Report of Analysis

Westinghouse Electric Company

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

Project Name: CVOC

Lot Number: **UH14136**Date Completed: 08/16/2019

08/16/2019 3:55 PM Approved and released by: Project Manager: Grant Wilton

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

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SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative Westinghouse Electric Company Lot Number: UH14136

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

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

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

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

Sample Summary Westinghouse Electric Company

Lot Number: UH14136 Project Name: CVOC Project Number:

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

(4 samples)

Detection Summary Westinghouse Electric Company

Lot Number: UH14136 Project Name: CVOC Project Number:

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

(2 detections)

Client: Westinghouse Electric Company

Laboratory ID: UH14136-001

Description: L-1 (10-15)

Matrix: Aqueous

Date Sampled: 08/14/2019 1500

Project Name: CVOC

Date Received: 08/14/2019

Project Number:

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

Number			100	Units	Run
	Method	Result Q	LOQ	Units	Kun
107-06-2	8260D	ND	1.0	ug/L	1
75-35-4	8260D	ND	1.0	ug/L	1
156-59-2	8260D	ND	1.0	ug/L	1
156-60-5	8260D	ND	1.0	ug/L	1
127-18-4	8260D	ND	1.0	ug/L	1
79-01-6	8260D	ND	1.0	ug/L	1
75-01-4	8260D	ND	1.0	ug/L	1
	75-35-4 156-59-2 156-60-5 127-18-4 79-01-6	75-35-4 8260D 156-59-2 8260D 156-60-5 8260D 127-18-4 8260D 79-01-6 8260D	75-35-4 8260D ND 156-59-2 8260D ND 156-60-5 8260D ND 127-18-4 8260D ND 79-01-6 8260D ND	75-35-4 8260D ND 1.0 156-59-2 8260D ND 1.0 156-60-5 8260D ND 1.0 127-18-4 8260D ND 1.0 79-01-6 8260D ND 1.0	75-35-4 8260D ND 1.0 ug/L 156-59-2 8260D ND 1.0 ug/L 156-60-5 8260D ND 1.0 ug/L 127-18-4 8260D ND 1.0 ug/L 79-01-6 8260D ND 1.0 ug/L

Surrogate	Q	Run 1 A % Recovery	cceptance Limits
Bromofluorobenzene		112	70-130
1,2-Dichloroethane-d4		114	70-130
Toluene-d8		100	70-130

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

Shealy Environmental Services, Inc.

B = Detected in the method blank

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

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

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

Client: Westinghouse Electric Company

Laboratory ID: UH14136-002

Description: L-1 (28-33)

Matrix: Aqueous

Date Sampled: 08/14/2019 1612

Project Name: CVOC

Date Received: 08/14/2019

Project Number:

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

	CAS	Analytical				
Parameter	Number	Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND	1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	3.8	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND	1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND	1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	2.7	1.0	ug/L	1

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

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

B = Detected in the method blank

H = Out of holding time W = Reported on wet weight basis P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

Client: Westinghouse Electric Company

Laboratory ID: UH14136-003

Description: L-1 (48-53)

Matrix: Aqueous

Date Sampled: 08/14/2019 1802

Project Name: CVOC

Date Received: 08/14/2019

Project Number:

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

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

Surrogate	Q	Run 1 A % Recovery	Acceptance Limits
Bromofluorobenzene		99	70-130
1,2-Dichloroethane-d4		117	70-130
Toluene-d8		97	70-130

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

B = Detected in the method blank

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

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

Client: Westinghouse Electric Company

Laboratory ID: UH14136-004

Description: TB-1

Matrix: Aqueous

Date Sampled: 08/14/2019 1810

Project Name: CVOC

Date Received: 08/14/2019

Project Number:

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

CAS	Analytical				
Number	Method	Result Q	LOQ	Units	Run
107-06-2	8260D	ND	1.0	ug/L	1
75-35-4	8260D	ND	1.0	ug/L	1
156-59-2	8260D	ND	1.0	ug/L	1
156-60-5	8260D	ND	1.0	ug/L	1
127-18-4	8260D	ND	1.0	ug/L	1
79-01-6	8260D	ND	1.0	ug/L	1
75-01-4	8260D	ND	1.0	ug/L	1
	Number 107-06-2 75-35-4 156-59-2 156-60-5 127-18-4 79-01-6	Number Method 107-06-2 8260D 75-35-4 8260D 156-59-2 8260D 156-60-5 8260D 127-18-4 8260D 79-01-6 8260D	Number Method Result Q 107-06-2 8260D ND 75-35-4 8260D ND 156-59-2 8260D ND 156-60-5 8260D ND 127-18-4 8260D ND 79-01-6 8260D ND	Number Method Result Q LOQ 107-06-2 8260D ND 1.0 75-35-4 8260D ND 1.0 156-59-2 8260D ND 1.0 156-60-5 8260D ND 1.0 127-18-4 8260D ND 1.0 79-01-6 8260D ND 1.0	Number Method Result Q LOQ Units 107-06-2 8260D ND 1.0 ug/L 75-35-4 8260D ND 1.0 ug/L 156-59-2 8260D ND 1.0 ug/L 156-60-5 8260D ND 1.0 ug/L 127-18-4 8260D ND 1.0 ug/L 79-01-6 8260D ND 1.0 ug/L

Surrogate	Q	Run 1 Acc	ceptance Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		112	70-130
Toluene-d8		94	70-130

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

B = Detected in the method blank

H = Out of holding time W = Reported on wet weight basis P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

Chain of Custody and Miscellaneous Documents

Document Number: F-AD-133 - Effective Date: 08-01-2014

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

SHEALY Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.

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

Number 101199

Westinghouse Columbia Fuel Estimation	1 Table 2 0	Diana	me Joyner	ner	102W-Lh9-808	School house.	
Address 5801 Bluff Road		Sampler's Signature	sture A. 4/	0 38.4	Anslysis (Attach list if more space is needed)	(needfid)	_
Oth Hopkins State Zo Code]	Printed Name	SALES K SYNEED Name		57		5
Projections Church's Fire Fabrication Facility		Z	Charles K Swolleth		20h f		
Project No.	P.O. No.	on where	Matrix	An of Containers by Presentative Type	9alian		UH14136
Sample ID / Description (Containers for each sample may be combined on one line.)	Date	1536 8-6 443-0	Ansi Ansi Shashby		Joly		GRW Remarks / Coolar I.D.
(51-01))-7	3 /4/14/8	1500 G	×	,	, ×		
7-1 (28-33)	1 61/11/8	1612 6	X	W	×		(Angly De Sr
65-87) 1-7	8/14/19	9 2081	×	w	×		only
1-8-1	8/m/m	9 0181	x	2	×		
A Land							
Turn Around Time Required (Pilor lab approval required for expedited INI.) Surrole Disposal Standard X Rush (Specify) 2.44 Ar (\(\lambda \l	() SALIO	Sample Disposal Refum to Client (XDisposal by Lab	Disposal by Lab	Possible Howard Identification (Chon-Record Paramable	Skin Irritant Poison Imponen	OC Requiréments (Specity)	unis (Spacity)
1. Relinguished Willy K Suffet		9/14/18	100 P)	1. Received by		Date	Tiène
2. Refraçuished by		Darke	Time	2. Received by		Date	Time
3. Relinquished by		Date	Time	3. Received by		Date	Torus
4. Relinquished by		Date	Time	4. Laboratory recelling by	1 / 200	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TAPI- STATE
Note: All samples are retained for four weeks from receipt	for four weeks f	rom receipt		LAGUSE OWY.	1247	Z/4//X	(2)
				A COMMISSION OF THE PARTY OF TH		-	

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

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

Sample Receipt Checklist (SRC)

Client: Westinghouse Columbia Fuel Cooler Inspected by/date: DMN / 08/14/19 Lot #: UH14136	
Means of receipt: ☐ SESI ☑ Client ☐ L.PS ☐ FedEx ☐ Other:	_
Yes ✓ No Were custody seals present on the cooler? 	
Yes No No NA 2. If custody seals were present, were they intact and unbroken?	
pH Strip ID: NA Chlorine Strip ID: NA Tested by NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA 5.0 /5.0 °C NA /NA °C NA /NA °C NA /NA °C	
Mathadi C Tananan Di ai C Tananan Di ai C Tanan Baran	
Method of coolant: ✓ Wet loc ☐ Ice Packs ☐ Dry Ice ☐ None	
Yes No No No Notified? Yes No No Notified by: phone / email / face-to-face (circle one).	
Yes No NA 4. Is the commercial courier's packing slip attached to this form?	-
✓ Yes No 5. Were proper custody procedures (relinquished/received) followed?	
✓ Yes ☐ No 6. Were sample IDs listed on the COC?	
✓ Yes □ No 7. Were sample IDs listed on all sample containers?	
✓ Yes □ No 8. Was collection date & time listed on the COC?	
✓ Yes □ No 9. Was collection date & time listed on all sample containers?	
✓ Yes ☐ No 10. Did all container label information (ID, date, time) agree with the COC?	
✓ Yes No 11. Were tests to be performed listed on the COC?	
Yes No 12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?	
☑ Ycs ☐ No	
The sample volume available:	
The modern of th	
Yes No NA 16. For VOA and RSK-175 samples, were bubbles present >"pca-size" (¼"or 6mm in diameter in any of the VOA vials?	èr)
Yes □ No ☑ NA 17. Were all DRO/metals/nutrient samples received at a pH of < 2?	
Tes No NA NA NA NA recall cyanide samples received at a pH > 12 and suiffide samples received at a pH > 02	_
Li Yes Li No Zi NA chlorine?	
Yes No No NA 20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc)	-
correctly transcribed from the COC into the comment section in LIMS?	
☐ Yes ☑ No ☐ 21. Was the quote number listed on the container label? If yes, Quote # NA	
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NAwere received incorrectly preserved and were adjusted according in sample receiving with NAmL of circle one: H2SO4, HNO3, HCI, NaOH using SR # NA	jly
. If more than one preservative is needed, please note in the comments below.	ı
Sample(s) NA were received with bubbles >6 mm in diameter.	
Samples(s) NA	_
A sample receiving with somum thiosulfate (Na ₂ S ₂ O ₃) with Shealy ID; NA	
SR barcode labels applied by: BMG Date: 08/14/19	
Comments:	
	_
	_
	_
	-

Report of Analysis

Westinghouse Electric Company

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

Project Name: CVOC

Lot Number: **UH15060**Date Completed: 08/16/2019

08/16/2019 5:18 PM Approved and released by: Project Manager: Grant Wilton

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SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative Westinghouse Electric Company Lot Number: UH15060

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

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

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

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

Sample Summary Westinghouse Electric Company

Lot Number: UH15060 Project Name: CVOC Project Number:

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

(4 samples)

Detection Summary Westinghouse Electric Company

Lot Number: UH15060 Project Name: CVOC Project Number:

Sample Sample ID Matrix	Parameter	Method	Result	Q	Units	Page
-------------------------	-----------	--------	--------	---	-------	------

(0 detections)

Client: Westinghouse Electric Company

Description: L-1 (63-68)

Laboratory ID: UH15060-001

Matrix: Aqueous

Date Sampled:08/15/2019 1000 Project Name: CVOC Date Received: 08/15/2019 Project Number:

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

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

Surrogate
Q % Recovery Limits

Bromofluorobenzene
1,2-Dichloroethane-d4
Toluene-d8
Run 1 Acceptance Limits
70-130
70-130
70-130

$$\begin{split} LOQ &= Limit \ of \ Quantitation \\ ND &= Not \ detected \ at \ or \ above \ the \ LOQ \\ H &= Out \ of \ holding \ time \end{split}$$

B = Detected in the method blank
N = Recovery is out of criteria

W = Reported on wet weight basis

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

Client: Westinghouse Electric Company

Laboratory ID: UH15060-002 Matrix: Aqueous

Description: L-1 (78-83)

Date Sampled:08/15/2019 1205

Project Name: CVOC

Date Received: 08/15/2019

Project Number:

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

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

Surrogate	Q	Run 1 F % Recovery	Acceptance Limits
Bromofluorobenzene		108	70-130
1,2-Dichloroethane-d4		123	70-130
Toluene-d8		104	70-130

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

B = Detected in the method blank

W = Reported on wet weight basis

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Client: Westinghouse Electric Company Laboratory ID: UH15060-003 Description: L-1 (78-83)-DUP Matrix: Aqueous

Date Sampled:08/15/2019 1205 Project Name: CVOC

Date Received: 08/15/2019 Project Number:

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

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

Acceptance Limits Run 1 Q % Recovery Surrogate Bromofluorobenzene 98 70-130 1,2-Dichloroethane-d4 119 70-130 Toluene-d8 98 70-130

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

B = Detected in the method blank

N = Recovery is out of criteria W = Reported on wet weight basis

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

Client: Westinghouse Electric Company

Laboratory ID: UH15060-004 Matrix: Aqueous

Description: TB-02-091519 Date Sampled:08/15/2019 1650

5030B

Project Name: CVOC

Date Received: 08/15/2019

Project Number:

Run Prep Method

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

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

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		97	70-130
1,2-Dichloroethane-d4		117	70-130
Toluene-d8		95	70-130

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

B = Detected in the method blank

W = Reported on wet weight basis

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Chain of Custody and Miscellaneous Documents

SHEALY Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.

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

Number 101198

UH15060 Remarks / Cooler J.D. GRW Quelle No. 8 OC Requirements (Spacify) ime Time Time population of constitution Date Ostb Select Select Analysis (Attach list if more space is headed) □ JnAnown Presentet Temp. O Polson 803-647-1920, Talephone No. / E-mail kee Pack 1.1 Skin Inritant Paranoly) Ş 5001 X × X × 1,05 Posseble Hezard Identification ☐ Flammable PH 5800 Received on ton (Gircle) No of Containers by Prosentative Type HOM 4. Laboratory receive LAB USE ONLY t. Received by 3. Received by KOH Return to Client | | Dispossy by Leb | | | X-Non-Hazard 3 W W N 2. Received by Charles K. Swalter RONH Charles K Light *089/ Report to Contest Distrar Joynes raidun ANDS ADM Matrix Time? Samplar's Signature Timo 7/17/8 Aribes Ü O O V Painted Name Note: All samples are retained for four weeks from receipt 61/51/2 fum Around Time Required (Prior lab approval required for expedited IAT.) Sample Disposal 502 000/ (205 1650 Time Date OBto $O_{3/6}$ unless other arrangements are made. Table Sing Which miles 8 15/19 51/21/8 8/15/19 6/15/18 P.O. Na Date hr or some 20 Code Ž N. Bar (Containors for each sample may be combined on one line.) westing house Columbia Tree I ond-(28-82)1-7 Standard K Rush (Specify) 48 Sanyale ID / Description TB-02-081519 Co [washig 5801 Alust Row (89-69) 1-7 (=1 (78-83) 1. Retinquishoopy CON NOPKING ks ling howa 3. Refinquisited by 2. Relinquished by Reunquished by Project No.

Document Number: FAD-133 Effective: Cate: 08-01-2014

DISTRIBUTION; WHITE & YELLOW-Return to Inhoratory With Sample(s); PINK-RelaChert Copy

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

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

Sample Receipt Checklist (SRC)

Client: Westinghouse Columbia Cooler Inspected by/date: DMN / 08/15/19 Lot #: UH15060
Means of receipt: SESI Client UPS FedEx Other:
Yes No 1. Were custody seals present on the cooler?
Yes No NA 2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID; NA 5.9 /5.9 °C NA /NA °C NA /NA °C NA /NA °C
Method: Temperature Blank Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C
Method of coolant: Wet Icc
Yes No
PM was Notified by: phone / email / face-to-face (circle one).
Yes No No NA 4. Is the commercial courier's packing slip attached to this form?
 ✓ Yes ✓ No 5. Were proper custody procedures (relinquished/received) followed? ✓ Yes ✓ No 6. Were sample IDs listed on the COC?
The state of all sample containers
The state of the coop,
The sample containers?
acet information (no, date, time) agree with the COC/
perfection and the coor
Yes No 12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☑ Yes ☐ No 13. Was adequate sample volume available?
Yes No 14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
Yes No No NA 16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
Yes No No NA 17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes ☐ No 62 NA 18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 02
☐ Yes ☐ No ☑ NA 19. Were all applicable NH ₃ /TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual chlorine?
Yes No No NA 20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc)
correctly transcribed from the COC into the comment section in LIMS?
Yes No 21. Was the quote number listed on the container label? If yes, Quote # NA
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)
Sample(s) NA were received incorrectly preserved and were adjusted accordingly
mL of circle one: H2SO4, HNO3, HCL NaOH using SR # NA
I find of preservation NA
Sample(s) TB-02-081519 (2) were received with bubbles >6 mm in diameter.
Samples(s) NA were received with TRC > 0.5 mg/l (15 ±10 is no.) and many
adjusted accordingly in sample receiving with sodium thiosulfate (Na ₂ S ₂ O ₃) with Shealy ID: NA
SR barcode labels applied by: DMN Date: 08/15/19
Comments:

Report of Analysis

Westinghouse Electric Company

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

Project Name: CVOC

Lot Number: **UH16068**Date Completed: 08/20/2019

08/20/2019 3:37 PM Approved and released by: Project Manager: Grant Wilton

Rund N Withou





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

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SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative Westinghouse Electric Company Lot Number: UH16068

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

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

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

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

Sample Summary Westinghouse Electric Company

Lot Number: UH16068 Project Name: CVOC Project Number:

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

(3 samples)

Detection Summary Westinghouse Electric Company

Lot Number: UH16068 Project Name: CVOC Project Number:

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

(2 detections)

Client: Westinghouse Electric Company

Laboratory ID: UH16068-001

Description: L-17 (15-20)

Matrix: Aqueous

Date Sampled:08/16/2019 1003

Project Name: CVOC

Date Received: 08/16/2019

Project Number:

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

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND	1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	6.2	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND	1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND	1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND	1.0	ug/L	1
	Pun 1 Accent	ance				

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		103	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		108	70-130

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

B = Detected in the method blank

W = Reported on wet weight basis

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Client: Westinghouse Electric Company

Laboratory ID: UH16068-002 Matrix: Aqueous

> Batch 26312

Description: L-17 (25-30) Date Sampled:08/16/2019 1122

Project Name: CVOC

Date Received: 08/16/2019

Project Number:

Run	Prep Method
1	5030B

Analy

ytical Method	Dilution	Analysis Date Analyst	Prep Date
8260D	1	08/19/2019 1235 TMI	

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND	1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	5.4	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND	1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND	1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND	1.0	ug/L	1
	Run 1 Accept	tance				

Surrogate	Q	Run 1 A % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		101	70-130
Toluene-d8		108	70-130

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

B = Detected in the method blank

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

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

Client: Westinghouse Electric Company

Laboratory ID: UH16068-003 Matrix: Aqueous

Description: TB-03-081619

Date Sampled:08/16/2019 1200

Date Received: 08/16/2019

Project Name: CVOC Project Number:

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

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

Acceptance Limits Run 1 Q % Recovery Surrogate Bromofluorobenzene 70-130 102 1,2-Dichloroethane-d4 99 70-130 Toluene-d8 108 70-130

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ B = Detected in the method blank

W = Reported on wet weight basis

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

N = Recovery is out of criteria H = Out of holding time

Chain of Custody and Miscellaneous Documents

Document Number: F.40-133 - Effective Date: 08-01-2014

DISTRIBUTION: WHITE & YELLOW-Return to Inhamitary with Sample(s); PINK-FleubClant Copy

Chain of Custody Record

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

Number 101201

Street, base 11 65 P. J. Phology N. C. 17.	Report to Cantrot	,	Telepho		200	Quate No.
same	Visina	Joyner	€08	803-647-1920/200	Well Maker St. Com	
5801 Blaff Road	oku/sS	. 0 //		Analysis (Attach list if incre space is needed)	(pep)	1 1
Caty Hopkins State Zp Code	X Challe	ころとが大力を見				7.3ge 01
the family	Chr	Charles K. Sullet.	Sales WC			
Projekt No.	System Con	Matrix	ers Type			UH16068
Sample 10 / Description (Confurers for each sample may be combined on one line.)	Programme and a second	Secondary Secondary Proc	HOW KOH EOHH			Remarks / Cautar I.D.
1-17 (15-20) 8/46/14	1003 GX					
1-17 (25-30) 8/16/19	1122 GX		×			
18-03-081619	× 9 000		×			
required to expedited IAT.)	- 20	Spocal by Lab Son	Possible Hazard Josephinestion Sour-Hazard — Planmakly — Oskin Lintant	nitani 🗆 Puison 🗀 Unknown	Requiremen	is (Specify)
Charles K Suppered	2/16/19	808	7. Heceived by		Oarte	Пте
2. Relinquished by	Date	Type 2. R	2. Received by		Date	Time
3. ReWiquished by	Date	Time 3. P	3. Received by		Care	Tans
4. Refinquished by		Time 4. 14	4. indication received by	The state of the s	80011 Gines 11008	KOOH em
Note: All samples are retained for four weeks from receipt unless other arrangements are made.	ks from receipt	24.0	AABLOSE ONLY Booselved on the Circles No.	Jones Order	17.0	77 200

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

Sample Receipt Checklist (SRC)

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

Client: Westinghouse Columbia Cooler Inspected by/date: BMG / 08/16/19 Lot #: UH16068							
Means of receipt: ☐ SESI ☑ Client ☐ UPS ☐ FedEx ☐ Other:							
☐ Yes ☑ No ☐ 1. Were custody seals present on the cooler?							
Yes No NA 2. If custody seals were present, were they intact and unbroken?							
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA							
Original temperature upon receipt / Derived (Corrected) temperature upon receipt							
5.7 /5.7 °C NA /NA °C NA /NA °C NA /NA °C							
Method: ☐ Temperature Blank ☑ Against Bottles IR Gun ID:5 IR Gun Correction Factor:0 °C							
Method of coolant: Wet Ice □ Ice Packs □ Dry Ice □ None							
Yes No No No No Notified? Yes No No Notified by: phone / email / face-to-face (circle one).							
☐ Yes ☐ No ☑ NA 4. Is the commercial courier's packing slip attached to this form?							
✓ Yes No							
✓ Yes ☐ No 6. Were sample IDs listed on the COC?							
✓ Yes No 7. Were sample IDs listed on all sample containers?							
✓ Yes □ No 8. Was collection date & time listed on the COC?							
✓ Yes ☐ No 9. Was collection date & time listed on all sample containers?							
✓ Yes No 10. Did all container label information (ID, date, time) agree with the COC?							
Yes No 11. Were tests to be performed listed on the COC?							
Yes No 12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?							
☑ Yes ☐ No 13. Was adequate sample volume available?							
✓ Yes □ No 14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?							
☐ Yes ☑ No ☐ 15. Were any samples containers missing/excess (circle one) samples Not listed on COC?							
Yes No No NA 16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?							
Yes □ No ☑ NA 17. Were all DRO/metals/nutrient samples received at a pH of < 2?							
Yes No No NA 18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?							
☐ Yes ☐ No ☑ NA 19. Were all applicable NH ₃ /TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual chlorine?							
Yes No No No No Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc)							
correctly transcribed from the COC into the comment section in LIMS?							
☐ Yes ☑ No ☐ 21. Was the quote number listed on the container label? If yes, Quote # NA							
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)							
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mt, 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) TB-03-081619 (2) were received with bubbles >6 mm in diameter.							
Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is no) and were							
adjusted accordingly in sample receiving with sodium thiosulfate (Na ₂ S ₂ O ₃) with Sheaty ID: NA .							
SR barcode labels applied by: DMN Date: 08/16/19							
Comments:							

Report of Analysis

Westinghouse Electric Company

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

Project Name: CVOC

Lot Number: **UH19033**Date Completed: 08/28/2019

Rind N With

08/29/2019 10:47 AM Approved and released by: Project Manager: Grant Wilton





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SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative Westinghouse Electric Company Lot Number: UH19033

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

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

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

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

Sample Summary Westinghouse Electric Company

Lot Number: UH19033 Project Name: CVOC Project Number:

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

(3 samples)

Detection Summary

Westinghouse Electric Company

Lot Number: UH19033 Project Name: CVOC Project Number:

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

(2 detections)

Inorganic non-metals

Client: Westinghouse Electric Company

Description: EB-01-081919

Laboratory ID: UH19033-001

Matrix: Aqueous

Date Sampled:08/19/2019 1315 Project Name: CVOC Date Received: 08/19/2019 Project Number:

RunPrep MethodAnalytical MethodDilutionAnalysis DateAnalystPrep DateBatch1(Fluoride) 9056A108/28/2019 0439GMH272871(Nitrate - N) 353.2108/21/2019 0014MDD26536

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

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

H = Out of holding time

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

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

Client: Westinghouse Electric Company

Laboratory ID: UH19033-001 Matrix: Aqueous

Description: EB-01-081919 Date Sampled:08/19/2019 1315

Project Name: CVOC

Date Received: 08/19/2019

Project Number:

Run Prep Method 5030B

Analytical Method Dilution Analysis Date Analyst 8260D

08/21/2019 2258 ALR1

Prep Date

Batch 26707

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

Q	% Recovery	Limits
	97	70-130
	109	70-130
	97	70-130
	Q	Q % Recovery 97 109

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

B = Detected in the method blank

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

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

Inorganic non-metals

Client: Westinghouse Electric Company

Description: L-10 (9-14)

Date Sampled: 08/19/2019 1250

Project Name: CVOC

Date Received: 08/19/2019

Laboratory ID: UH19033-002

Matrix: Aqueous

Project Name: CVOC

RunPrep MethodAnalytical MethodDilutionAnalysis Date AnalystPrep DateBatch1(Fluoride) 9056A108/28/2019 0455GMH272871(Nitrate - N) 353.2108/21/2019 0015MDD26536

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

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

H = Out of holding time

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

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

Client: Westinghouse Electric Company

Description: L-10 (9-14)

Laboratory ID: UH19033-002

Matrix: Aqueous

Date Sampled:08/19/2019 1250 Project Name: CVOC

Date Received: 08/19/2019 Project Number:

RunPrep MethodAnalytical MethodDilutionAnalysis DateAnalystPrep DateBatch15030B8260D108/21/2019 2322 ALR126707

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

SurrogateQRun 1 / RecoveryAcceptance LimitsBromofluorobenzene9170-1301,2-Dichloroethane-d410970-130Toluene-d89870-130

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

B = Detected in the method blank

N = Recovery is out of criteria W = Reported on wet weight basis P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Client: Westinghouse Electric Company

Laboratory ID: UH19033-003 Matrix: Aqueous

Description: TB-04-081919 Date Sampled:08/19/2019 1315

Project Name: CVOC

Date Received: 08/19/2019

Project Number:

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

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

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		95	70-130
1,2-Dichloroethane-d4		109	70-130
Toluene-d8		96	70-130

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

B = Detected in the method blank

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

W = Reported on wet weight basis

Chain of Custody and Miscellaneous Documents

Document Number: F-40-133 Effective Date: 08-01-2014

DISTRIBUTION: WHITE & YELLOVA-Fetum to laboratory with Sanyvie(s); PINK-Field/Client Copy

SHEALY Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.

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

Number 097985

trapouse columbia	The land		DEM BYER	2000		25.00	989-647-1920		Medical com	
Address 5801 Bluff Rend		Sampler's Signature	gnature N O	19.11		Analysis	(Attach list	Analysis (Attach list if more space is needed)	seded)	Pane w
ON HOPKIN STATE ZD COOF		Printed Marrie	CASA K LASA	X2X		,				
Propositions Columbia Facel Fabrication Facility	是是	-	John Kark	Z		5011	9			
Projekt No.	P.O. No.		Matrix	No of Confavars by Preservative Type	artive Type	MA	What show			UH19033
Samake 10 / Description Cantainers for each sample may be combined on one that,	Date	Tiene	orantiv olin prog arountly (inc)-0 (inc)-0	SOWH SOWH	MA SEGS	esolis)	n)=l UN			65W Remarks / Cooler LD.
1/8 (15-20) 81-7	8/19/19	1450 6	X	w		×				48 hr TAT or sooner
1/8 (62-42) 81-7	8/14/19	1612 6	×	in		×				48 M TAT OF SECRET
EB-01-081919 8/1	8/10/10	9 5161	×	3		×	×			Strokad TAT
1-10(4-14)	14/19	1750 6	X	3		<u> </u>	×			Standard TAT
18-04-081919	14 14	1375 6	×	14						Standing TAT
Turn Around Time Required (Plan teh symmal required for expedited IAT), Sample Disposel Standard Rush (Specify) Sec. Rework Return to Dism	softed IAT.)	Sample Dispossi	Sample Disposs! Return to Oliver 1) Disposal by Lab Mon-Hazard	Possible Hazard	Possible Hazard Identification	Skin Irritant		□ Poison . □ Unknuwr	-	QC Requirements (Specify)
1. Pellinguished Balls & Lallth		8/19/19	7 (840	7. Received by	34.	1			Date	Тапе
2. Refinquished by		Daire	Tyme	2. Received by	ă.				Cate	Типе
3. Relinquiebed by		Date	Twee	3. Received by	à				Cate	Tune
4. Relinquished by		Date	Тлте	4. Laboratory received by		3	-	¥	1101数	(10) June (10)
Note: All samples are retained for four weeks from receipt	four was	te from neces	15	2 40 10th OA	-	2×€	12%	1		21-02

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

Sample Receipt Checklist (SRC)

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

Client: Westinghouse Columbia Cooler Inspected by/date: DMN / 08/19/19 Lot #: UH19033
Means of receipt: SESI Client UPS FedEx Other:
Yes No 1. Were custody scals present on the cooler?
Yes No No NA 2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA 5.7 /5.7 °C NA /NA °C NA /NA °C NA /NA °C
Method: Temperature Blank Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C
Method of coolant: ☐ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None
Yes No No No No Notified by: phone / email / face-to-face (circle one).
☐ Yes ☐ No ☑ NA 4. Is the commercial courier's packing slip attached to this form?
☑ Yes □ No
☑ Yes ☐ No 6. Were sample IDs listed on the COC?
☑ Yes ☐ No 7. Were sample IDs listed on all sample containers?
✓ Yes No 8. Was collection date & time listed on the COC?
☑ Yes □ No 9. Was collection date & time listed on all sample containers?
☑ Yes ☐ No ☐ 10. Did all container label information (ID, date, time) agree with the COC?
Yes No 11. Were tests to be performed listed on the COC?
Yes No 12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
✓ Yes No 13. Was adequate sample volume available?
Yes No 14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes No 15. Were any samples containers missing/excess (circle onc) samples Not listed on COC?
Yes No No NA 16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
☐ Yes ☐ No ☑ NA 17. Were all DRO/metals/nutrient samples received at a pH of < 2?
L Yes L No M NA 18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 92
Yes No No No NA 19. Were all applicable NH ₂ /TKN/cyanide/phonol/625 (< 0.5mg/L) samples free of residual chlorine?
Yes No No No NA 20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc)
correctly transcribed from the COC into the comment section in LIMS?
Yes No 21. Was the quote number listed on the container label? If yes, Quote # NA
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)
Sample(s) NAwere received incorrectly preserved and were adjusted accordingly
in sample receiving with NA mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # NA
I f more than one preservative is needed, please note in the comments below.
Sample(s) TB-04-081919 (2) were received with bubbles >6 mm in diameter.
Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is no) and were
adjusted accordingly in sample receiving with sodium thiosulfate (Na ₂ S ₂ O ₃) with Shealy ID: NA
SR barcode labels applied by: BMG Date: 08/19/19
Comments:

Report of Analysis

Westinghouse Electric Company

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

Project Name: CVOC

Lot Number: **UH19036**Date Completed: 08/22/2019

Project Manager: Grant Wilton

08/26/2019 5:15 PM
Approved and released by:
Project Manager: Cathy S. Dover





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

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SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative Westinghouse Electric Company Lot Number: UH19036

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

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

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

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

Sample Summary Westinghouse Electric Company

Lot Number: UH19036 Project Name: CVOC Project Number:

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

(2 samples)

Detection Summary Westinghouse Electric Company

Lot Number: UH19036 Project Name: CVOC Project Number:

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

(2 detections)

Client: Westinghouse Electric Company

Laboratory ID: UH19036-001 Matrix: Aqueous

Description: L-18 (15-20) Date Sampled:08/19/2019 1450

Project Name: CVOC

Date Received: 08/19/2019

Project Number:

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

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

Q	% Recovery	Acceptance Limits
	96	70-130
	94	70-130
	103	70-130
	Q	Q % Recovery 96 94

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ B = Detected in the method blank

N = Recovery is out of criteria W = Reported on wet weight basis P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Client: Westinghouse Electric Company

Laboratory ID: UH19036-002

Matrix: Aqueous

Description: L-18 (24-29) Date Sampled:08/19/2019 1450

Project Name: CVOC

Date Received: 08/19/2019

Project Number:

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

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND	1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	1.2	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND	1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND	1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	1.1	1.0	ug/L	1

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

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ B = Detected in the method blank

N = Recovery is out of criteria W = Reported on wet weight basis P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Chain of Custody and Miscellaneous Documents

Document Number: F-AD-133 - Effective Date: 08-01-2014

DISTRIBUTION: WHITE & YELLOW-Relum to laboratory with Sample(s); PINK-Flakk/Client Copy

SHEALY Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.

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

Number 097985

chert Linghouse Columbia Free Fabrica	Report to Consect Diama Byshor	Dana J	бунов	Telephone No. / E-mail (207-647-1920)	1015-meil joynerape	100 Se. Our	Quarte Ms.
		aure 0 1	14.11	Analysis (Att	Analysis (Attach list If more space is needed)	(pag)	Page 1 of 1
Project Name 1: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	× = .	Charles K Sullette	<u>\$</u>	52011			
Most way prove Co figuration Face! Towns as the Tack The Properties. Properties.	\dashv	Matrix	No of Containers For Oresessation Torse	hal. She		UH19036	UH19033
Sample 1D / Description [Containers by each cample may be cambined on one fine.]	26 P.V.	meanthy angu Anne smeanthy	EDH EDH EDH EDH EDH	drida oKiva owisi	m)=l	_	GRW Remarks / Coaler LD.
1-18 (15-20) 8/1-1	1450 6		3	' ×			48 Kr TAT or Soorer
H/61/8 (62-172) 81-7	ত	×	w	×			48 hr TAT or sooner
EB-01-081919 8/19/19	(315 &	X	m	X	×		studied TAT
M/H/8 (4-14)	1750 6	X	w	×	×		stawked TAT
78-04-081919 8/19/19	322 6	×	Ч	×			Standing TAT
						The state of the s	
Turn Around Time Required (Prior lab approval regular for expedited TAT.) Sample Disposal Standard Rush (Specify) See Rehalf(K5)	() Sample Disposar	(Discossif by Lab	Sample Disposar Possible Hazard Identification Return to Client DC Disposar by Lab DC Nor-Hazard Planmable	ion le 3 Skin Irrihant	ant 🗆 Polson 🗅 Unknown	QC Requirements (Specify)	als (Specify)
While Khi	B (4 (9) 1000	120 Hg	1. Received by			Date	Time
2. Heunquished by	Carle	Тіте	2. Received by			Date	Three
S. Heiingulehed by	Date	Time	3. Received by		-	Date	Типе
4. Relinquished by	Date	Тиле	4. Laboratory reselved by	A. Co.	THE THE	P110118	(10) zwe (80)
Note: All samples are retained for four weeks from receipt uniess other arrangements are made.	eeks from receipt made.		Received on ice (Circle) (Yes No	4	toe Pack Tecepa Temp.	21,6	3
A THE ALL PRINCIPLES OF THE PR			Helefores or the jerring				7.7

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

Sample Receipt Checklist (SRC)

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

Client: Westinghouse Columbia Cooler Inspected by/date: DMN / 08/19/19 Lot #: UII19036
Means of receipt: SESI Client UPS FedEx Other:
Yes No 1. Were custody seals present on the cooler?
Yes No No NA 2. If custody seals were present, were they intact and unbroken?
pH Strip ID; NA Chlorine Strip ID: NA Tested by; NA
Original temperature upon receipt / Derived (Corrected) temperature upon receipt
5.7 /5.7 °C NA /NA °C NA /NA °C NA /NA °C
Method: ☐ Temperature Blank ☑ Against Bottles _IR Gun ID:5 IR Gun Correction Factor:0°C
Method of coolant: Wet Ice □ Ice Packs □ Dry Ice □ None
Yes No No No No Notified by: phone / cmail / face-to-face (circle one).
☐ Yes ☐ No ☑ NA 4. Is the commercial courier's packing slip attached to this form?
☑ Yes ☐ No 5. Were proper custody procedures (relinquished/received) followed?
✓ Yes □ No 6. Were sample IDs listed on the COC?
✓ Yes ☐ No 7. Were sample IDs listed on all sample containers?
☑ Yes ☐ No 8. Was collection date & time listed on the COC?
✓ Ycs No 9. Was collection date & time listed on all sample containers?
☑ Yes ☐ No 10. Did all container label information (ID, date, time) agree with the COC?
✓ Ycs No 11. Were tests to be performed listed on the COC?
Yes No 12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☑ Yes ☐ No 13. Was adequate sample volume available?
☑ Yes ☐ No 14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes ☑ No ☐ 15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
16 For VOA and BCV 175
Yes No NA in any of the VOA vials?
☐ Yes ☐ No ☑ NA 17. Were all DRO/metals/nutrient samples received at a pH of < 2?
Yes ☐ No ☑ NA 18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes ☐ No ☐ NA 19. Were all applicable NH ₃ /TKN/cyanide/phonol/625 (< 0.5mg/L) samples free of residual chlorine?
Vess [] No. [7] NA 20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc)
Yes No NA 20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc) correctly transcribed from the COC into the comment section in LIMS?
Yes No 21. Was the quote number listed on the container label? If yes, Quote # NA
province of this industries.
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.
production and the continuents below.
Sample(s) NA were received with bubbles >6 mm in diameter.
Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is no) and were
adjusted accordingly in sample receiving with sodium thiosulfate (Na ₂ S ₂ O ₃) with Shealy ID: NA
SR barcode labels applied by: BMG Date: 08/19/19
Comments:

Report of Analysis

Westinghouse Electric Company

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

Project Name: CVOC

Lot Number: **UH20071**Date Completed: 09/04/2019

09/05/2019 9:09 AM Approved and released by: Project Manager: Grant Wilton

Rund N Withou





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SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative Westinghouse Electric Company Lot Number: UH20071

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

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

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

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

Volatile Organic Analysis – Method 8260B The following sample was received with headspace in the sample vial UH20071-006.

Sample Summary Westinghouse Electric Company

Lot Number: UH20071 Project Name: CVOC Project Number:

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

(6 samples)

Detection Summary Westinghouse Electric Company

Lot Number: UH20071 Project Name: CVOC Project Number:

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

(10 detections)

Inorganic non-metals

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

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

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

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ B = Detected in the method blank

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

N = Recovery is out of criteria H = Out of holding time W = Reported on wet weight basis

Client: Westinghouse Electric Company

Laboratory ID: UH20071-001 Matrix: Aqueous

Description: L-10 (18-23) Date Sampled:08/20/2019 1105

Project Name: CVOC

Date Received: 08/20/2019

Project Number:

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

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

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		113	70-130
Toluene-d8		98	70-130

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ B = Detected in the method blank

N = Recovery is out of criteria W = Reported on wet weight basis P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Inorganic non-metals

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

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

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

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ B = Detected in the method blank

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

N = Recovery is out of criteria H = Out of holding time W = Reported on wet weight basis

Client: Westinghouse Electric Company

Laboratory ID: UH20071-002

Matrix: Aqueous

Description: L-10 (28-33) Date Sampled:08/20/2019 1235

95

Date Received: 08/20/2019

Project Name: CVOC Project Number:

Run Prep Method

Toluene-d8

Analytical Method Dilution Analysis Date Analyst Prep Date Batch

1 5030B	8260D 1 08/22/	2019 0205 ALR	'	26707		
Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND	1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND	1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND	1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND	1.0	ug/L	1
Surrogate	Run 1 Accepta Q % Recovery Limi					
Bromofluorobenzene	92 70-1	30				
1,2-Dichloroethane-d4	110 70-1	30				

70-130

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

W = Reported on wet weight basis

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

H = Out of holding time

Inorganic non-metals

Client: Westinghouse Electric Company

Description: L-19 (7-12)

Date Sampled:08/20/2019 1505

Project Name: CVOC

Date Received: 08/20/2019

Project Number:

RunPrep MethodAnalytical MethodDilutionAnalysis Date AnalystPrep DateBatch1(Fluoride) 9056A109/04/2019 0135GMH278661(Nitrate - N) 353.2108/21/2019 0027MDD26536

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

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

H = Out of holding time

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

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

Client: Westinghouse Electric Company

Laboratory ID: UH20071-003

Description: L-19 (7-12)

Matrix: Aqueous

Date Sampled:08/20/2019 1505 Project Name: CVOC

Date Received: 08/20/2019 Project Number:

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

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND	1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	1.0	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	1.3	1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	ND	1.0	ug/L	1
Trichloroethene	79-01-6	8260D	ND	1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND	1.0	ug/L	1

SurrogateQRun 1 / RecoveryAcceptance LimitsBromofluorobenzene9170-1301,2-Dichloroethane-d410970-130Toluene-d89670-130

$$\begin{split} LOQ &= Limit \ of \ Quantitation \\ ND &= Not \ detected \ at \ or \ above \ the \ LOQ \\ H &= Out \ of \ holding \ time \end{split}$$

B = Detected in the method blank

W = Reported on wet weight basis

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40%

Inorganic non-metals

Client: Westinghouse Electric Company

Description: L-19 (21-26)

Date Sampled: 08/20/2019 1615

Project Name: CVOC

Date Received: 08/20/2019

Project Number:

RunPrep MethodAnalytical MethodDilutionAnalysis DateAnalystPrep DateBatch1(Fluoride) 9056A109/04/2019 0151GMH278661(Nitrate - N) 353.2108/21/2019 0029MDD26536

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

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

H = Out of holding time

B = Detected in the method blank

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

ve the LOQ N = Recovery is out of criteria
W = Reported on wet weight basis

Client: Westinghouse Electric Company

Laboratory ID: UH20071-004 Matrix: Aqueous

Description: L-19 (21-26) Date Sampled:08/20/2019 1615

5030B

Project Name: CVOC

Date Received: 08/20/2019

Project Number:

Run Prep Method

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

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

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		98	70-130
1,2-Dichloroethane-d4		112	70-130
Toluene-d8		98	70-130

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

B = Detected in the method blank

W = Reported on wet weight basis

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Inorganic non-metals

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

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

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

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ B = Detected in the method blank

W = Reported on wet weight basis

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

N = Recovery is out of criteria H = Out of holding time

Client: Westinghouse Electric Company

Laboratory ID: UH20071-006 Matrix: Aqueous

Description: TB-05-082019 Date Sampled:08/20/2019 1105

Project Name: CVOC

Date Received: 08/20/2019

Project Number:

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

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

Surrogate	Q	% Recovery	Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		114	70-130
Toluene-d8		98	70-130

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

B = Detected in the method blank

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

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

Chain of Custody and Miscellaneous Documents

HEALY Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.

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

Number 097989

Mind have blumbie that to bracken Heilery	conthin Beilet.	Repo	Diana Byner		Talepi PO3	Talephone No. / E-mail 803-647 - 1920		1 JOHNELAPE	Quote Mc.
Address Di. GR D.			ture .	11.0	Ansiy	vis (Althorh	Anayata (Attach kist if thore space is needed)	esded)	2000
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Project No.	P.O. No.	da afaux	Matrix	No of Contenters by Pressrinsfive Type	Jel'a	sher o'no	a so		ORW
Sample 1D / Description (Containers for each sample may be combined on one Ans.)	Dede	inograp inog inograp inograp inograp inog inog inog inog inog inog inog inog	Mos encoupt.	HORN HORN HORN HORRH HOSRH TRINKING	allen	11/	n) _ 1		Remarks / Capler LD.
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(22-12) 61-7	8 20/19	1615 6	×	w	×	××	×		
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Turn Around Time Required (Pilor lab approved required for expedited IXI.) Sample Disposal Monacology of Constitution of Disposal Property of Children in Children	nired for expedited TAT.)	Sample Disposal	T Oknosa ov (st	Possible Hazard	1	Skin Irrilant	□ Poison □ Lovarown		GC Requirements (Specify)
1. Halt quight by Ju K. Roll H.		P. 62 83	1829 1829	1. Received by				Date	Тоть
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3, Relinquished by		Date	Типе	3. Received by				Oate	Time
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Note: All samples are retained for four weeks from receipt	amples are retained for four weeks fr	eks from receip	ığ.	LAR USECNLY	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		Mecalof Tarro.	1	\$ 20 P
THE STATE OF THE S	angendano ac			and on to paragon)	1	+		

Document Number: F-AD-139 Effective Date: 08-01-2014

DISTRIBUTION: WHITE & YELLOW-Raturn to (abovatory with Sample(a); PINK-Fisid/Cuent Copy

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

Sample Receipt Checklist (SRC)

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

Client: Westinghouse Cooler Inspected by/date: DMN / 8/20/19 Lot #; UII20071
Means of receipt: SESI □ Client □ UPS □ FedEx □ Other:
Yes No 1. Were custody seals present on the cooler?
☐ Yes ☐ No ☑ NA 2. If custody scals 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 // WSolid Snap-Cup ID: NA
4.8 /4.8 °C NA /NA °C NA /NA °C NA /NA °C
Method: ☐ Temperature Blank ☑ Against Bottles IR Gun ID:5 IR Gun Correction Factor: 0 °C
Method of coolant: Wet Ice Ice Packs Dry Ice None
Yes No No No If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
Yes No No NA 4. Is the commercial courier's packing slip attached to this form?
✓ Yes No 5. Were proper custody procedures (relinquished/received) followed?
✓ Yes No 6. Were sample IDs listed on the COC?
✓ Yes ☐ No 7. Were sample IDs listed on all sample containers?
✓ Yes
☑ Yes ☐ No 9. Was collection date & time listed on all sample containers?
☑ Yes ☐ No 10. Did all container label information (ID, date, time) agree with the COC?
✓ Yes No 11. Were tests to be performed listed on the COC?
Yes No 12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
The state of the s
16 For VOA and DSV 175 and a superbulble and the state of
Yes No NA in any of the VOA vials?
Yes ☐ No ☑ NA 17. Were all DRO/mctals/nutrient samples received at a pH of < 2?
Yes ☐ No Z NA 18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
Yes No No NA 19. Were all applicable NH ₃ /TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual
chlorine?
Yes No No NA 20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc)
Yes No 21. Was the quote number listed on the container label? If yes, Quote # NA
The state of the s
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)
Sample(s) NA were received incorrectly preserved and were adjusted accordingly
in sample receiving with NA mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # NA
Time of preservation NA
Sample(s)006 (2)were received with bubbles >6 mm in diameter.
Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is $n\sigma$) and were
adjusted accordingly in sample receiving with sodium thiosulfate (Na ₂ S ₂ O ₃) with Shealy ID: NA
SR barcode labels applied by: BMG Date: 8/20/19
Comments:

Report of Analysis

Westinghouse Electric Company

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

Project Name: RI Implementation

Lot Number: **UH21060**Date Completed: 09/10/2019

09/10/2019 12:25 PM Approved and released by: Project Manager: Grant Wilton

Rind N Withou





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

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

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

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative Westinghouse Electric Company Lot Number: UH21060

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

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

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Summary Westinghouse Electric Company

Lot Number: UH21060
Project Name: RI Implementation
Project Number:

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

(9 samples)

SHEALY ENVIRONMENTAL SERVICES, INC.

Detection Summary

Westinghouse Electric Company

Lot Number: UH21060

Project Name: RI Implementation

Project Number:

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

(7 detections)

Client: Westinghouse Electric Company Laboratory ID: UH21060-001 Description: L-8 (17-22) Matrix: Aqueous Date Sampled:08/21/2019 0940 Project Name: RI Implementation Date Received: 08/21/2019 Project Number: Run Prep Method Analytical Method Dilution Analysis Date Analyst Prep Date Batch (Fluoride) 9056A 09/10/2019 0016 GMH 28380 1 (Nitrate - N) 353.2 1 08/22/2019 0113 MDD 26725

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

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

B = Detected in the method blank

Recovery is out of criteria P = The RPD between two GC columns exceeds 40%
Reported on wet weight basis

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

 $[\]begin{aligned} \text{ND} &= \text{Not detected at or above the LOQ} & \quad \text{N} &= \text{Recovery is out of criteria} \\ \text{H} &= \text{Out of holding time} & \quad \text{W} &= \text{Reported on wet weight basis} \end{aligned}$

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

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

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

Surrogate	Q	Run 1 A % Recovery	cceptance Limits	
Bromofluorobenzene		98	70-130	
1,2-Dichloroethane-d4		94	70-130	
Toluene-d8		99	70-130	

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

B = Detected in the method blank

P = The RPD between two GC columns exceeds 40%

E = Quantitation of compound exceeded the calibration range

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

Client: Westinghouse Electric Company Laboratory ID: UH21060-002 Description: L-9 (10-15) Matrix: Aqueous Date Sampled:08/21/2019 1018 Project Name: RI Implementation Date Received: 08/21/2019 Project Number: Run Prep Method Analytical Method Dilution Analysis Date Analyst Prep Date Batch (Fluoride) 9056A 1 09/10/2019 0037 GMH 28380 1 (Nitrate - N) 353.2 5 08/22/2019 0115 MDD 26725

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

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

H = Out of holding time

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

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

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

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

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND	1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	6.5	1.0	ug/L	1
Trichloroethene	79-01-6	8260D	3.0	1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND	1.0	ug/L	1
	Pun 1 Accon	tanco				

_	Surrogate	Q	% Recovery	Limits
	Bromofluorobenzene		99	70-130
	1,2-Dichloroethane-d4		94	70-130
	Toluene-d8		99	70-130

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

B = Detected in the method blank

W = Reported on wet weight basis

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

Client: Westinghouse Electric Company Laboratory ID: UH21060-003 Description: L-8 (25-30) Matrix: Aqueous Date Sampled:08/21/2019 1125 Project Name: RI Implementation Date Received: 08/21/2019 Project Number: Run Prep Method Analytical Method Dilution Analysis Date Analyst Prep Date Batch (Fluoride) 9056A 09/10/2019 0223 GMH 28380 1 (Nitrate - N) 353.2 1 08/22/2019 0033 MDD 26725

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

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

H = Out of holding time

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

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

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

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

Parameter	CAS Number	Analytical Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane	107-06-2	8260D	ND	1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260D	ND	1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260D	ND	1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260D	ND	1.0	ug/L	1
Tetrachloroethene	127-18-4	8260D	2.2	1.0	ug/L	1
Trichloroethene	79-01-6	8260D	2.1	1.0	ug/L	1
Vinyl chloride	75-01-4	8260D	ND	1.0	ug/L	1
	Run 1 Accen	tance				

Surrogate	Q	Run 1 A % Recovery	Acceptance Limits
Bromofluorobenzene		101	70-130
1,2-Dichloroethane-d4		95	70-130
Toluene-d8		101	70-130

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

B = Detected in the method blank

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

W = Reported on wet weight basis

Client: Westinghouse Electric Company Laboratory ID: UH21060-004 Description: L-9 (23-28) Matrix: Aqueous Date Sampled:08/21/2019 1135 Project Name: RI Implementation Date Received: 08/21/2019 Project Number: Run Prep Method Analytical Method Dilution Analysis Date Analyst Prep Date Batch (Fluoride) 9056A 09/10/2019 0244 GMH 28380 1 (Nitrate - N) 353.2 1 08/22/2019 0035 MDD 26725

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

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

H = Out of holding time

B = Detected in the method blank

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% W = Reported on wet weight basis

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

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

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

Surrogate	Q	Run 1 A % Recovery	Acceptance Limits	
Bromofluorobenzene		100	70-130	
1,2-Dichloroethane-d4		96	70-130	
Toluene-d8		102	70-130	

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

B = Detected in the method blank

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

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

Client: Westinghouse Electric Company Laboratory ID: UH21060-005 Description: L-9 (23-28)-DUP Matrix: Aqueous Date Sampled:08/21/2019 1135 Project Name: RI Implementation Date Received: 08/21/2019 Project Number: Run Prep Method Analytical Method Dilution Analysis Date Analyst Prep Date Batch (Fluoride) 9056A 09/10/2019 0305 GMH 28380 1 (Nitrate - N) 353.2 1 08/22/2019 0040 MDD 26725 CAS Analytical Result Q LOQ Units Parameter Number Method Run 9056A 16984-48-8 ND 0.10 Fluoride mg/L

353.2

ND

0.020

mg/L

1

LOQ = Limit of Quantitation

B = Detected in the method blank

ND = Not detected at or above the LOQ

H = Out of holding time

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

W = Reported on wet weight basis

Shealy Environmental Services, Inc.

Nitrate - N

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

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

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits		
Bromofluorobenzene		102	70-130		
1,2-Dichloroethane-d4		97	70-130		
Toluene-d8		103	70-130		

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

B = Detected in the method blank

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

W = Reported on wet weight basis

Client: Westinghouse Electric Company Laboratory ID: UH21060-006 Description: L-9 (32-37) Matrix: Aqueous Date Sampled:08/21/2019 1423 Project Name: RI Implementation Date Received: 08/21/2019 Project Number: Run Prep Method Analytical Method Dilution Analysis Date Analyst Prep Date Batch (Fluoride) 9056A 09/10/2019 0326 GMH 28380 1 (Nitrate - N) 353.2 1 08/22/2019 0041 MDD 26725 Analytical CAS

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

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

H = Out of holding time

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

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

P = The RPD between two GC columns exceeds 40%

Client: Westinghouse Electric Company

Description: L-9 (32-37)

Date Sampled: 08/21/2019 1423

Project Name: RI Implementation

Date Received: 08/21/2019

Project Number:

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

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

SurrogateQRun 1 RecoveryAcceptance LimitsBromofluorobenzene10170-1301,2-Dichloroethane-d49770-130Toluene-d810370-130

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ B = Detected in the method blank

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P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

ND = Not detected at or above the LOQ N = Recovery is out of criteria H = Out of holding time W = Reported on wet weight basis

Client: Westinghouse Electric Company Laboratory ID: UH21060-007 Description: L-8 (41-46) Matrix: Aqueous Date Sampled:08/21/2019 1520 Project Name: RI Implementation Date Received: 08/21/2019 Project Number: Run Prep Method Analytical Method Dilution Analysis Date Analyst Prep Date Batch (Fluoride) 9056A 09/10/2019 0347 GMH 28380 1 (Nitrate - N) 353.2 1 08/22/2019 0043 MDD 26725 CAS Analytical Result Q LOQ Units Parameter Number Method Run 9056A Fluoride 16984-48-8 0.14 0.10 mg/L Nitrate - N 353.2 ND0.020 mg/L 1

LOQ = Limit of Quantitation

B = Detected in the method blank

ND = Not detected at or above the LOQ

H = Out of holding time

B = Detected in the method blank

N = Recovery is out of criteria

W = Reported on wet weight basis

Shealy Environmental Services, Inc.

Client: Westinghouse Electric Company

Description: L-8 (41-46)

Date Sampled: 08/21/2019 1520

Project Name: RI Implementation

Date Received: 08/21/2019

Project Number:

		•					
Run Prep Method 1 5030B	3		lysis Date Analyst 4/2019 2145 STM	Prep Date	Batch 26947		
Deremeter		CAS	Analytical	Decult O	1.00	Units	Dun
Parameter		Number	Method	Result Q	LOQ	Units	Run
1,2-Dichloroethane		107-06-2	8260D	ND	1.0	ug/L	1
1,1-Dichloroethene		75-35-4	8260D	ND	1.0	ug/L	1
cis-1,2-Dichloroethene		156-59-2	8260D	ND	1.0	ug/L	1
trans-1,2-Dichloroethene		156-60-5	8260D	ND	1.0	ug/L	1

8260D

8260D

8260D

ND

ND

ND

1.0

1.0

1.0

ug/L

ug/L

ug/L

1

1

Surrogate	Run 1 Acceptance Q % Recovery Limits
Bromofluorobenzene	102 70-130
1,2-Dichloroethane-d4	97 70-130
Toluene-d8	102 70-130

127-18-4

79-01-6

75-01-4

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

Shealy Environmental Services, Inc.

Tetrachloroethene

Trichloroethene

Vinyl chloride

Client: Westinghouse Electric Company Laboratory ID: UH21060-008 Description: EB-01-082119 Matrix: Aqueous Date Sampled:08/21/2019 1550 Project Name: RI Implementation Date Received: 08/21/2019 Project Number: Run Prep Method Analytical Method Dilution Analysis Date Analyst Prep Date Batch (Fluoride) 9056A 09/10/2019 0408 GMH 28380 1 (Nitrate - N) 353.2 1 08/22/2019 0044 MDD 26725

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

$$\begin{split} &LOQ = Limit \ of \ Quantitation \\ &ND = Not \ detected \ at \ or \ above \ the \ LOQ \\ &H = Out \ of \ holding \ time \end{split}$$

B = Detected in the method blank

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

N = Recovery is out of criteria P = The RPD between two GC columns exceeds 40% W = Reported on wet weight basis

Client: Westinghouse Electric Company

Laboratory ID: UH21060-008 Matrix: Aqueous

Description: EB-01-082119 Date Sampled:08/21/2019 1550

Project Name: RI Implementation

Date Received: 08/21/2019

Project Number:

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

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

Acceptance Limits Run 1 Q % Recovery Surrogate Bromofluorobenzene 99 70-130 95 1,2-Dichloroethane-d4 70-130 Toluene-d8 100 70-130

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ B = Detected in the method blank

N = Recovery is out of criteria W = Reported on wet weight basis P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

H = Out of holding time

Client: Westinghouse Electric Company

Laboratory ID: UH21060-009 Matrix: Aqueous

Description: TB-06-082119 Date Sampled:08/21/2019 1025

Project Name: RI Implementation

Date Received: 08/21/2019

Project Number:

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

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

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
Bromofluorobenzene		102	70-130
1,2-Dichloroethane-d4		97	70-130
Toluene-d8		102	70-130

LOQ = Limit of Quantitation ND = Not detected at or above the LOQ B = Detected in the method blank

W = Reported on wet weight basis

P = The RPD between two GC columns exceeds 40%

Shealy Environmental Services, Inc.

E = Quantitation of compound exceeded the calibration range

N = Recovery is out of criteria H = Out of holding time

Chain of Custody and Miscellaneous Documents

Document Number: F-AD-133 Effective Date: 05-01-2014

Chain of Custody Record Telenhone No. 2002-201-0200 Economics

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

Number 097990

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Turn Around Time Required (Prior lab approval required for expedited TAT.) Sample Disposed Astandard — Rosh (Specify)	Sample Disposal Distant to Olean A Dienasel hu can	Wenger! Au Cas	Possible Hazerd Identification	i	OC Requirements (Specify)	ds (Specify)
#	8 24/19	Time HOLD	1. Received by	Destruction □ Poison □ □	□ Unknewn Date	Tune
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Note: All samples are retained for four weaks from receipt	ks from receipt		LAB USE ONLY	anoun L	101.19	1/04
anangements are made	ROE.		Received on ice (Circle) (Yes.) No	No los Pack Receipt Tamp.	Jama, 1 - 1	ts/
DISTRIBUTION: WAITE & YELLOV-Return to laboratory with Samplie(s); PINK-First/CMent Copy	PINK-Flatd/Chart Cap	ń)	C	1	

SHEALY ENVIRONMENTAL SERVICES, INC.

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

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

Sample Receipt Checklist (SRC)

Client: Westinghouse Electic Cooler Inspected by/date: BMG / 08/21/19 Lot #: UH21060
Means of receipt: SESI Client UPS FedEx Other:
Yes No 1. Were custody seals present on the cooler?
Yes No NA 2. If custody seals were present, were they intact and unbroken?
IDII Strip ID: NA Chloring Strip TO, NA
Original temperature upon receipt / Derived (Corrected) temperature upon receipt
1.7 / I.7 °C NA /NA °C NA /NA °C NA /NA °C NA /NA °C
Method: Temperature Blank Against Bottles IR Gun ID: 5 IR Gun Committee Blank
Method of coulant: Wet Ice lee Packs Dry Ice None
Yes No No NA 3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified?
Fivi was Notified by: phone / email / face-to-face (circle one)
i es i No MA 4. Is the commercial courier's packing slin attached to this form?
2. Were proper custody procedures (relinquished/received) followed?
Land 10 10 10 10 10 10 10 1
✓ Yes No 7. Were sample IDs listed on all sample containers?
8. Was collection date & time listed on the COC2
✓ Yes ☐ No 9. Was collection date & time listed on all sample containers?
10. Did all container label information (ID. date time) agree with the COCS
Yes No 11. Were tests to be performed listed on the COC?
Yes No 12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
was adoquate sample volume available?
the following which are the state of the first of the following the foll
13. Were any samples containers missing/excess (circle one) samples Not listed on Coop
Ves No
at any of the vort vials;
The state of the property of a per of a
The state of the s
Yes No No NA 19. Were all applicable NH ₃ /TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual chlorine?
Yes No NA 20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc)
correctly transcribed from the COC into the comment section in LIMS?
12 May the quote frames a fisted on the container label? If yes, Quote # NA
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)
Sample(s) NA were received incorrectly preserved and were adjusted assurable land
mis of chick one, fiz. of the North prince CD 4 NA
Time of preservation NA
Sample(e) The
Sample (2) NA were received with bubbles >6 mm in diameter.
adjusted accordingly in sample receiving with an discrete serving with an experience serving with a serving serving serving with a serving serving with a serving servi
adjusted accordingly in sample receiving with sodium thiosulfate (Na ₂ S ₂ O ₃) with Shealy ID: NA
SR barcode labels applied by: BMG/JSH Date: 08/21/19
Comments:
селиненду,