.132 ## [0.216]	<b>1.10 [1.152]</b>	0.0187 # [0.698]	0.0385 # [0.1214]	-0.0428 ## [0.1934]	-0.0580 ## [0.1162]	-0.0327 ## [0.4]	-0.643 ## [0.36]	-0.138 ## [0.129]	-0.335 ## [0.206]	<b>0.758 [1.296]</b>	0.0302 # [0.1508]	-0.0309 ## [0.057]
Radiological	Uranium-235/236			pCi/L	0.0564 # [0.27]	-0.0150 ## [0.33]	0.0746 # [0.1766]	-0.0120 ## [0.1936]	-0.0462 ## [0.0702]	0.0381 # [0.1196]	0 # [0.208]	-0.0148 ## [0.226]	0.0273 # [0.1422]	-0.0566 ## [0.058]	-0.0235 ## [0.01098]	-0.0279 ## [0.0148]	0.0786 # [0.1436]	0.0109 # [0.0285]
Radiological	Uranium-238			pCi/L	-0.0564 ## [0.216]	-0.0101 ## [0.1644]	0.230 # [1.138]	0.0324 # [0.276]	0.159 # [0.2]	-0.0276 ## [0.266]	-0.0412 ## [0.366]	-0.0340 ## [0.1914]	-0.177 ## [0.21]	-0.0915 ## [0.0492]	-0.0949 ## [0.1118]	0.134 # [0.1826]	<b>0.113 # [0.0952]</b>	0.0101 # [0.0866]
Radiological	Percent Uranium-235			%	0 # [6.6]	0 # [0]	0 # [0]	0 # [8.06]	0 # [0]	0 # [5.3]	0 # [16.26]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]
Radiological	Uranium-234			ug/L	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]
Radiological	Uranium-235			ug/L	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	<b>0.0131 J [0.108]</b>	< 0.0700 [0.14]	< 0.0700 [0.14]
Radiological	Uranium-238			ug/L	< 0.200 [0.4]	< 0.200 [0.306]	<b>1.35 [1.516]</b>	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.352]	< 0.200 [0.4]	< 0.200 [0.4]	<b>0.0784 J [0.224]</b>	<b>0.423 [0.738]</b>	<b>0.133 J [0.208]</b>	< 0.200 [0.4]
Radiological	Total Uranium Isotopes	30		ug/L	< 0.200 [0.4]	< 0.200 [0.306]	<b>1.35 [1.516]</b>	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.352]	< 0.200 [0.4]	< 0.200 [0.4]	<b>0.0784 J [0.224]</b>	<b>0.437 [0.752]</b>	<b>0.133 J [0.208]</b>	< 0.200 [0.4]
Chemical	Fluoride	4		mg/L	< 0.100 [0.076]	< 0.100 [0.0186]	<b>0.108 [0.352]</b>	<b>4.10 [8.36]</b>	<b>0.196 [0.962]</b>	< 0.100 [0.106]	< 0.100 [0.086]	< 0.100 [0.076]	< 0.100 [0.086]	< 0.100 [0.2]	< 0.100 [0.19]	<b>0.741 [1.178]</b>	< 0.100 [0.144]	< 0.100 [0.028]
Chemical	Nitrate as N	10		mg/L	<b>2.5 [2.8]</b>	<b>3.9 [8]</b>	<b>2.3 [1.48]</b>	<b>34 [94]</b>	<b>1.2 [1.24]</b>	<b>1.4 [9.8]</b>	<b>13 [32]</b>	<b>2.5 [6.2]</b>	<b>0.51 [0.52]</b>	<b>1.7 [2.8]</b>	< 0.020 [0.07]	<b>2.8 [11.4]</b>	<b>5.1 [10.4]</b>	
Chemical	Ammonia as N			mg/L	< 0.100 [0.0722]	< 0.100 [0.0324]	< 0.100 [0.0826]	<b>9.96 [30.8]</b>	< 0.100 [0.0626]	< 0.100 [0.0482]	<b>1.28 [3.74]</b>	< 0.100 [0.0512]	< 0.100 [0.0666]	< 0.100 [0.0296]	< 0.100 [0.039]	< 0.100 [0.256]	< 0.100 [0.0552]	< 0.100 [0.1234]
SVOCs	1,1'-Biphenyl			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2,4,5-Trichlorophenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2,4,6-Trichlorophenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2,4-Dichlorophenol			ug/L	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]
SVOCs	2,4-Dimethylphenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2,4-Dinitrophenol			ug/L	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]
SVOCs	2,4-Dinitrotoluene			ug/L	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]
SVOCs	2,6-Dinitrotoluene			ug/L	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]
SVOCs	2-Chloronaphthalene			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2-Chlorophenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2-Methylnaphthalene			ug/L	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]
SVOCs	2-Methylphenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	2-Nitroaniline			ug/L	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]
SVOCs	2-Nitrophenol			ug/L	< 1.6 [7]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]
SVOCs	3,3'-Dichlorobenzidine			ug/L	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]
SVOCs	3-Nitroaniline			ug/L	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]
SVOCs	4,6-Dinitro-2-methylphenol			ug/L	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]
SVOCs	4-Bromophenyl phenyl ether			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	4-Chloro-3-methylphenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	4-Chloroaniline			ug/L	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [14]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]
SVOCs	4-Chlorophenyl phenyl ether			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	4-Methylphenol			ug/L	< 1.6 [7]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7]	< 1.6 [7]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]
SVOCs	4-Nitroaniline			ug/L	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [13.4]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]
SVOCs	4-Nitrophenol			ug/L	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [40]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]
SVOCs	Acenaphthene			ug/L	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]
SVOCs	Acenaphthylene			ug/L	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.34]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]
SVOCs	Acetophenone			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOCs	Anthracene			ug/L	< 0.16 [1.34]	< 0.16 [1												



Attachment B

April 2021 Groundwater Analytical Results  
Westinghouse Columbia Fuel Fabrication Facility, Hopkins, SC

				Well	W-74	W-75	W-76	W-77	W-78	W-78	W-79	W-80	W-81	W-82	W-83	W-84	W-85	W-86
				Date	4/12/2021 9:32:00 AM	4/12/2021 11:50:00 AM	4/9/2021 9:26:00 AM	4/7/2021 10:55:00 AM	4/7/2021 12:24:00 PM	4/7/2021 12:25:00 PM	4/6/2021 3:04:00 PM	4/6/2021 11:18:00 AM	4/6/2021 2:58:00 PM	4/6/2021 1:05:00 PM	4/6/2021 11:26:00 AM	4/6/2021 8:50:00 AM	4/22/2021 11:49:00 AM	4/22/2021 9:57:00 AM
				Type	FD	N	N	N	N	FD	N	N	N	N	N	N	N	N
Group	Analyte	MCL	note	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Radiological	Alpha particles	15	*	pCi/L	1.72 # [2.08]	-1.04 ## [3.44]	6.80 [16.5]	1110 [1360]	0.0827 # [2.08]	0.166 # [2.08]	-0.552 ## [2.28]	0.855 # [3.74]	6.35 [5.32]	2.66 [3.2]	-1.06 ## [3.46]	0.295 # [2.4]	1.26 # [2.44]	2.40 # [1.62]
Radiological	Beta particles	50	*	pCi/L	5.55 [5.08]	3.05 # [8.28]	6.02 [11.82]	101 [177.2]	3.78 [6.92]	1.27 # [6.92]	2.59 # [11.4]	6.93 [16.42]	2.90 # [8.64]	0.370 # [9.2]	0.207 # [4.66]	2.14 # [9.32]	3.55 # [3.36]	2.56 # [4.84]
Radiological	Tritium			pCi/L														
Radiological	Technetium-99	900		pCi/L	-1.12 ## [7.18]	-1.62 ## [5.9]	-0.518 ## [4.86]	8.38 [77.2]	-1.50 ## [2.35]	-0.493 ## [2.35]	0.340 # [3.76]	2.11 # [0.38]	0.663 # [4.54]	0.0115 # [1.19]	0.692 # [0.922]	0.165 # [3.51]	1.98 # [12.7]	0.664 # [5.66]
Radiological	Uranium-233/234			pCi/L	0.0176 # [0.057]	-0.00976 ## [0.0147]	4.06 [6.52]	937 [1134]	0.210 # [0.1552]	-0.0711 ## [0.1552]	0.0818 # [0.0116]	-0.184 ## [0.322]	1.38 [0.358]	-0.0159 ## [0.0798]	-0.0437 ## [0.702]	-0.0410 ## [0.1604]	-0.208 ## [0.0148]	-0.288 ## [0.21]
Radiological	Uranium-235/236			pCi/L	0.0896 # [0.0285]	0.00293 # [0.0562]	0.299 [0.1834]	40.9 [54.8]	-0.0192 ## [0.1412]	-0.00932 ## [0.1412]	0 # [0.0104]	-0.0534 ## [0.048]	0.0324 # [0.0108]	0.0729 # [0.00932]	0 # [0.176]	-0.0312 ## [0.059]	0 # [0.097]	0 # [0.1396]
Radiological	Uranium-238			pCi/L	0.130 # [0.0866]	-0.0344 ## [0.00978]	0.837 [1.184]	148 [182.4]	0.0350 # [0.1258]	0.0113 # [0.1258]	-0.00284 ## [0.16]	0.330 # [0.1756]	0.633 [0.262]	0.00134 # [0.1474]	-0.00906 ## [0.0171]	0.0842 # [0.00658]	0.0921 # [0.059]	-0.0273 ## [0.1686]
Radiological	Percent Uranium-235			%	0 # [0]	0 # [0]	5.26 [3.54]	4.11 [8.98]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]
Radiological	Uranium-234			ug/L	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	0.147 [0.1934]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]
Radiological	Uranium-235			ug/L	< 0.0700 [0.14]	< 0.0700 [0.14]	0.0798 [0.1544]	14.7 [21.4]	< 0.0700 [0.1002]	< 0.0700 [0.1002]	< 0.0700 [0.14]	< 0.0700 [0.14]	0.0286 J [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]
Radiological	Uranium-238			ug/L	< 0.200 [0.4]	< 0.200 [0.4]	2.42 [4.44]	331 [502]	0.222 [0.396]	0.132 J [0.396]	< 0.200 [0.326]	0.0963 J [0.3]	2.53 [0.73]	< 0.200 [0.296]	< 0.200 [0.322]	< 0.200 [0.314]	0.131 J [0.4]	< 0.200 [0.4]
Radiological	Total Uranium Isotopes	30		ug/L	< 0.200 [0.4]	< 0.200 [0.4]	2.50 [4.58]	346 [524]	0.222 [0.402]	0.132 J [0.402]	< 0.200 [0.326]	0.0963 J [0.3]	2.55 [0.73]	< 0.200 [0.296]	< 0.200 [0.322]	< 0.200 [0.314]	0.131 J [0.4]	< 0.200 [0.4]
Chemical	Fluoride	4		mg/L	< 0.100 [0.028]	< 0.100 [0.1986]	1.91 [3.36]	23.9 [20.4]	8.85 [24.8]	8.92 [24.8]	0.253 [2.12]	0.333 [1.306]	0.412 [0.1754]	< 0.100 [0.092]	< 0.100 [0.206]	< 0.100 [0.1806]	0.190 [0.42]	0.432 [0.96]
Chemical	Nitrate as N	10		mg/L	4.8 [10.4]	1.1 [1.18]	10 [22]	3.6 [24]	4.0 [7.4]	3.6 [7.4]	5.3 [8.6]	18 [22]	4.5 [3.8]	3.0 [2.8]	1.1 [1.5]	< 0.020 [0.07]	< 0.020 [0.054]	< 0.020 [0.04]
Chemical	Ammonia as N			mg/L	< 0.100 [0.1234]	0.172 [0.71]	< 0.100 [0.0348]	3.99 [18.96]	< 0.100 [0.051]	< 0.100 [0.051]	< 0.100 [0.0242]	< 0.100 [0.0774]	0.139 [0.282]	< 0.100 [0.0554]	< 0.100 [0.0536]	< 0.100 [0.048]	< 0.100 [0.1472]	0.168 [0.0256]
SVOcs	1,1'-Biphenyl			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	2,4,5-Trichlorophenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	2,4,6-Trichlorophenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	2,4-Dichlorophenol			ug/L	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]
SVOcs	2,4-Dimethylphenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	2,4-Dinitrophenol			ug/L	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]
SVOcs	2,4-Dinitrotoluene			ug/L	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]
SVOcs	2,6-Dinitrotoluene			ug/L	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]
SVOcs	2-Chloronaphthalene			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	2-Chlorophenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	2-Methylnaphthalene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]
SVOcs	2-Methylphenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	2-Nitroaniline			ug/L	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]
SVOcs	2-Nitrophenol			ug/L	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]
SVOcs	3,3'-Dichlorobenzidine			ug/L	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]
SVOcs	3-Nitroaniline			ug/L	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]
SVOcs	4,6-Dinitro-2-methylphenol			ug/L	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]
SVOcs	4-Bromophenyl phenyl ether			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	4-Chloro-3-methylphenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	4-Chloroaniline			ug/L	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]
SVOcs	4-Chlorophenyl phenyl ether			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	4-Methylphenol			ug/L	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]
SVOcs	4-Nitroaniline			ug/L	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]
SVOcs	4-Nitrophenol			ug/L	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]
SVOcs	Acenaphthene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]
SVOcs	Acenaphthylene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]
SVOcs	Acetophenone			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]
SVOcs	Anthracene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18											



**Attachment B**  
**April 2021 Groundwater Analytical Results**  
**Westinghouse Columbia Fuel Fabrication Facility, Hopkins, SC**

Well				W-87	W-88	W-89	W-90	W-92	W-93	W-94	W-95	W-96	W-97	W-91	
Date Type				4/15/2021 2:37:00 PM	4/21/2021 8:11:00 AM	4/21/2021 9:18:00 AM	4/20/2021 1:00:00 PM	4/21/2021 11:00:00 AM	4/7/2021 9:34:00 AM	4/23/2021 11:20:00 AM	4/22/2021 3:37:00 PM	4/22/2021 1:45:00 PM	4/21/2021 1:53:00 PM	4/20/2021 2:37:00 PM	
Group	Analyte	MCL	note	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	
Radiological	Alpha particles	15	*	pCi/L	4.42 [3.14]	3.35 # [3.86]	0.330 # [2.08]	2.04 # [3.96]	1.90 # [2.6]	1.29 # [3.38]	1.65 # [1.78]	0.537 # [2.68]	0.253 # [2.16]	2.07 # [6.3]	2.12 # [2.1]
Radiological	Beta particles	50	*	pCi/L	1.01 # [4.62]	3.64 # [4.8]	2.67 # [0.378]	2.37 # [17.28]	4.59 [6]	4.16 [9.16]	-1.10 ## [4.92]	1.60 # [9.28]	1.76 # [8.06]	42.3 [59.6]	5.13 [8.4]
Radiological	Tritium			pCi/L											
Radiological	Technetium-99	900		pCi/L	-1.68 ## [0.154]	1.42 # [5.76]	-0.966 ## [18.06]	-1.97 ## [4.56]	3.40 # [1.93]	-1.12 ## [9.27]	0.696 # [12.1]	-0.469 ## [1.224]	0.392 # [0.71]	97.8 [88.2]	0.186 # [0.021]
Radiological	Uranium-233/234			pCi/L	0.00879 # [0.2]	-0.315 ## [0.1464]	-0.755 ## [0.1742]	-0.181 ## [0.00425]	-0.301 ## [0.0796]	0.163 # [0.1128]	0.202 # [0.1904]	-0.164 ## [0.1458]	-0.0515 ## [0.0868]	-0.181 ## [0.1686]	-0.116 ## [0.177]
Radiological	Uranium-235/236			pCi/L	0 # [0.00674]	0.0337 # [0.0318]	0.0326 # [0.027]	-0.0557 ## [0.052]	0 # [0.0108]	0.0547 # [0.104]	0.121 # [0.0145]	0.0234 # [0.1062]	0.0441 # [0.1078]	0 # [0.049]	-0.0114 ## [0.1132]
Radiological	Uranium-238			pCi/L	0.0853 # [0.1508]	-0.0546 ## [0.1742]	-0.237 ## [0.0142]	0.0976 # [0.0284]	-0.190 ## [0.0452]	0.0885 # [0.1138]	-0.0644 ## [0.0131]	0.0568 # [0.062]	0.0535 # [0.182]	0.0373 # [0.0043]	-0.0153 ## [0.1064]
Radiological	Percent Uranium-235			%	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]	0 # [0]
Radiological	Uranium-234			ug/L	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]	< 0.0500 [0.1]
Radiological	Uranium-235			ug/L	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]	< 0.0700 [0.14]
Radiological	Uranium-238			ug/L	0.351 [0.48]	0.108 J [0.4]	0.0916 J [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.338]	< 0.200 [0.4]	< 0.200 [0.342]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]
Radiological	Total Uranium Isotopes	30		ug/L	0.351 [0.48]	0.108 J [0.4]	0.0916 J [0.4]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.338]	< 0.200 [0.4]	< 0.200 [0.342]	< 0.200 [0.4]	< 0.200 [0.4]	< 0.200 [0.4]
Chemical	Fluoride	4		mg/L	0.115 [0.434]	< 0.100 [0.142]	< 0.100 [0.074]	< 0.100 [0.16]	< 0.100 [0.204]	< 0.100 [0.062]	< 0.100 [0.106]	< 0.100 [0.162]	0.298 [0.678]	< 0.100 [0.134]	
Chemical	Nitrate as N	10		mg/L	0.097 [0.094]	4.0 [8.6]	2.3 [5.2]	1.7 [4.2]	0.068 [0.084]	4.5 [9.6]	0.054 [0.078]	0.039 [0.08]	< 0.020 [0.07]	15 [10.4]	2.0 [1.44]
Chemical	Ammonia as N			mg/L	< 0.100 [0.0496]	< 0.100 [0.0404]	< 0.100 [0.043]	< 0.100 [0.0518]	4.01 [8.1]	< 0.100 [0.0478]	0.110 [0.344]	< 0.100 [0.372]	5.28 [7.58]	< 0.100 [0.0326]	
SVOcs	1,1'-Biphenyl			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	2,4,5-Trichlorophenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	2,4,6-Trichlorophenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	2,4-Dichlorophenol			ug/L	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [8]
SVOcs	2,4-Dimethylphenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	2,4-Dinitrophenol			ug/L	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]
SVOcs	2,4-Dinitrotoluene			ug/L	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [9.6]
SVOcs	2,6-Dinitrotoluene			ug/L	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [9.6]
SVOcs	2-Chloronaphthalene			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	2-Chlorophenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	2-Methylnaphthalene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [0.96]
SVOcs	2-Methylphenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	2-Nitroaniline			ug/L	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [9.6]
SVOcs	2-Nitrophenol			ug/L	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [5.6]
SVOcs	3,3'-Dichlorobenzidine			ug/L	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]	< 4.0 [8]
SVOcs	3-Nitroaniline			ug/L	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [9.6]
SVOcs	4,6-Dinitro-2-methylphenol			ug/L	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]
SVOcs	4-Bromophenyl phenyl ether			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	4-Chloro-3-methylphenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	4-Chloroaniline			ug/L	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [12]	< 0.80 [8]
SVOcs	4-Chlorophenyl phenyl ether			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	4-Methylphenol			ug/L	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [6.4]	< 1.6 [5.6]
SVOcs	4-Nitroaniline			ug/L	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [11.8]	< 1.6 [9.6]
SVOcs	4-Nitrophenol			ug/L	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]	< 4.0 [20]
SVOcs	Acenaphthene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	0.35 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [0.96]
SVOcs	Acenaphthylene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [0.96]
SVOcs	Acetophenone			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	Anthracene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [0.96]
SVOcs	Atrazine	3		ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	Benz(a)anthracene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [0.96]
SVOcs	Benzaldehyde			ug/L	< 4.0 [14]	< 4.0 [14]	< 4.0 [14]	< 4.0 [14]	< 4.0 [14]	< 4.0 [14]	< 4.0 [14]	< 4.0 [14]	< 4.0 [14]	< 4.0 [14]	< 4.0 [12]
SVOcs	Benzo(a)pyrene	0.2		ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [0.96]
SVOcs	Benzo(b)fluoranthene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [0.96]
SVOcs	Benzo(g,h,i)perylene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [0.96]
SVOcs	Benzo(k)fluoranthene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [0.96]
SVOcs	Bis(2-chloroethoxy)methane			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	Bis(2-chloroethyl)ether			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOcs	Bis(2-chloroisopropyl)ether			ug/L	< 0.80 [6]										

Attachment B

April 2021 Groundwater Analytical Results

Westinghouse Columbia Fuel Fabrication Facility, Hopkins, SC

Well				W-87	W-88	W-89	W-90	W-92	W-93	W-94	W-95	W-96	W-97	W-91
Date				4/15/2021 2:37:00 PM	4/21/2021 8:11:00 AM	4/21/2021 9:18:00 AM	4/20/2021 1:00:00 PM	4/21/2021 11:00:00 AM	4/7/2021 9:34:00 AM	4/23/2021 11:20:00 AM	4/22/2021 3:37:00 PM	4/22/2021 1:45:00 PM	4/21/2021 1:53:00 PM	4/20/2021 2:37:00 PM
Group	Analyte	MCL	note	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
SVOCs	Pentachlorophenol (SIM)	1		ug/L	< 1.0 [20]	< 1.0 [22]	< 1.0 [20]	< 0.95 [20]	< 1.0 [20]	< 0.96 [20]	< 1.0 [20]	< 1.0 [22]	< 1.0 [22]	< 1.0 [16]
SVOCs	Phenanthrene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [0.96]
SVOCs	Phenol			ug/L	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [6]	< 0.80 [4]
SVOCs	Pyrene			ug/L	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [1.18]	< 0.16 [0.96]
VOCS	(1-Methylethyl)-Benzene			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	1,1,1-Trichloroethane	200		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	1,1,2,2-Tetrachloroethane			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	1,1,2-Trichloro-1,2,2-trifluoroethane			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	1,1,2-Trichloroethane	5		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	1,1-Dichloroethane			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	1,1-Dichloroethene	7		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	1,2,4-Trichlorobenzene	70		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	1,2-Dibromo-3-chloropropane	0.2		ug/L	< 1.0 [1.5]	< 1.0 [1.5]	< 1.0 [1.6]	< 1.0 [1.6]	< 1.0 [1.6]	< 1.0 [1.6]	< 1.0 [1.6]	< 1.0 [1.6]	< 1.0 [1.5]	< 1.0 [1.34]
VOCS	1,2-Dibromo-3-chloropropane (8011)	0.2		ug/L	< 0.020 [1.5]	< 0.019 [1.5]	< 0.019 [1.6]	< 0.019 [1.6]	< 0.019 [1.6]	< 0.020 [1.6]	< 0.020 [1.6]	< 0.019 [1.6]	< 0.019 [1.5]	< 0.019 [1.34]
VOCS	1,2-Dibromoethane	0.05		ug/L	< 1.0 [1.5]	< 1.0 [1.5]	< 1.0 [1.6]	< 1.0 [1.6]	< 1.0 [1.6]	< 1.0 [1.6]	< 1.0 [1.6]	< 1.0 [1.6]	< 1.0 [1.5]	< 1.0 [1.34]
VOCS	1,2-Dibromoethane (8011)	0.05		ug/L	< 0.020 [1.5]	< 0.019 [1.5]	< 0.019 [1.6]	< 0.019 [1.6]	< 0.019 [1.6]	< 0.020 [1.6]	< 0.020 [1.6]	< 0.019 [1.6]	< 0.019 [1.5]	< 0.019 [1.34]
VOCS	1,2-Dichlorobenzene	600		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	1,2-Dichloroethane	5		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	1,2-Dichloropropane	5		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	1,3-Dichlorobenzene			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	1,4-Dichlorobenzene	75		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	2-Butanone			ug/L	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]
VOCS	2-Hexanone			ug/L	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]
VOCS	4-Methyl-2-pentanone			ug/L	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]	< 10 [20]
VOCS	Acetone			ug/L	< 20 [40]	< 20 [40]	< 20 [40]	< 20 [40]	< 20 [40]	< 20 [40]	< 20 [40]	< 20 [40]	< 20 [40]	< 20 [40]
VOCS	Benzene	5		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Bromodichloromethane			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Bromoform			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Bromomethane			ug/L	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]
VOCS	Carbon disulfide			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Carbon tetrachloride	5		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Chlorobenzene	100		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Chloroethane			ug/L	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]
VOCS	Chloroform			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Chloromethane			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	cis-1,2-Dichloroethene	70		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	<b>5.3 [11.2]</b>	<b>2.7 [8]</b>	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	cis-1,3-Dichloropropene			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Cyclohexane			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Dibromochloromethane			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Dichlorodifluoromethane			ug/L	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]	< 2.0 [4]
VOCS	Ethylbenzene	700		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Methyl acetate			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Methyl tert-butyl ether			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Methylcyclohexane			ug/L	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]	< 5.0 [10]
VOCS	Methylene chloride	5		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Styrene	100		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Tetrachloroethene	5		ug/L	<b>40 [82]</b>	<b>2.7 [7.6]</b>	<b>6.4 [6.8]</b>	< 1.0 [2]	< 1.0 [2]	<b>29 [58]</b>	< 1.0 [2]	<b>1.1 [2.2]</b>	<b>16 [13.6]</b>	< 1.0 [2]
VOCS	Toluene	1000		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	trans-1,2-Dichloroethene	100		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	trans-1,3-Dichloropropene			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Trichloroethene	5		ug/L	<b>8.5 [18.6]</b>	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	<b>3.8 [7]</b>	< 1.0 [2]	< 1.0 [2]	<b>4.6 [3.2]</b>	< 1.0 [2]
VOCS	Trichlorofluoromethane			ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Vinyl chloride	2		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	<b>3.2 [6]</b>	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]
VOCS	Xylenes, Total	10000		ug/L	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]	< 1.0 [2]

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**Tabulated Soil Sampling Results for Dike Wall Adjacent to East Lagoon**

Attachment C

Dike Adjacent to East Lagoon  
Soil Sampling Analysis Compilation

Sample ID	mg/kg		mg/kg	mg/kg	Analyte (pCi/g)			Analyte (pCi/g)	Analyte (pCi/g)				Analyte (pCi/g)	SOF	SOF
	Fluoride		Nitrate	Ammonia	U-234		U-235 DL	U-235	U-238	Sum U		Tc-99 DL	Tc-99	Resid.	Ind.
ELC-1	16.4		2.21	15.3	27.5			1.29	8.17	36.96	<	0.833	0	2.86	0.09
ELC-2	21.4		3.97	15.0	26.6			1.84	9.24	37.68	<	0.785	0.127	2.94	0.11
ELC-3	37.7		9.11	21.7	43.3			2.33	11.2	56.83	<	0.815	0	4.42	0.14
ELC-4	0.879		0.952	2.22	4.30	<	0.404	0.233	2.48	7.01	<	0.860	0	0.54	0.02
ELC-5-2	32.6		239	28.2	120			6.41	28.7	155.11	<	0.813	0.0665	12.09	0.36
ELC-5-4	21.1		205	81.8	46.4			1.56	12.7	60.66	<	0.806	0.102	4.68	0.12
ELC-5-5	17.5		301	35.3	35.1			1.75	8.18	45.03	<	0.793	0.203	3.51	0.10
ELC-6-2	49.2		1.06	35.4	136			6.30	33.0	175.30	<	0.749	0.199	13.62	0.39
ELC-6-4	34.3		1.15	24.0	137			7.31	36.1	180.41	<	0.786	0.380	14.05	0.43
ELC-6-5	44.8		0.925	18.5	271			12.4	64.7	348.10	<	0.745	0.190	27.03	0.76
ELC-7-2	34.2		2.06	17.6	84.0			3.19	16.9	104.09	<	0.814	0.687	8.10	0.20
ELC-7-4	38.3		2.12	24.8	41.4			1.25	8.81	51.46	<	0.806	0.166	3.98	0.09
ELC-7-5	26.9		1.67	17.1	41.9			2.26	11.5	55.66	<	0.841	0.0211	4.33	0.13
ELC-8-2	45.8		1.71	26.8	166			8.49	30.4	204.89	<	0.823	0.556	16.03	0.44
ELC-8-4	20.6		1.89	20.3	51.9			2.95	12.6	67.45	<	0.813	0.477	5.29	0.16
ELC-8-5	31.7		2.08	27.7	73.2			3.74	19.3	96.24	<	0.818	0.704	7.51	0.23
ELC-9-2	44.5		1.94	29.2	102			4.81	28.6	135.41			1.22	10.55	0.31
ELC-9-4	36.4		3.54	21.8	227			11.3	57.9	296.20	<	0.660	0.628	23.04	0.68
ELC-9-5	54.4		3.77	24.9	330			16.1	79.1	425.20			2.06	33.16	0.95
ELC-10-2	54.5		4.15	21.1	48.9			2.04	10.8	61.74			0.950	4.84	0.13
ELC-10-4	54.3		3.81	18.7	2.66			0.136	1.31	4.11	<	0.654	0.0688	0.32	0.01
ELC-10-5	32.2		3.09	6.37	1.16	<	0.171	0.120	0.825	2.11	<	0.668	0	0.16	0.01
ELC-11-2	11.3		82.4	34.8	63.1			3.54	16.8	83.44			1.52	6.58	0.20
ELC-11-4	27.1		10.0	12.9	1.35			0.273	0.914	2.54	<	0.616	0.0592	0.21	0.01
ELC-11-5	22.3		7.68	6.92	1.46	<	0.195	0.165	1.08	2.71	<	0.641	0.277	0.22	0.01
ELC-12-2	22.9		2.69	16.0	36.9			2.81	10.5	50.21			1.69	4.03	0.14
ELC-12-4	10.3		3.21	8.59	2.65			0.238	1.57	4.46	<	0.657	0	0.35	0.02
ELC-12-5	25.9		3.28	4.93	24.9			1.77	7.26	33.93	<	0.657	0.165	2.66	0.09
ELC-13-2	32.1		2.55	16.7	54.0			3.25	15.1	72.35			1.17	5.70	0.18
ELC-13-4	8.60		2.71	10.3	3.56			0.206	1.71	5.48	<	0.646	0.101	0.43	0.02
ELC-13-5	7.82		2.81	7.00	1.72			0.154	1.02	2.89	<	0.652	0	0.22	0.01
ELC-14-2	50.1		3.95	18.1	66.3			5.46	20.9	92.66	<	0.846	0.150	7.28	0.28
ELC-14-4	13.0		4.82	14.4	7.67			0.602	3.07	11.34	<	0.808	0	0.88	0.03
ELC-14-5	18.2		5.94	6.66	31.5			2.31	8.63	42.44	<	0.854	0	3.33	0.12
ELC-15	3.48		1.26	3.52	5.51			0.324	3.44	9.27	<	0.827	0	0.71	0.03
ELC-16	16.5		11.7	11.6	6.66			0.473	1.76	8.89	<	0.821	0	0.70	0.02
ELC-17	16.0		20.7	12.7	5.77	<	0.172	0.151	1.57	7.49	<	0.849	0	0.57	0.01
ELC-18	4.86		31.0	34.9	42.1			2.82	8.66	53.58	<	0.754	0	4.21	0.13
ELC-19	5.16		3.02	12.8	50.9			3.34	11.1	65.34	<	0.818	0	5.13	0.16
ELC-20	4.06		2.64	13.5	25.1			1.20	5.26	31.56	<	0.791	0	2.46	0.07
ELC-21	5.57		2.42	17.2	18.7			1.15	5.15	25.00	<	0.828	0	1.95	0.06
ELC-22	6.26		1.78	17.6	41.0			2.40	9.60	53.00	<	0.832	0	4.14	0.13
ELC-23	11.2		2.81	16.9	24.3			1.23	6.61	32.14	<	0.832	0	2.50	0.08
ELC-24	6.60		4.43	22.6	15.7			0.895	3.80	20.40	<	0.835	0	1.59	0.05
ELC-25	3.59		6.61	17.5	17.8			1.07	4.13	23.00	<	0.817	0	1.80	0.06
ELC-26	5.71		4.32	22.0	49.2			2.24	8.24	59.68	<	0.665	0	4.65	0.12
ELC-27	5.85		1.01	21.5	33.9			1.59	6.61	42.10	<	0.691	0.478	3.30	0.09
ELC-28	11.3		1.32	26.9	41.8			2.00	7.41	51.21	<	0.621	0.160	4.00	0.11
ELC-29	5.97		0.985	16.7	51.9			2.37	9.34	63.61	<	0.705	0.316	4.97	0.13
ELC-30	6.45		1.34	31.5	79.1			3.79	15.6	98.49	<	0.671	0	7.67	0.21
ELC-31	5.25		7.67	15.9	27.4			1.44	5.87	34.71	<	0.696	0.00557	2.71	0.08
ELC-32	7.92		1.36	12.5	43.2			2.25	9.57	55.02	<	0.699	0.0610	4.29	0.12
ELC-33	17.2		2.45	14.5	36.0			1.94	9.84	47.78	<	0.658	0.114	3.72	0.12
ELC-34	49.7		1.81	37.5	96.0			5.30	23.6	124.90	<	0.872	0.339	9.75	0.30
ELC-35	40.5	<	0.390	22.6	160			7.71	38.5	206.21	<	0.724	0.458	16.05	0.46

**Attachment C**

**Dike Adjacent to East Lagoon**

Soil Sampling Analysis Compilation

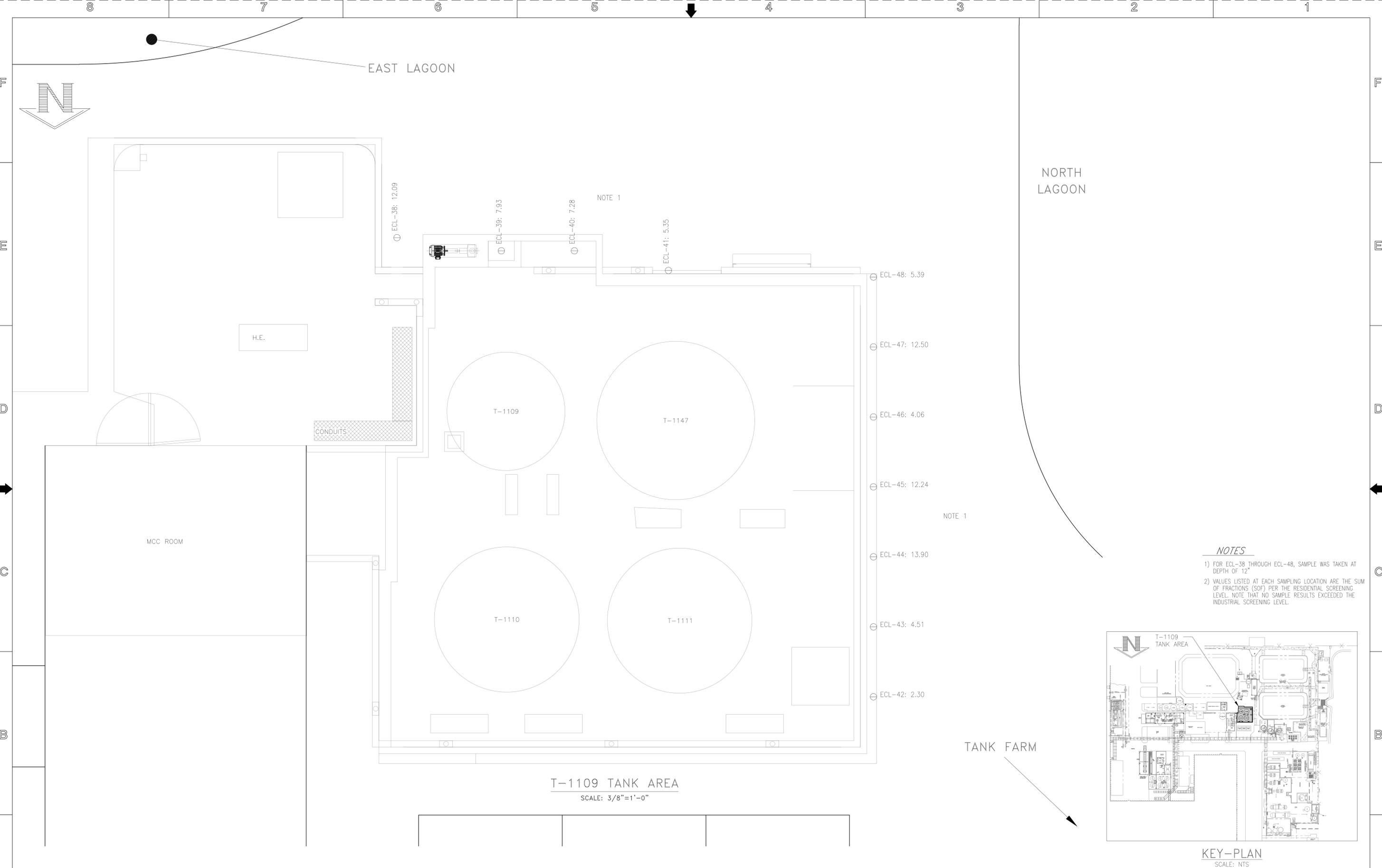
Sample ID	mg/kg		mg/kg	mg/kg	Analyte (pCi/g)			Analyte (pCi/g)	Analyte (pCi/g)			Analyte (pCi/g)	SOF	SOF	
	Fluoride		Nitrate	Ammonia	U-234	U-235 DL		U-235	U-238	Sum U		Tc-99 DL	Tc-99	Resid.	Ind.
ELC-36	7.92		0.935	23.5	127			6.47	28.7	162.17	<	0.927	0.758	12.67	0.36
ELC-37	13.0		0.680	17.1	135			6.47	29.0	170.47	<	0.710	0.123	13.27	0.37
ELC-38	8.74		71.3	8.43	119			5.85	29.8	154.65			1.39	12.09	0.35
ELC-39	53.4		8.30	7.58	77.9			3.70	18.7	100.30			2.72	7.93	0.22
ELC-40	43.3		15.5	9.32	70.8			3.10	18.7	92.60			2.15	7.28	0.21
ELC-41	29.8		11.7	9.85	52.7			2.48	11.8	66.98			2.70	5.35	0.15
ELC-42	32.9		3.26	11.2	22.2			0.820	6.55	29.57	<	0.682	0.485	2.30	0.06
ELC-43	44.3		6.30	21.7	45.8			1.83	10.3	57.93	<	0.920	0.415	4.51	0.12
ELC-44	16.6		9.05	9.08	138			6.78	33.6	178.38	<	0.805	0.690	13.90	0.40
ELC-45	19.1		3.39	6.13	122			6.22	28.9	157.12	<	0.811	0.279	12.24	0.36
ELC-46	36.9		4.28	5.61	40.1			2.07	9.67	51.84	<	0.791	0.398	4.06	0.12
ELC-47	34.3		25.0	9.03	123			6.11	30.2	159.31			2.19	12.50	0.36
ELC-48	38.7		20.6	13.5	54.3			2.59	12.0	68.89	<	0.764	0.558	5.39	0.15

Notes:

Negative values reflected as zero

Parameter	Residential Limits in Soil (per RA-433)	Industrial Limits in Soil (per RA-433)	Unit
Fluoride	600	n/a	mg/kg
Nitrate	130,000	n/a	mg/kg
Ammonia	n/a	n/a	n/a
U234	13	3310	pCi/g
U235	8	39	pCi/g
U238	14	179	pCi/g
Tc-99	19	89400	pCi/g



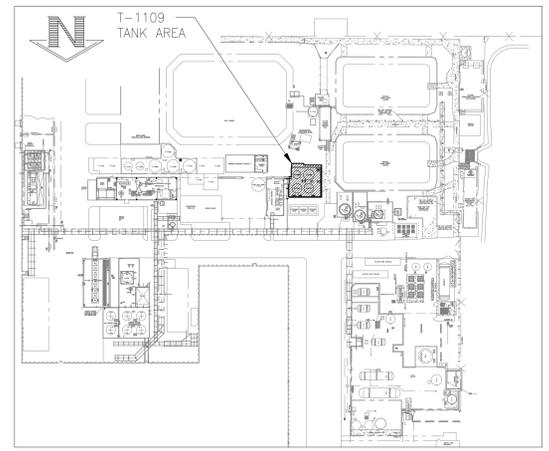


NOTE 1

NOTE 1

**NOTES**

- 1) FOR ECL-38 THROUGH ECL-48, SAMPLE WAS TAKEN AT DEPTH OF 12"
- 2) VALUES LISTED AT EACH SAMPLING LOCATION ARE THE SUM OF FRACTIONS (SOF) PER THE RESIDENTIAL SCREENING LEVEL. NOTE THAT NO SAMPLE RESULTS EXCEEDED THE INDUSTRIAL SCREENING LEVEL.



**KEY-PLAN**  
SCALE: NTS

**T-1109 TANK AREA**  
SCALE: 3/8"=1'-0"

CHANGE	DTW	W.D. HERLONG	07/22	<b>Westinghouse</b> ELECTRIC COMPANY LLC - NUCLEAR FUEL COLUMBIA, S.C. USA						
	CHKD		2020							
	APPD									
	APPD									
ZONE	APPD			AREA / PROCESS	T-1109 TANK STORAGE					
	APPD			TITLE	SAMPLE LOCATIONS MAP					
	APPD			SIZE	REGN NO	DWG NO	REV			
	APPD			SCALE	N/A	DWG TYPE	CV	SHEET	01	OF