

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Westinghouse Electric Company

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

Project Name: Groundwater

Lot Number: **UG15055**

Date Completed: 08/07/2019



08/15/2019 5:27 PM

Approved and released by:
Project Manager: Grant Wilton



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

SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

Case Narrative Westinghouse Electric Company Lot Number: UG15055

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.

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W" qualifier

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: UG15055
Project Name: Groundwater
Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SW-22	Aqueous	07/15/2019 1315	07/15/2019
002	SED-22	Solid	07/15/2019 1330	07/15/2019
003	SW-21	Aqueous	07/15/2019 1600	07/15/2019
004	SED-21	Solid	07/15/2019 1600	07/15/2019

(4 samples)

SHEALY ENVIRONMENTAL SERVICES, INC.

Detection Summary
Westinghouse Electric Company
Lot Number: UG15055
Project Name: Groundwater
Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	SED-22	Solid	Acetone	8260B	88		ug/kg	11
002	SED-22	Solid	2-Butanone (MEK)	8260B	32		ug/kg	11
004	SED-21	Solid	Acetone	8260B	67		ug/kg	21

(3 detections)

Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UG15055-001
Description: SW-22	Matrix: Aqueous
Date Sampled: 07/15/2019 1315	Project Name: Groundwater
Date Received: 07/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	07/17/2019 0319	MDD		22813

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

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

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

Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-001
Description: SW-22	Matrix: Aqueous
Date Sampled: 07/15/2019 1315	Project Name: Groundwater
Date Received: 07/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/19/2019 2243	STM		23223

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,1,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	ug/L	1
1,1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1

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

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

Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-001
Description: SW-22	Matrix: Aqueous
Date Sampled: 07/15/2019 1315	Project Name: Groundwater
Date Received: 07/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/19/2019 2243	STM		23223

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		103	70-130
Bromofluorobenzene		106	70-130
Toluene-d8		107	70-130

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

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

Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-001
Description: SW-22	Matrix: Aqueous
Date Sampled: 07/15/2019 1315	Project Name: Groundwater
Date Received: 07/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1311	SCD	07/18/2019 1700	23005

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1'-Biphenyl	92-52-4	8270D	ND		4.0	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		4.0	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		4.0	ug/L	1
2,4-Dichlorophenol	120-83-2	8270D	ND		8.0	ug/L	1
2,4-Dimethylphenol	105-67-9	8270D	ND		4.0	ug/L	1
2,4-Dinitrophenol	51-28-5	8270D	ND		20	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		8.0	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		8.0	ug/L	1
2-Chloronaphthalene	91-58-7	8270D	ND		4.0	ug/L	1
2-Chlorophenol	95-57-8	8270D	ND		4.0	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		0.80	ug/L	1
2-Methylphenol	95-48-7	8270D	ND		4.0	ug/L	1
2-Nitroaniline	88-74-4	8270D	ND		8.0	ug/L	1
2-Nitrophenol	88-75-5	8270D	ND		4.0	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		4.0	ug/L	1
3+4-Methylphenol	106-44-5	8270D	ND		4.0	ug/L	1
3-Nitroaniline	99-09-2	8270D	ND		8.0	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		20	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		4.0	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		4.0	ug/L	1
4-Chloroaniline	106-47-8	8270D	ND		8.0	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		4.0	ug/L	1
4-Nitroaniline	100-01-6	8270D	ND		8.0	ug/L	1
4-Nitrophenol	100-02-7	8270D	ND		20	ug/L	1
Acenaphthene	83-32-9	8270D	ND		0.80	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		0.80	ug/L	1
Acetophenone	98-86-2	8270D	ND		4.0	ug/L	1
Anthracene	120-12-7	8270D	ND		0.80	ug/L	1
Atrazine	1912-24-9	8270D	ND		4.0	ug/L	1
Benzaldehyde	100-52-7	8270D	ND		8.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		0.80	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		0.80	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		0.80	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		0.80	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		0.80	ug/L	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		4.0	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		4.0	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		4.0	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		4.0	ug/L	1
Butyl benzyl phthalate	85-68-7	8270D	ND		4.0	ug/L	1
Caprolactam	105-60-2	8270D	ND		8.0	ug/L	1
Carbazole	86-74-8	8270D	ND		4.0	ug/L	1
Chrysene	218-01-9	8270D	ND		0.80	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		0.80	ug/L	1

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

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

Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-001
Description: SW-22	Matrix: Aqueous
Date Sampled: 07/15/2019 1315	Project Name: Groundwater
Date Received: 07/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1311	SCD	07/18/2019 1700	23005

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Dibenzofuran	132-64-9	8270D	ND		4.0	ug/L	1
Diethylphthalate	84-66-2	8270D	ND		4.0	ug/L	1
Dimethyl phthalate	131-11-3	8270D	ND		4.0	ug/L	1
Di-n-butyl phthalate	84-74-2	8270D	ND		4.0	ug/L	1
Di-n-octylphthalate	117-84-0	8270D	ND		4.0	ug/L	1
Fluoranthene	206-44-0	8270D	ND		0.80	ug/L	1
Fluorene	86-73-7	8270D	ND		0.80	ug/L	1
Hexachlorobenzene	118-74-1	8270D	ND		4.0	ug/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		4.0	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		20	ug/L	1
Hexachloroethane	67-72-1	8270D	ND		4.0	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		0.80	ug/L	1
Isophorone	78-59-1	8270D	ND		4.0	ug/L	1
Naphthalene	91-20-3	8270D	ND		0.80	ug/L	1
Nitrobenzene	98-95-3	8270D	ND		4.0	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		4.0	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		4.0	ug/L	1
Pentachlorophenol	87-86-5	8270D	ND		20	ug/L	1
Phenanthrene	85-01-8	8270D	ND		0.80	ug/L	1
Phenol	108-95-2	8270D	ND		4.0	ug/L	1
Pyrene	129-00-0	8270D	ND		0.80	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		56	37-129
2-Fluorophenol		36	24-127
Nitrobenzene-d5		61	38-127
Phenol-d5		50	28-128
Terphenyl-d14		42	10-148
2,4,6-Tribromophenol		63	35-144

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

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

Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UG15055-002
Description: SED-22	Matrix: Solid
Date Sampled: 07/15/2019 1330	Project Name: Groundwater
Date Received: 07/15/2019	Project Number:
	% Solids: 26.0 07/17/2019 0103

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 9056A	1	07/30/2019 0419	GMH		24362

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.20	mg/kg	2

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

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

Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-002
Description: SED-22	Matrix: Solid
Date Sampled: 07/15/2019 1330	Project Name: Groundwater
Date Received: 07/15/2019	% Solids: 26.0 07/17/2019 0103
Project Number:	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/18/2019 1100	JM1		23070	4.10

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	88		24	ug/kg	1
Benzene	71-43-2	8260B	ND		6.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.1	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.1	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	32		24	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.1	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.1	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.1	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.1	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.1	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.1	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.1	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.1	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.1	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.1	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.1	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.1	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.1	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.1	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.1	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.1	ug/kg	1
Styrene	100-42-5	8260B	ND		6.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.1	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.1	ug/kg	1
Toluene	108-88-3	8260B	ND		6.1	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.1	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.1	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.1	ug/kg	1

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

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

Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-002
Description: SED-22	Matrix: Solid
Date Sampled: 07/15/2019 1330	Project Name: Groundwater
Date Received: 07/15/2019	% Solids: 26.0 07/17/2019 0103
Project Number:	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/18/2019 1100	JM1		23070	4.10

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		12	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		94	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		117	68-124

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

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

Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-002
Description: SED-22	Matrix: Solid
Date Sampled: 07/15/2019 1330	Project Name: Groundwater
Date Received: 07/15/2019	% Solids: 26.0 07/17/2019 0103
Project Number:	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1645	SCD	07/17/2019 1446	22863

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		13	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		13	ug/kg	1
Acetophenone	98-86-2	8270D	ND		66	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		66	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		66	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		13	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		13	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		13	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		13	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		66	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		66	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		66	ug/kg	1
Caprolactam	105-60-2	8270D	ND		66	ug/kg	1
Carbazole	86-74-8	8270D	ND		66	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		66	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		66	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		66	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		66	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		66	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		66	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		66	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		66	ug/kg	1
Chrysene	218-01-9	8270D	ND		13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		13	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		66	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		66	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		66	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		66	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		66	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		66	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		66	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		330	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		330	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		130	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		130	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		66	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		66	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		13	ug/kg	1
Fluorene	86-73-7	8270D	ND		13	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		66	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		66	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		330	ug/kg	1

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

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

Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-002
Description: SED-22	Matrix: Solid
Date Sampled: 07/15/2019 1330	Project Name: Groundwater
Date Received: 07/15/2019	% Solids: 26.0 07/17/2019 0103
Project Number:	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1645	SCD	07/17/2019 1446	22863

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		66	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		13	ug/kg	1
Isophorone	78-59-1	8270D	ND		66	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		66	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		130	ug/kg	1
Naphthalene	91-20-3	8270D	ND		13	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		130	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		130	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		130	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		66	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		330	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		66	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		66	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		330	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		66	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		66	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		66	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		66	24-137
2-Fluorophenol		62	16-136
Nitrobenzene-d5		64	12-144
Phenol-d5		65	26-148
Terphenyl-d14		81	20-127
2,4,6-Tribromophenol		89	27-128

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

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

Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UG15055-003
Description: SW-21	Matrix: Aqueous
Date Sampled: 07/15/2019 1600	Project Name: Groundwater
Date Received: 07/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	07/17/2019 0320	MDD		22813

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

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

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

Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-003
Description: SW-21	Matrix: Aqueous
Date Sampled: 07/15/2019 1600	Project Name: Groundwater
Date Received: 07/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/19/2019 2307	STM		23223

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	ND		20	ug/L	1
Benzene	71-43-2	8260B	ND		1.0	ug/L	1
Bromodichloromethane	75-27-4	8260B	ND		1.0	ug/L	1
Bromoform	75-25-2	8260B	ND		1.0	ug/L	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		2.0	ug/L	1
2-Butanone (MEK)	78-93-3	8260B	ND		10	ug/L	1
Carbon disulfide	75-15-0	8260B	ND		1.0	ug/L	1
Carbon tetrachloride	56-23-5	8260B	ND		1.0	ug/L	1
Chlorobenzene	108-90-7	8260B	ND		1.0	ug/L	1
Chloroethane	75-00-3	8260B	ND		2.0	ug/L	1
Chloroform	67-66-3	8260B	ND		1.0	ug/L	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		1.0	ug/L	1
Cyclohexane	110-82-7	8260B	ND		1.0	ug/L	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		1.0	ug/L	1
Dibromochloromethane	124-48-1	8260B	ND		1.0	ug/L	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		1.0	ug/L	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		1.0	ug/L	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		1.0	ug/L	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		1.0	ug/L	1
Dichlorodifluoromethane	75-71-8	8260B	ND		2.0	ug/L	1
1,1-Dichloroethane	75-34-3	8260B	ND		1.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260B	ND		1.0	ug/L	1
1,1-Dichloroethene	75-35-4	8260B	ND		1.0	ug/L	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		1.0	ug/L	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		1.0	ug/L	1
1,2-Dichloropropane	78-87-5	8260B	ND		1.0	ug/L	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		1.0	ug/L	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		1.0	ug/L	1
Ethylbenzene	100-41-4	8260B	ND		1.0	ug/L	1
2-Hexanone	591-78-6	8260B	ND		10	ug/L	1
Isopropylbenzene	98-82-8	8260B	ND		1.0	ug/L	1
Methyl acetate	79-20-9	8260B	ND		1.0	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		1.0	ug/L	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/L	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/L	1
Methylene chloride	75-09-2	8260B	ND		1.0	ug/L	1
Styrene	100-42-5	8260B	ND		1.0	ug/L	1
1,1,1,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	ND		1.0	ug/L	1
Toluene	108-88-3	8260B	ND		1.0	ug/L	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		1.0	ug/L	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		1.0	ug/L	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		1.0	ug/L	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		1.0	ug/L	1

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

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

Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-003
Description: SW-21	Matrix: Aqueous
Date Sampled: 07/15/2019 1600	Project Name: Groundwater
Date Received: 07/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/19/2019 2307	STM		23223

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		1.0	ug/L	1
Trichlorofluoromethane	75-69-4	8260B	ND		1.0	ug/L	1
Vinyl chloride	75-01-4	8260B	ND		1.0	ug/L	1
Xylenes (total)	1330-20-7	8260B	ND		1.0	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		101	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		105	70-130

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

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

Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-003
Description: SW-21	Matrix: Aqueous
Date Sampled: 07/15/2019 1600	Project Name: Groundwater
Date Received: 07/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1426	SCD	07/18/2019 1700	23005

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
1,1'-Biphenyl	92-52-4	8270D	ND		4.0	ug/L	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		4.0	ug/L	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		4.0	ug/L	1
2,4-Dichlorophenol	120-83-2	8270D	ND		8.0	ug/L	1
2,4-Dimethylphenol	105-67-9	8270D	ND		4.0	ug/L	1
2,4-Dinitrophenol	51-28-5	8270D	ND		20	ug/L	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		8.0	ug/L	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		8.0	ug/L	1
2-Chloronaphthalene	91-58-7	8270D	ND		4.0	ug/L	1
2-Chlorophenol	95-57-8	8270D	ND		4.0	ug/L	1
2-Methylnaphthalene	91-57-6	8270D	ND		0.80	ug/L	1
2-Methylphenol	95-48-7	8270D	ND		4.0	ug/L	1
2-Nitroaniline	88-74-4	8270D	ND		8.0	ug/L	1
2-Nitrophenol	88-75-5	8270D	ND		4.0	ug/L	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		4.0	ug/L	1
3+4-Methylphenol	106-44-5	8270D	ND		4.0	ug/L	1
3-Nitroaniline	99-09-2	8270D	ND		8.0	ug/L	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		20	ug/L	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		4.0	ug/L	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		4.0	ug/L	1
4-Chloroaniline	106-47-8	8270D	ND		8.0	ug/L	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		4.0	ug/L	1
4-Nitroaniline	100-01-6	8270D	ND		8.0	ug/L	1
4-Nitrophenol	100-02-7	8270D	ND		20	ug/L	1
Acenaphthene	83-32-9	8270D	ND		0.80	ug/L	1
Acenaphthylene	208-96-8	8270D	ND		0.80	ug/L	1
Acetophenone	98-86-2	8270D	ND		4.0	ug/L	1
Anthracene	120-12-7	8270D	ND		0.80	ug/L	1
Atrazine	1912-24-9	8270D	ND		4.0	ug/L	1
Benzaldehyde	100-52-7	8270D	ND		8.0	ug/L	1
Benzo(a)anthracene	56-55-3	8270D	ND		0.80	ug/L	1
Benzo(a)pyrene	50-32-8	8270D	ND		0.80	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		0.80	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		0.80	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		0.80	ug/L	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		4.0	ug/L	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		4.0	ug/L	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		4.0	ug/L	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		4.0	ug/L	1
Butyl benzyl phthalate	85-68-7	8270D	ND		4.0	ug/L	1
Caprolactam	105-60-2	8270D	ND		8.0	ug/L	1
Carbazole	86-74-8	8270D	ND		4.0	ug/L	1
Chrysene	218-01-9	8270D	ND		0.80	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		0.80	ug/L	1

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

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

Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-003
Description: SW-21	Matrix: Aqueous
Date Sampled: 07/15/2019 1600	Project Name: Groundwater
Date Received: 07/15/2019	Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1426	SCD	07/18/2019 1700	23005

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Dibenzofuran	132-64-9	8270D	ND		4.0	ug/L	1
Diethylphthalate	84-66-2	8270D	ND		4.0	ug/L	1
Dimethyl phthalate	131-11-3	8270D	ND		4.0	ug/L	1
Di-n-butyl phthalate	84-74-2	8270D	ND		4.0	ug/L	1
Di-n-octylphthalate	117-84-0	8270D	ND		4.0	ug/L	1
Fluoranthene	206-44-0	8270D	ND		0.80	ug/L	1
Fluorene	86-73-7	8270D	ND		0.80	ug/L	1
Hexachlorobenzene	118-74-1	8270D	ND		4.0	ug/L	1
Hexachlorobutadiene	87-68-3	8270D	ND		4.0	ug/L	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		20	ug/L	1
Hexachloroethane	67-72-1	8270D	ND		4.0	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		0.80	ug/L	1
Isophorone	78-59-1	8270D	ND		4.0	ug/L	1
Naphthalene	91-20-3	8270D	ND		0.80	ug/L	1
Nitrobenzene	98-95-3	8270D	ND		4.0	ug/L	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		4.0	ug/L	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		4.0	ug/L	1
Pentachlorophenol	87-86-5	8270D	ND		20	ug/L	1
Phenanthrene	85-01-8	8270D	ND		0.80	ug/L	1
Phenol	108-95-2	8270D	ND		4.0	ug/L	1
Pyrene	129-00-0	8270D	ND		0.80	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		55	37-129
2-Fluorophenol		34	24-127
Nitrobenzene-d5		58	38-127
Phenol-d5		52	28-128
Terphenyl-d14		61	10-148
2,4,6-Tribromophenol		64	35-144

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

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

Inorganic non-metals

Client: Westinghouse Electric Company	Laboratory ID: UG15055-004
Description: SED-21	Matrix: Solid
Date Sampled: 07/15/2019 1600	Project Name: Groundwater
Date Received: 07/15/2019	% Solids: 34.0 07/17/2019 0103
Project Number:	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 9056A	1	07/30/2019 0435	GMH		24188

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.20	mg/kg	2

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

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

Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-004
Description: SED-21	Matrix: Solid
Date Sampled: 07/15/2019 1600	Project Name: Groundwater
Date Received: 07/15/2019	% Solids: 34.0 07/17/2019 0103
Project Number:	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	07/23/2019 1816	JM1		23498	4.05

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	67		25	ug/kg	2
Benzene	71-43-2	8260B	ND		6.2	ug/kg	2
Bromodichloromethane	75-27-4	8260B	ND		6.2	ug/kg	2
Bromoform	75-25-2	8260B	ND		6.2	ug/kg	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.2	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	ND		25	ug/kg	2
Carbon disulfide	75-15-0	8260B	ND		6.2	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		6.2	ug/kg	2
Chlorobenzene	108-90-7	8260B	ND		6.2	ug/kg	2
Chloroethane	75-00-3	8260B	ND		6.2	ug/kg	2
Chloroform	67-66-3	8260B	ND		6.2	ug/kg	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.2	ug/kg	2
Cyclohexane	110-82-7	8260B	ND		6.2	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.2	ug/kg	2
Dibromochloromethane	124-48-1	8260B	ND		6.2	ug/kg	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.2	ug/kg	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.2	ug/kg	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.2	ug/kg	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.2	ug/kg	2
Dichlorodifluoromethane	75-71-8	8260B	ND		6.2	ug/kg	2
1,1-Dichloroethane	75-34-3	8260B	ND		6.2	ug/kg	2
1,2-Dichloroethane	107-06-2	8260B	ND		6.2	ug/kg	2
1,1-Dichloroethene	75-35-4	8260B	ND		6.2	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.2	ug/kg	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.2	ug/kg	2
1,2-Dichloropropane	78-87-5	8260B	ND		6.2	ug/kg	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.2	ug/kg	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.2	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		6.2	ug/kg	2
2-Hexanone	591-78-6	8260B	ND		12	ug/kg	2
Isopropylbenzene	98-82-8	8260B	ND		6.2	ug/kg	2
Methyl acetate	79-20-9	8260B	ND		6.2	ug/kg	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.2	ug/kg	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	ug/kg	2
Methylcyclohexane	108-87-2	8260B	ND		6.2	ug/kg	2
Methylene chloride	75-09-2	8260B	ND		6.2	ug/kg	2
Styrene	100-42-5	8260B	ND		6.2	ug/kg	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.2	ug/kg	2
Tetrachloroethene	127-18-4	8260B	ND		6.2	ug/kg	2
Toluene	108-88-3	8260B	ND		6.2	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.2	ug/kg	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.2	ug/kg	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.2	ug/kg	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.2	ug/kg	2

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

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

Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-004
Description: SED-21	Matrix: Solid
Date Sampled: 07/15/2019 1600	Project Name: Groundwater
Date Received: 07/15/2019	% Solids: 34.0 07/17/2019 0103
Project Number:	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	07/23/2019 1816	JM1		23498	4.05

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.2	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		6.2	ug/kg	2
Vinyl chloride	75-01-4	8260B	ND		6.2	ug/kg	2
Xylenes (total)	1330-20-7	8260B	ND		12	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	53-142
Bromofluorobenzene		93	47-138
Toluene-d8		119	68-124

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

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

Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-004
Description: SED-21	Matrix: Solid
Date Sampled: 07/15/2019 1600	Project Name: Groundwater
Date Received: 07/15/2019	% Solids: 34.0 07/17/2019 0103
Project Number:	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1709	SCD	07/17/2019 1446	22863

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		13	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		13	ug/kg	1
Acetophenone	98-86-2	8270D	ND		66	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		66	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		66	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		13	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		13	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		13	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		13	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		66	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		66	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		66	ug/kg	1
Caprolactam	105-60-2	8270D	ND		66	ug/kg	1
Carbazole	86-74-8	8270D	ND		66	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		66	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		66	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		66	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		66	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		66	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		66	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		66	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		66	ug/kg	1
Chrysene	218-01-9	8270D	ND		13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		13	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		66	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		66	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		66	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		66	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		66	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		66	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		66	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		330	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		330	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		130	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		130	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		66	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		66	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		13	ug/kg	1
Fluorene	86-73-7	8270D	ND		13	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		66	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		66	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		330	ug/kg	1

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

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

Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company	Laboratory ID: UG15055-004
Description: SED-21	Matrix: Solid
Date Sampled: 07/15/2019 1600	Project Name: Groundwater
Date Received: 07/15/2019	% Solids: 34.0 07/17/2019 0103
Project Number:	

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1709	SCD	07/17/2019 1446	22863

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		66	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		13	ug/kg	1
Isophorone	78-59-1	8270D	ND		66	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		66	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		130	ug/kg	1
Naphthalene	91-20-3	8270D	ND		13	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		130	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		130	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		130	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		66	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		330	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		66	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		66	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		330	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		66	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		66	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		66	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		70	24-137
2-Fluorophenol		74	16-136
Nitrobenzene-d5		73	12-144
Phenol-d5		73	26-148
Terphenyl-d14		82	20-127
2,4,6-Tribromophenol		90	27-128

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

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

**Chain of Custody
and
Miscellaneous Documents**



Chain of Custody Record

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

Number **097622**

Client: AECOM	Report to Contact: Jerry Grant	Telephone No. / E-mail: Jerry.Grant@AECOM.com	Outside No. _____	
Address: 101 Reservoir Dr.	Sampler's Signature: <i>[Signature]</i>	Analysis (Attach list if more space is needed)		
City: Columbia	State: SC	Zip Code: 29203	Page 1 of 1	
Project Name: Westin@AECOM	Project No. _____	Product Name: James Cochran Benjaminite	 UG150555 NMS Remarks / Cooler I.D.	
Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time		No. of Containers by Preservative Type
				HNO ₃ H ₂ O ₂ CH ₃ COOH H ₂ SO ₄ H ₂ O 100% 30% 10% 10% 10%
SEP-22	7-15-19	1315		TCC Vials: 3 TCC Vials: 3 TCC Vials: 3 TCC Vials: 3
SEP-22		1330		TCC Vials: 3 TCC Vials: 3 TCC Vials: 3 TCC Vials: 3
SEP-21		1600	TCC Vials: 3 TCC Vials: 3 TCC Vials: 3 TCC Vials: 3	
SEP-21		1600	TCC Vials: 3 TCC Vials: 3 TCC Vials: 3 TCC Vials: 3	

Turn Around Time Required (Prior lab approval required for expedited TAT.)	Sample Disposal		Residuals Hazard Identification		QC Requirements (Specify)	
	Return to Client	Disposal by Lab	Non-Hazard	Hazardous	Unknown	Time
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (Specify)	Date: 7-15-19 Time: 1724	Date: _____ Time: _____	<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison	<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison	<input type="checkbox"/> Unknown	Date: _____ Time: _____
1. Relinquished by: <i>[Signature]</i>	Date: _____	Time: _____	1. Received by: _____		Date: _____	Time: _____
2. Relinquished by: _____	Date: _____	Time: _____	2. Received by: _____		Date: _____	Time: _____
3. Relinquished by: _____	Date: _____	Time: _____	3. Received by: _____		Date: _____	Time: _____
4. Relinquished by: _____	Date: _____	Time: _____	4. Laboratory received by: <i>[Signature]</i>		Date: 7-16-19	Time: 1726

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

LAB USE ONLY
 Received on ice (Circle) No Ice Pack Recalibr Temp **2.3** °C

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: MEO018C-14

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

Sample Receipt Checklist (SRC)

Client: AECOM

Cooler Inspected by/date: ETB / 7/15/19

Lot #: UG15055

Means of receipt: <input type="checkbox"/> SESI <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	1. Were custody seals present on the cooler?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	2. If custody seals were present, were they intact and unbroken?
pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: 19-1020	
2.3 / 2.3 °C NA / NA °C NA / NA °C NA / NA °C	
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C	
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Were proper custody procedures (relinquished/received) followed?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Were sample IDs listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7. Were sample IDs listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8. Was collection date & time listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9. Was collection date & time listed on all sample containers?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10. Did all container label information (ID, date, time) agree with the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	11. Were tests to be performed listed on the COC?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	13. Was adequate sample volume available?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	14. Were all samples received within 1/2 the holding time or 48 hours, whichever comes first?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (1/4" or 6mm in diameter) in any of the VOA vials?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	19. Were all applicable NH ₃ /TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual chlorine?
<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	21. Was the quote number listed on the container label? If yes, Quote # NA
Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)	
Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # NA	
Time of preservation NA. If more than one preservative is needed, please note in the comments below.	
Sample(s) NA were received with bubbles >6 mm in diameter.	
Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is 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: ETB Date: 7/15/19	

Comments:
