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.

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

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.

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)

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		353.2	ND		0.020	mg/L	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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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
1,1,2,2-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
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P = The RPD between two GC columns exceeds 40%

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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
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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

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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

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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** % Solids: **26.0** **07/17/2019 0103**

Date Received: **07/15/2019** Project Number:

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
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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** % Solids: **26.0** **07/17/2019 0103**

Date Received: **07/15/2019** 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

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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** % Solids: **26.0** **07/17/2019 0103**

Date Received: **07/15/2019** 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
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%

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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** % Solids: **26.0** **07/17/2019 0103**

Date Received: **07/15/2019** 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
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%

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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** % Solids: **26.0** **07/17/2019 0103**

Date Received: **07/15/2019** 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
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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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		353.2	ND		0.020	mg/L	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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P = The RPD between two GC columns exceeds 40%

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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
1,1,2,2-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
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%

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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
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%

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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
ND = Not detected at or above the LOQ
H = Out of holding time
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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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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
ND = Not detected at or above the LOQ
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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%

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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** % Solids: **34.0** **07/17/2019 0103**

Date Received: **07/15/2019** 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
ND = Not detected at or above the LOQ
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P = The RPD between two GC columns exceeds 40%

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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** % Solids: **34.0** **07/17/2019 0103**

Date Received: **07/15/2019** 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
ND = Not detected at or above the LOQ
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N = Recovery is out of criteria
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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** % Solids: **34.0** **07/17/2019 0103**

Date Received: **07/15/2019** 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
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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** % Solids: **34.0** **07/17/2019 0103**

Date Received: **07/15/2019** 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
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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** % Solids: **34.0** **07/17/2019 0103**

Date Received: **07/15/2019** 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
ND = Not detected at or above the LOQ
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Chain of Custody
and
Miscellaneous Documents

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SHEALY ENVIRONMENTAL SERVICES, INC.

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: JEREMY GRANT	Telephone No. / E-mail: JEREMY.GRANT@AECOM.COM	Quote No.
Address: 101 RESEARCH DR.	Sampler's Signature:	Analysis (Attach list if more space is needed)	Page 1 of 1
City: COLUMBIA State: SC Zip Code: 29203	Printed Name: JAMES LEIGHTON BENJAMIN FRITZ		UG15055 NMS
Project Name: WESTINGHOUSE			
Project No.	P.O. No.		Remarks / Cooler I.D.

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	G=Grab C=Composite	Matrix: Aqueous	Soil	Non-Aqueous	No of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc NaOH	TCL VOCs 8260B	TCL SVOCs 8270D	NO3 353.2
SW-22	7-15-19	1315	G	X			3			3			X	X	X
SED-22		1350	G		X		3					1	X	X	X
SW-21		1600	G	X			3			3			X	X	X
SED-21		1600	G		X		3					1	X	X	X

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☑ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☑ Disposal by Lab

Possible Hazard Identification ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by	7-15-19	1726	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory received by	7/16-19	1726

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

LAB USE ONLY
Received on ice (Circle) Yes No Ice Pack Receipt Temp. 2.3 °C

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

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

Shealy Environmental Services, Inc.
Document Number: ME0018C-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: ☐ 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: 19-1020

2.3 / 2.3 °C NA / NA °C NA / NA °C NA / NA °C

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

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☐ Yes	☐ No	☑ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☐ Yes	☐ No	☑ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC?
☑ Yes	☐ No		7. Were sample IDs listed on all sample containers?
☑ Yes	☐ No		8. Was collection date & time listed on the COC?
☑ Yes	☐ No		9. Was collection date & time listed on all sample containers?
☑ Yes	☐ No		10. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☑ Yes	☐ No		13. Was adequate sample volume available?
☑ Yes	☐ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☐ Yes	☑ No	☐ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	19. Were all applicable NH_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?
☐ Yes	☑ No		21. Was the quote number listed on the container label? If yes, Quote # NA

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

Sample(s) NA _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: 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 ($Na_2S_2O_3$) with Shealy ID: NA _____.

SR barcode labels applied by: ETB Date: 7/15/19

Comments:

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

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

Project Name: Groundwater

Lot Number:**UG16058**

Date Completed:08/02/2019

08/14/2019 5:25 PM
Approved and released by:
Project Manager: Grant Wilton

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

Shealy Environmental Services, Inc.
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Case Narrative
Westinghouse Electric Company
Lot Number: UG16058

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.

Volatile Organic Analysis – Method 8260B
Sample -004: Internal standard response for the sample exceeded the lower control limit, and a surrogate failed high. The sample was re-analyzed with concurring results. As such, the sample results may be biased high. The original set of data has been reported

Sample Summary

Westinghouse Electric Company

Lot Number: UG16058

Project Name: Groundwater

Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SED-15	Solid	07/16/2019 1120	07/16/2019
002	SED-18	Solid	07/16/2019 1230	07/16/2019
003	SW-18	Aqueous	07/16/2019 1230	07/16/2019
004	SED-20	Solid	07/16/2019 1400	07/16/2019
005	SW-20	Aqueous	07/16/2019 1400	07/16/2019
006	SED-23	Solid	07/16/2019 1545	07/16/2019
007	SW-23	Aqueous	07/16/2019 1545	07/16/2019
008	SED-24	Solid	07/16/2019 1615	07/16/2019

(8 samples)

Detection Summary

Westinghouse Electric Company

Lot Number: UG16058

Project Name: Groundwater

Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
003	SW-18	Aqueous	Nitrate - N	353.2	5.7		mg/L	15
003	SW-18	Aqueous	Tetrachloroethene	8260B	14		ug/L	16
004	SED-20	Solid	Acetone	8260B	110		ug/kg	21
004	SED-20	Solid	2-Butanone (MEK)	8260B	45		ug/kg	21
006	SED-23	Solid	Acetone	8260B	91		ug/kg	31
007	SW-23	Aqueous	Nitrate - N	353.2	7.3		mg/L	35
008	SED-24	Solid	Nitrate - N (soluble)	9056A	0.20		mg/kg	40
008	SED-24	Solid	Acetone	8260B	25		ug/kg	41

(8 detections)

Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG16058-001
Description: SED-15
Matrix: Solid
Date Sampled: 07/16/2019 1120
Project Name: Groundwater
% Solids: 79.3 07/17/2019 0103
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 9056A	1	07/30/2019 0524	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
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-001
Description: SED-15 | Matrix: Solid
Date Sampled: 07/16/2019 1120 | Project Name: Groundwater | % Solids: 79.3 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1346	JM1		23498	6.55

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	ND		15	ug/kg	1
Benzene	71-43-2	8260B	ND		3.8	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		3.8	ug/kg	1
Bromoform	75-25-2	8260B	ND		3.8	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		3.8	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		15	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		3.8	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		3.8	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		3.8	ug/kg	1
Chloroethane	75-00-3	8260B	ND		3.8	ug/kg	1
Chloroform	67-66-3	8260B	ND		3.8	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		3.8	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		3.8	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		3.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		3.8	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		3.8	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		3.8	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		3.8	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		3.8	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		3.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		3.8	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		3.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		3.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		3.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		3.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		3.8	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		3.8	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		3.8	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		3.8	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		7.6	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		3.8	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		3.8	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		3.8	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		7.6	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		3.8	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		3.8	ug/kg	1
Styrene	100-42-5	8260B	ND		3.8	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		3.8	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		3.8	ug/kg	1
Toluene	108-88-3	8260B	ND		3.8	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		3.8	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		3.8	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		3.8	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		3.8	ug/kg	1

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG16058-001
Description: SED-15
Matrix: Solid
Date Sampled: 07/16/2019 1120
Project Name: Groundwater
% Solids: 79.3 07/17/2019 0103
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1346	JM1		23498	6.55

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		3.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		3.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		3.8	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		7.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		105	47-138
Toluene-d8		108	68-124

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P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-001
Description: SED-15 | Matrix: Solid
Date Sampled: 07/16/2019 1120 | Project Name: Groundwater | % Solids: 79.3 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1734	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		67	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		67	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		67	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		67	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		67	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		67	ug/kg	1
Caprolactam	105-60-2	8270D	ND		67	ug/kg	1
Carbazole	86-74-8	8270D	ND		67	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		67	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		67	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		67	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		67	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		67	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		67	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		67	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		67	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		67	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		67	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		67	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		67	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		67	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		67	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		67	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		67	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		67	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		67	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		67	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		330	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-001
Description: SED-15 | Matrix: Solid
Date Sampled: 07/16/2019 1120 | Project Name: Groundwater | % Solids: 79.3 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1734	SCD	07/17/2019 1446	22863

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		67	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		67	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		67	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		67	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		67	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		67	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		67	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		67	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		67	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		73	24-137
2-Fluorophenol		79	16-136
Nitrobenzene-d5		77	12-144
Phenol-d5		79	26-148
Terphenyl-d14		86	20-127
2,4,6-Tribromophenol		94	27-128

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG16058-002
Description: SED-18
Matrix: Solid
Date Sampled: 07/16/2019 1230
Project Name: Groundwater
% Solids: 76.0 07/17/2019 0103
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 9056A	1	07/30/2019 0556	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
ND = Not detected at or above the LOQ
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-002
Description: SED-18 | Matrix: Solid
Date Sampled: 07/16/2019 1230 | Project Name: Groundwater | % Solids: 76.0 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1408	JM1		23498	5.59

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	ND		18	ug/kg	1
Benzene	71-43-2	8260B	ND		4.5	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.5	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.5	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.5	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		18	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.5	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.5	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.5	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.5	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.5	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.5	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.5	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.5	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.5	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.5	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.5	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.5	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.5	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.5	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.5	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.5	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.5	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.5	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.5	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.5	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.5	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.5	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.5	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.9	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.5	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.5	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.5	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.9	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.5	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.5	ug/kg	1
Styrene	100-42-5	8260B	ND		4.5	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.5	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.5	ug/kg	1
Toluene	108-88-3	8260B	ND		4.5	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.5	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.5	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.5	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.5	ug/kg	1

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG16058-002
Description: SED-18
Matrix: Solid
Date Sampled: 07/16/2019 1230
Project Name: Groundwater
% Solids: 76.0 07/17/2019 0103
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1408	JM1		23498	5.59

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.5	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.5	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.5	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		105	47-138
Toluene-d8		107	68-124

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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-002
Description: SED-18 | Matrix: Solid
Date Sampled: 07/16/2019 1230 | Project Name: Groundwater | % Solids: 76.0 | 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1758	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		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		320	ug/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-002
Description: SED-18 | Matrix: Solid
Date Sampled: 07/16/2019 1230 | Project Name: Groundwater | % Solids: 76.0 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1758	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		320	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		320	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		67	24-137
2-Fluorophenol		72	16-136
Nitrobenzene-d5		70	12-144
Phenol-d5		72	26-148
Terphenyl-d14		82	20-127
2,4,6-Tribromophenol		82	27-128

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG16058-003
Description: SW-18
Matrix: Aqueous
Date Sampled: 07/16/2019 1230
Project Name: Groundwater
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	5	07/18/2019 0131	MDD		22958

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	5.7		0.10	mg/L	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG16058-003
Description: SW-18
Matrix: Aqueous
Date Sampled: 07/16/2019 1230
Project Name: Groundwater
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/20/2019 0135	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
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	14		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
ND = Not detected at or above the LOQ
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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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG16058-003
Description: SW-18
Matrix: Aqueous
Date Sampled: 07/16/2019 1230
Project Name: Groundwater
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/20/2019 0135	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		102	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		106	70-130

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-003

Description: SW-18 | Matrix: Aqueous

Date Sampled: 07/16/2019 1230 | Project Name: Groundwater

Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1451	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
ND = Not detected at or above the LOQ
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG16058-003
Description: SW-18
Matrix: Aqueous
Date Sampled: 07/16/2019 1230
Project Name: Groundwater
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1451	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		66	37-129
2-Fluorophenol		42	24-127
Nitrobenzene-d5		68	38-127
Phenol-d5		55	28-128
Terphenyl-d14		68	10-148
2,4,6-Tribromophenol		73	35-144

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

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG16058-004
Description: SED-20
Matrix: Solid
Date Sampled: 07/16/2019 1400
Project Name: Groundwater
% Solids: 13.6 07/17/2019 0103
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 9056A	1	07/30/2019 0612	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
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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-004
Description: SED-20 | Matrix: Solid
Date Sampled: 07/16/2019 1400 | Project Name: Groundwater | % Solids: 13.6 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1431	JM1		23498	3.84

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	110		26	ug/kg	1
Benzene	71-43-2	8260B	ND		6.5	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.5	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.5	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.5	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	45		26	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.5	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.5	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.5	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.5	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.5	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.5	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.5	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.5	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.5	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.5	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.5	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.5	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.5	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.5	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.5	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.5	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.5	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.5	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.5	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.5	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.5	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.5	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.5	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.5	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.5	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.5	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.5	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.5	ug/kg	1
Styrene	100-42-5	8260B	ND		6.5	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.5	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.5	ug/kg	1
Toluene	108-88-3	8260B	ND		6.5	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.5	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.5	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.5	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.5	ug/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UG16058-004	
Description: SED-20		Matrix: Solid	
Date Sampled: 07/16/2019 1400	Project Name: Groundwater	% Solids: 13.6	07/17/2019 0103
Date Received: 07/16/2019	Project Number:		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1431	JM1		23498	3.84

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.5	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.5	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.5	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	53-142
Bromofluorobenzene		84	47-138
Toluene-d8	N	129	68-124

LOQ = Limit of Quantitation
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P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-004
Description: SED-20 | Matrix: Solid
Date Sampled: 07/16/2019 1400 | Project Name: Groundwater | % Solids: 13.6 | 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1823	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		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		320	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-004
Description: SED-20 | Matrix: Solid
Date Sampled: 07/16/2019 1400 | Project Name: Groundwater | % Solids: 13.6 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1823	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		320	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		320	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		73	16-136
Nitrobenzene-d5		74	12-144
Phenol-d5		74	26-148
Terphenyl-d14		80	20-127
2,4,6-Tribromophenol		89	27-128

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P = The RPD between two GC columns exceeds 40%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG16058-005
Description: SW-20
Matrix: Aqueous
Date Sampled: 07/16/2019 1400
Project Name: Groundwater
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	07/18/2019 0132	MDD		22958

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

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG16058-005
Description: SW-20
Matrix: Aqueous
Date Sampled: 07/16/2019 1400
Project Name: Groundwater
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/20/2019 0159	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
1,1,2,2-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

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG16058-005
Description: SW-20
Matrix: Aqueous
Date Sampled: 07/16/2019 1400
Project Name: Groundwater
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/20/2019 0159	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		102	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		107	70-130

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG16058-005
Description: SW-20
Matrix: Aqueous
Date Sampled: 07/16/2019 1400
Project Name: Groundwater
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1516	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
ND = Not detected at or above the LOQ
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N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG16058-005
Description: SW-20
Matrix: Aqueous
Date Sampled: 07/16/2019 1400
Project Name: Groundwater
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1516	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		63	37-129
2-Fluorophenol		34	24-127
Nitrobenzene-d5		67	38-127
Phenol-d5		50	28-128
Terphenyl-d14		40	10-148
2,4,6-Tribromophenol		68	35-144

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Inorganic non-metals

Client: Westinghouse Electric Company			Laboratory ID: UG16058-006
Description: SED-23			Matrix: Solid
Date Sampled: 07/16/2019 1545	Project Name: Groundwater		% Solids: 57.4 07/17/2019 0103
Date Received: 07/16/2019	Project Number:		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 9056A	1	07/30/2019 0701	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
ND = Not detected at or above the LOQ
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P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-006
Description: SED-23 | Matrix: Solid
Date Sampled: 07/16/2019 1545 | Project Name: Groundwater | % Solids: 57.4 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1453	JM1		23498	3.53

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	91		28	ug/kg	1
Benzene	71-43-2	8260B	ND		7.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		7.1	ug/kg	1
Bromoform	75-25-2	8260B	ND		7.1	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		7.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		28	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		7.1	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		7.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		7.1	ug/kg	1
Chloroethane	75-00-3	8260B	ND		7.1	ug/kg	1
Chloroform	67-66-3	8260B	ND		7.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		7.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		7.1	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		7.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		7.1	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		7.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		7.1	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		7.1	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		7.1	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		7.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		7.1	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		7.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		7.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		7.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		7.1	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		7.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		7.1	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		7.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		7.1	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		14	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		7.1	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		7.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		7.1	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		14	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		7.1	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		7.1	ug/kg	1
Styrene	100-42-5	8260B	ND		7.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		7.1	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		7.1	ug/kg	1
Toluene	108-88-3	8260B	ND		7.1	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		7.1	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		7.1	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		7.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		7.1	ug/kg	1

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UG16058-006	
Description: SED-23		Matrix: Solid	
Date Sampled: 07/16/2019 1545	Project Name: Groundwater	% Solids: 57.4	07/17/2019 0103
Date Received: 07/16/2019	Project Number:		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1453	JM1		23498	3.53

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		7.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		7.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		7.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		14	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		103	47-138
Toluene-d8		111	68-124

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-006
Description: SED-23 | Matrix: Solid
Date Sampled: 07/16/2019 1545 | Project Name: Groundwater | % Solids: 57.4 | 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1847	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		65	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		65	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		65	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		65	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		65	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		65	ug/kg	1
Caprolactam	105-60-2	8270D	ND		65	ug/kg	1
Carbazole	86-74-8	8270D	ND		65	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		65	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		65	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		65	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		65	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		65	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		65	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		65	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		65	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		65	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		65	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		65	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		65	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		65	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		65	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		65	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		65	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		65	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		65	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		65	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	1

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-006
Description: SED-23 | Matrix: Solid
Date Sampled: 07/16/2019 1545 | Project Name: Groundwater | % Solids: 57.4 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1847	SCD	07/17/2019 1446	22863

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		65	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		65	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		65	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		65	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		65	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		65	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		65	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		65	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		65	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		70	24-137
2-Fluorophenol		68	16-136
Nitrobenzene-d5		73	12-144
Phenol-d5		73	26-148
Terphenyl-d14		80	20-127
2,4,6-Tribromophenol		89	27-128

LOQ = Limit of Quantitation
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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%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG16058-007
Description: SW-23
Matrix: Aqueous
Date Sampled: 07/16/2019 1545
Project Name: Groundwater
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	10	07/18/2019 0133	MDD		22958

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	7.3		0.20	mg/L	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-007
Description: SW-23 | Matrix: Aqueous
Date Sampled: 07/16/2019 1545 | Project Name: Groundwater
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/20/2019 0223	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
1,1,2,2-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
ND = Not detected at or above the LOQ
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N = Recovery is out of criteria
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG16058-007
Description: SW-23
Matrix: Aqueous
Date Sampled: 07/16/2019 1545
Project Name: Groundwater
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/20/2019 0223	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		103	70-130
Toluene-d8		105	70-130

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG16058-007
Description: SW-23
Matrix: Aqueous
Date Sampled: 07/16/2019 1545
Project Name: Groundwater
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1541	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

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG16058-007
Description: SW-23
Matrix: Aqueous
Date Sampled: 07/16/2019 1545
Project Name: Groundwater
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1541	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		57	37-129
2-Fluorophenol		37	24-127
Nitrobenzene-d5		62	38-127
Phenol-d5		47	28-128
Terphenyl-d14		45	10-148
2,4,6-Tribromophenol		70	35-144

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG16058-008
Description: SED-24
Matrix: Solid
Date Sampled: 07/16/2019 1615
Project Name: Groundwater
% Solids: 52.2 07/17/2019 0103
Date Received: 07/16/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 9056A	1	07/30/2019 0717	GMH		24362

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

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-008
Description: SED-24 | Matrix: Solid
Date Sampled: 07/16/2019 1615 | Project Name: Groundwater | % Solids: 52.2 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1516	JM1		23498	5.99

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	25		17	ug/kg	1
Benzene	71-43-2	8260B	ND		4.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		17	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.3	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.3	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.2	ug/kg	1
Styrene	100-42-5	8260B	ND		4.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.2	ug/kg	1
Toluene	108-88-3	8260B	ND		4.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.2	ug/kg	1

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UG16058-008	
Description: SED-24		Matrix: Solid	
Date Sampled: 07/16/2019 1615	Project Name: Groundwater	% Solids: 52.2	07/17/2019 0103
Date Received: 07/16/2019	Project Number:		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1516	JM1		23498	5.99

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		105	47-138
Toluene-d8		108	68-124

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-008
Description: SED-24 | Matrix: Solid
Date Sampled: 07/16/2019 1615 | Project Name: Groundwater | % Solids: 52.2 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1912	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		64	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		64	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		64	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		64	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		64	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		64	ug/kg	1
Caprolactam	105-60-2	8270D	ND		64	ug/kg	1
Carbazole	86-74-8	8270D	ND		64	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		64	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		64	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		64	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		64	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		64	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		64	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		64	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		64	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		64	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		64	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		64	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		64	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		64	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		64	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		64	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		310	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		310	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		120	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		120	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		64	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		64	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		64	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		64	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		310	ug/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG16058-008
Description: SED-24 | Matrix: Solid
Date Sampled: 07/16/2019 1615 | Project Name: Groundwater | % Solids: 52.2 07/17/2019 0103
Date Received: 07/16/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/24/2019 1912	SCD	07/17/2019 1446	22863

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		64	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		64	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		64	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		120	ug/kg	1
Naphthalene	91-20-3	8270D	ND		13	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		120	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		120	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		120	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		64	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		120	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		310	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		64	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		64	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		310	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		64	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		64	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		64	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		75	24-137
2-Fluorophenol		66	16-136
Nitrobenzene-d5		74	12-144
Phenol-d5		72	26-148
Terphenyl-d14		86	20-127
2,4,6-Tribromophenol		91	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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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%

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Chain of Custody

and

Miscellaneous Documents

Chain of Custody Record

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

Number 097501

Client: WESTINGHOUSE
Address: 5801 BLUFF RD
City: HOPKINS State: SC Zip Code: 29061
Project Name: WESTINGHOUSE
Project No.:
P.O. No.:
Report to Contact: DIANA JOYNER
Sampler's Signature: [signature] [signature]
Printed Name: James Leaphart Benjamin [illegible]
Telephone No. / E-mail: 803 647 1920 JOYNERDP@WESTINGHOUSE.COM
Quote No.: 22261
Analysis (Attach list if more space is needed)
Page 1 of 1
UG16058
GRW

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Aqueous	Solid	Non-Aqueous	Unpres.	H2SO4	HNO3	HCl	NaOH	[illegible]	TCL VOC's 8260D	TCL SVOC's 8270D	NO3 353.2	Remarks / Cooler I.D.
SED-15	7-16-19	1120	G		X		3					1	X	X	X	
SED-18	↓	1230	G		X		3					1	X	X	X	
SW-18		1230	G	X			3			3			X	X	X	
SED-20		1400	G		X		3					1	X	X	X	
SW-20		1400	G	X			3			3			X	X	X	
SED-23		1545	G		X		3					1	X	X	X	
SW-23		1545	G	X			3			3			X	X	X	
SED-24	↓	1615	G		X		3					1	X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☒ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☒ Disposal by Lab

Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by [signature]	7-16-19	1940	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory received by [signature]	7/16/19	1750

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

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack Receipt Temp. 4.5 °C

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

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

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

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

Sample Receipt Checklist (SRC)

Client: Westinghouse Cooler Inspected by/date: JSH / 07/16/19 Lot #: UG16058

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: 19-1020

4.5 / 4.5 °C NA / NA °C NA / NA °C NA / NA °C

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

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☐ Yes	☐ No	☑ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☐ Yes	☐ No	☑ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC?
☐ Yes	☑ No		7. Were sample IDs listed on all sample containers?
☑ Yes	☐ No		8. Was collection date & time listed on the COC?
☑ Yes	☐ No		9. Was collection date & time listed on all sample containers?
☐ Yes	☑ No		10. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)? _____
☑ Yes	☐ No		13. Was adequate sample volume available?
☑ Yes	☐ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☐ Yes	☐ No	☑ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	19. Were all applicable NH_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?
☐ Yes	☑ No		21. Was the quote number listed on the container label? If yes, Quote # NA

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

Sample(s) NA _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: 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 ($Na_2S_2O_3$) with Shealy ID: NA.

SR barcode labels applied by: DMN/JSH Date: 07/16/19

Comments: SW-23 collection time on container:1445, COC: 1545

SW-18 had no collection time on container

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

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

Project Name: Groundwater

Lot Number:**UG17072**

Date Completed:08/02/2019

09/16/2019 11:59 AM
Approved and released by:
Project Manager: Grant Wilton

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

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Case Narrative
Westinghouse Electric Company
Lot Number: UG17072

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.

Sample Summary

Westinghouse Electric Company

Lot Number: UG17072

Project Name: Groundwater

Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SW-19	Aqueous	07/17/2019 0845	07/17/2019
002	SED-19	Solid	07/17/2019 0845	07/17/2019
003	SW-16	Aqueous	07/17/2019 1030	07/17/2019
004	SED-16	Solid	07/17/2019 1030	07/17/2019
005	SW-14	Aqueous	07/17/2019 1100	07/17/2019
006	SED-14	Solid	07/17/2019 1100	07/17/2019
007	SW-13	Aqueous	07/17/2019 1200	07/17/2019
008	SED-13	Solid	07/17/2019 1200	07/17/2019
009	SW-11	Aqueous	07/17/2019 1345	07/17/2019
010	SED-11	Solid	07/17/2019 1345	07/17/2019
011	SW-12	Aqueous	07/17/2019 1515	07/17/2019
012	SED-12	Solid	07/17/2019 1515	07/17/2019
013	TB-01-071719	Aqueous	07/17/2019	07/17/2019

(13 samples)

Detection Summary

Westinghouse Electric Company

Lot Number: UG17072

Project Name: Groundwater

Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	SED-19	Solid	Nitrate - N (soluble)	9056A	1.2		mg/kg	10
002	SED-19	Solid	Acetone	8260B	48		ug/kg	11
002	SED-19	Solid	2-Butanone (MEK)	8260B	45		ug/kg	11
003	SW-16	Aqueous	Nitrate - N	353.2	0.48		mg/L	15
004	SED-16	Solid	Nitrate - N (soluble)	9056A	2.7		mg/kg	20
005	SW-14	Aqueous	Nitrate - N	353.2	0.63		mg/L	25
006	SED-14	Solid	Acetone	8260B	28		ug/kg	31
006	SED-14	Solid	Benzo(a)anthracene	8270D	13		ug/kg	33
006	SED-14	Solid	Benzo(a)pyrene	8270D	20		ug/kg	33
006	SED-14	Solid	Benzo(b)fluoranthene	8270D	37		ug/kg	33
006	SED-14	Solid	Benzo(g,h,i)perylene	8270D	18		ug/kg	33
006	SED-14	Solid	Benzo(k)fluoranthene	8270D	16		ug/kg	33
006	SED-14	Solid	Chrysene	8270D	21		ug/kg	33
006	SED-14	Solid	Fluoranthene	8270D	36		ug/kg	33
006	SED-14	Solid	Indeno(1,2,3-c,d)pyrene	8270D	15		ug/kg	34
006	SED-14	Solid	Pyrene	8270D	28		ug/kg	34
008	SED-13	Solid	Nitrate - N (soluble)	9056A	0.20		mg/kg	40
008	SED-13	Solid	Acetone	8260B	30		ug/kg	41
008	SED-13	Solid	Anthracene	8270D	14		ug/kg	43
008	SED-13	Solid	Benzo(a)anthracene	8270D	170		ug/kg	43
008	SED-13	Solid	Benzo(a)pyrene	8270D	290		ug/kg	43
008	SED-13	Solid	Benzo(b)fluoranthene	8270D	630		ug/kg	43
008	SED-13	Solid	Benzo(g,h,i)perylene	8270D	190		ug/kg	43
008	SED-13	Solid	Benzo(k)fluoranthene	8270D	200		ug/kg	43
008	SED-13	Solid	Chrysene	8270D	310		ug/kg	43
008	SED-13	Solid	Fluoranthene	8270D	570		ug/kg	43
008	SED-13	Solid	Indeno(1,2,3-c,d)pyrene	8270D	170		ug/kg	44
008	SED-13	Solid	Phenanthrene	8270D	130		ug/kg	44
008	SED-13	Solid	Pyrene	8270D	450		ug/kg	44
010	SED-11	Solid	Nitrate - N (soluble)	9056A	0.33		mg/kg	50
010	SED-11	Solid	Acetone	8260B	32		ug/kg	51
012	SED-12	Solid	Nitrate - N (soluble)	9056A	0.24		mg/kg	60
012	SED-12	Solid	Acetone	8260B	110		ug/kg	61
012	SED-12	Solid	2-Butanone (MEK)	8260B	180		ug/kg	61

(34 detections)

Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG17072-001
Description: SW-19
Matrix: Aqueous
Date Sampled: 07/17/2019 0845
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	07/19/2019 0152	MDD		23098

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
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
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-001
Description: SW-19
Matrix: Aqueous
Date Sampled: 07/17/2019 0845
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/21/2019 0034	STM		23248

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
1,1,2,2-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
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-001
Description: SW-19
Matrix: Aqueous
Date Sampled: 07/17/2019 0845
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/21/2019 0034	STM		23248

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		92	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		99	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-001
Description: SW-19
Matrix: Aqueous
Date Sampled: 07/17/2019 0845
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1631	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
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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-001
Description: SW-19
Matrix: Aqueous
Date Sampled: 07/17/2019 0845
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1631	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		65	37-129
2-Fluorophenol		39	24-127
Nitrobenzene-d5		64	38-127
Phenol-d5		48	28-128
Terphenyl-d14		41	10-148
2,4,6-Tribromophenol		73	35-144

LOQ = Limit of Quantitation
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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG17072-002
Description: SED-19
Matrix: Solid
Date Sampled: 07/17/2019 0845
Project Name: Groundwater
% Solids: 36.1 07/18/2019 0107
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 9056A	1	07/30/2019 0806	GMH		24362

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	1.2		0.20	mg/kg	2

LOQ = Limit of Quantitation
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P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-002
Description: SED-19 | Matrix: Solid
Date Sampled: 07/17/2019 0845 | Project Name: Groundwater | % Solids: 36.1 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1601	JM1		23498	4.82

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	48		21	ug/kg	1
Benzene	71-43-2	8260B	ND		5.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	45		21	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.2	ug/kg	1
Styrene	100-42-5	8260B	ND		5.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.2	ug/kg	1
Toluene	108-88-3	8260B	ND		5.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.2	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UG17072-002	
Description: SED-19		Matrix: Solid	
Date Sampled: 07/17/2019 0845	Project Name: Groundwater	% Solids: 36.1	07/18/2019 0107
Date Received: 07/17/2019	Project Number:		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1601	JM1		23498	4.82

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		10	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	53-142
Bromofluorobenzene		95	47-138
Toluene-d8		118	68-124

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-002
Description: SED-19 | Matrix: Solid
Date Sampled: 07/17/2019 0845 | Project Name: Groundwater | % Solids: 36.1 | 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1505	SCD	07/23/2019 1708	23488

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		67	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		67	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		67	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		67	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		67	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		67	ug/kg	1
Caprolactam	105-60-2	8270D	ND		67	ug/kg	1
Carbazole	86-74-8	8270D	ND		67	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		67	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		67	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		67	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		67	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		67	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		67	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		67	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		67	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		67	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		67	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		67	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		67	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		67	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		67	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		67	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		67	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		67	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		67	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		67	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		330	ug/kg	1

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-002
Description: SED-19 | Matrix: Solid
Date Sampled: 07/17/2019 0845 | Project Name: Groundwater | % Solids: 36.1 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1505	SCD	07/23/2019 1708	23488

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		67	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		67	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		67	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		67	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		67	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		67	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		67	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		67	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		67	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		62	24-137
2-Fluorophenol		65	16-136
Nitrobenzene-d5		60	12-144
Phenol-d5		65	26-148
Terphenyl-d14		73	20-127
2,4,6-Tribromophenol		78	27-128

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%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG17072-003
Description: SW-16
Matrix: Aqueous
Date Sampled: 07/17/2019 1030
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	07/19/2019 0153	MDD		23098

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	0.48		0.020	mg/L	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-003
Description: SW-16
Matrix: Aqueous
Date Sampled: 07/17/2019 1030
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/21/2019 0057	STM		23248

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
1,1,2,2-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
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-003
Description: SW-16
Matrix: Aqueous
Date Sampled: 07/17/2019 1030
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/21/2019 0057	STM		23248

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		90	70-130
Bromofluorobenzene		88	70-130
Toluene-d8		92	70-130

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-003
Description: SW-16 | Matrix: Aqueous
Date Sampled: 07/17/2019 1030 | Project Name: Groundwater
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1656	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

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-003
Description: SW-16
Matrix: Aqueous
Date Sampled: 07/17/2019 1030
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1656	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		67	37-129
2-Fluorophenol		40	24-127
Nitrobenzene-d5		65	38-127
Phenol-d5		55	28-128
Terphenyl-d14		79	10-148
2,4,6-Tribromophenol		77	35-144

LOQ = Limit of Quantitation
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P = The RPD between two GC columns exceeds 40%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG17072-004
Description: SED-16
Matrix: Solid
Date Sampled: 07/17/2019 1030
Project Name: Groundwater
% Solids: 75.6 07/18/2019 0107
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 9056A	1	07/31/2019 2125	HKL		24497

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	2.7		0.20	mg/kg	2

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-004
Description: SED-16 | Matrix: Solid
Date Sampled: 07/17/2019 1030 | Project Name: Groundwater | % Solids: 75.6 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1623	JM1		23498	6.10

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	ND		16	ug/kg	1
Benzene	71-43-2	8260B	ND		4.1	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.1	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.1	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.1	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		16	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.1	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.1	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.1	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.1	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.1	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.1	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.1	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.1	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.1	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.1	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.1	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.1	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.1	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.1	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.1	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.1	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.1	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.1	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.1	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.1	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.1	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.1	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.1	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.2	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.1	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.1	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.1	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.2	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.1	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.1	ug/kg	1
Styrene	100-42-5	8260B	ND		4.1	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.1	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.1	ug/kg	1
Toluene	108-88-3	8260B	ND		4.1	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.1	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.1	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.1	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.1	ug/kg	1

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-004
Description: SED-16
Matrix: Solid
Date Sampled: 07/17/2019 1030
Project Name: Groundwater
% Solids: 75.6 07/18/2019 0107
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1623	JM1		23498	6.10

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.1	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.1	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.1	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.2	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	53-142
Bromofluorobenzene		104	47-138
Toluene-d8		108	68-124

LOQ = Limit of Quantitation
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N = Recovery is out of criteria
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-004
Description: SED-16 | Matrix: Solid
Date Sampled: 07/17/2019 1030 | Project Name: Groundwater | % Solids: 75.6 | 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1531	SCD	07/23/2019 1708	23488

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		65	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		65	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		65	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		65	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		65	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		65	ug/kg	1
Caprolactam	105-60-2	8270D	ND		65	ug/kg	1
Carbazole	86-74-8	8270D	ND		65	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		65	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		65	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		65	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		65	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		65	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		65	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		65	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		65	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		65	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		65	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		65	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		65	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		65	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		65	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		65	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		65	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		65	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		65	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		65	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-004
Description: SED-16 | Matrix: Solid
Date Sampled: 07/17/2019 1030 | Project Name: Groundwater | % Solids: 75.6 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1531	SCD	07/23/2019 1708	23488

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		65	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		65	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		65	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		65	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		65	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		65	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		65	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		65	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		65	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		64	24-137
2-Fluorophenol		68	16-136
Nitrobenzene-d5		64	12-144
Phenol-d5		69	26-148
Terphenyl-d14		78	20-127
2,4,6-Tribromophenol		79	27-128

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

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG17072-005
Description: SW-14
Matrix: Aqueous
Date Sampled: 07/17/2019 1100
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	07/19/2019 0155	MDD		23098

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	0.63		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
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-005
Description: SW-14
Matrix: Aqueous
Date Sampled: 07/17/2019 1100
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/21/2019 0121	STM		23248

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
1,1,2,2-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

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-005
Description: SW-14
Matrix: Aqueous
Date Sampled: 07/17/2019 1100
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/21/2019 0121	STM		23248

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		92	70-130
Bromofluorobenzene		94	70-130
Toluene-d8		94	70-130

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-005
Description: SW-14 | Matrix: Aqueous
Date Sampled: 07/17/2019 1100 | Project Name: Groundwater
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1721	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
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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-005
Description: SW-14
Matrix: Aqueous
Date Sampled: 07/17/2019 1100
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1721	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		62	37-129
2-Fluorophenol		38	24-127
Nitrobenzene-d5		63	38-127
Phenol-d5		49	28-128
Terphenyl-d14		64	10-148
2,4,6-Tribromophenol		61	35-144

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

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG17072-006
Description: SED-14
Matrix: Solid
Date Sampled: 07/17/2019 1100
Project Name: Groundwater
% Solids: 76.0 07/18/2019 0107
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 9056A	1	07/31/2019 2141	HKL		24497

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

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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-006
Description: SED-14 | Matrix: Solid
Date Sampled: 07/17/2019 1100 | Project Name: Groundwater | % Solids: 76.0 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1646	JM1		23498	5.73

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	28		17	ug/kg	1
Benzene	71-43-2	8260B	ND		4.4	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.4	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.4	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		17	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.4	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.4	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.4	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.4	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.4	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.4	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.4	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.4	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.4	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.4	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.4	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.4	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.4	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.4	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.4	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.4	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.4	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.4	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.4	ug/kg	1
Styrene	100-42-5	8260B	ND		4.4	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.4	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.4	ug/kg	1
Toluene	108-88-3	8260B	ND		4.4	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.4	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.4	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.4	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.4	ug/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UG17072-006	
Description: SED-14		Matrix: Solid	
Date Sampled: 07/17/2019 1100	Project Name: Groundwater	% Solids: 76.0	07/18/2019 0107
Date Received: 07/17/2019	Project Number:		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1646	JM1		23498	5.73

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.4	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.4	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	53-142
Bromofluorobenzene		104	47-138
Toluene-d8		107	68-124

LOQ = Limit of Quantitation
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P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-006
Description: SED-14 | Matrix: Solid
Date Sampled: 07/17/2019 1100 | Project Name: Groundwater | % Solids: 76.0 | 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1621	SCD	07/23/2019 1708	23488

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		64	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		64	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		64	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	13		13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	20		13	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	37		13	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	18		13	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	16		13	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		64	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		64	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		64	ug/kg	1
Caprolactam	105-60-2	8270D	ND		64	ug/kg	1
Carbazole	86-74-8	8270D	ND		64	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		64	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		64	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		64	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		64	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		64	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		64	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		64	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		64	ug/kg	1
Chrysene	218-01-9	8270D	21		13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		13	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		64	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		64	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		64	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		64	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		64	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		64	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		64	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		310	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		310	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		120	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		120	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		64	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		64	ug/kg	1
Fluoranthene	206-44-0	8270D	36		13	ug/kg	1
Fluorene	86-73-7	8270D	ND		13	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		64	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		64	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		310	ug/kg	1

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P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-006
Description: SED-14 | Matrix: Solid
Date Sampled: 07/17/2019 1100 | Project Name: Groundwater | % Solids: 76.0 | 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1621	SCD	07/23/2019 1708	23488

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		64	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	15		13	ug/kg	1
Isophorone	78-59-1	8270D	ND		64	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		64	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		120	ug/kg	1
Naphthalene	91-20-3	8270D	ND		13	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		120	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		120	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		120	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		64	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		120	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		310	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		64	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		64	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		310	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		64	ug/kg	1
Pyrene	129-00-0	8270D	28		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		64	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		64	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		59	24-137
2-Fluorophenol		60	16-136
Nitrobenzene-d5		57	12-144
Phenol-d5		63	26-148
Terphenyl-d14		75	20-127
2,4,6-Tribromophenol		77	27-128

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E = Quantitation of compound exceeded the calibration range
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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG17072-007
Description: SW-13
Matrix: Aqueous
Date Sampled: 07/17/2019 1200
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	07/19/2019 0156	MDD		23098

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
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
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-007
Description: SW-13
Matrix: Aqueous
Date Sampled: 07/17/2019 1200
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/21/2019 0144	STM		23248

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
1,1,2,2-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

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-007
Description: SW-13
Matrix: Aqueous
Date Sampled: 07/17/2019 1200
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/21/2019 0144	STM		23248

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		92	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		97	70-130

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-007
Description: SW-13 | Matrix: Aqueous
Date Sampled: 07/17/2019 1200 | Project Name: Groundwater
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1746	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
ND = Not detected at or above the LOQ
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-007
Description: SW-13
Matrix: Aqueous
Date Sampled: 07/17/2019 1200
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1746	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		61	37-129
2-Fluorophenol		40	24-127
Nitrobenzene-d5		62	38-127
Phenol-d5		47	28-128
Terphenyl-d14		68	10-148
2,4,6-Tribromophenol		66	35-144

LOQ = Limit of Quantitation
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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG17072-008
Description: SED-13
Matrix: Solid
Date Sampled: 07/17/2019 1200
Project Name: Groundwater
% Solids: 55.7 07/18/2019 0107
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 9056A	1	07/30/2019 0822	GMH		24362

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

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-008
Description: SED-13 | Matrix: Solid
Date Sampled: 07/17/2019 1200 | Project Name: Groundwater | % Solids: 55.7 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1709	JM1		23498	4.13

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	30		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	ND		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
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-008
Description: SED-13
Matrix: Solid
Date Sampled: 07/17/2019 1200
Project Name: Groundwater
% Solids: 55.7 07/18/2019 0107
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1709	JM1		23498	4.13

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		95	53-142
Bromofluorobenzene		99	47-138
Toluene-d8		113	68-124

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-008
Description: SED-13 | Matrix: Solid
Date Sampled: 07/17/2019 1200 | Project Name: Groundwater | % Solids: 55.7 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1646	SCD	07/23/2019 1708	23488

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		64	ug/kg	1
Anthracene	120-12-7	8270D	14		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		64	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		64	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	170		13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	290		13	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	630		13	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	190		13	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	200		13	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		64	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		64	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		64	ug/kg	1
Caprolactam	105-60-2	8270D	ND		64	ug/kg	1
Carbazole	86-74-8	8270D	ND		64	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		64	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		64	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		64	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		64	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		64	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		64	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		64	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		64	ug/kg	1
Chrysene	218-01-9	8270D	310		13	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		13	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		64	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		64	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		64	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		64	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		64	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		64	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		64	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		64	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		64	ug/kg	1
Fluoranthene	206-44-0	8270D	570		13	ug/kg	1
Fluorene	86-73-7	8270D	ND		13	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		64	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		64	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	1

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-008
Description: SED-13 | Matrix: Solid
Date Sampled: 07/17/2019 1200 | Project Name: Groundwater | % Solids: 55.7 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1646	SCD	07/23/2019 1708	23488

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		64	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	170		13	ug/kg	1
Isophorone	78-59-1	8270D	ND		64	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		64	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		64	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		64	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		64	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	130		13	ug/kg	1
Phenol	108-95-2	8270D	ND		64	ug/kg	1
Pyrene	129-00-0	8270D	450		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		64	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		64	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		58	24-137
2-Fluorophenol		66	16-136
Nitrobenzene-d5		51	12-144
Phenol-d5		66	26-148
Terphenyl-d14		66	20-127
2,4,6-Tribromophenol		67	27-128

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG17072-009
Description: SW-11
Matrix: Aqueous
Date Sampled: 07/17/2019 1345
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	07/19/2019 0157	MDD		23098

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

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-009
Description: SW-11
Matrix: Aqueous
Date Sampled: 07/17/2019 1345
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1635	JTH		23315

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
1,1,2,2-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
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-009
Description: SW-11
Matrix: Aqueous
Date Sampled: 07/17/2019 1345
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1635	JTH		23315

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		103	70-130
Toluene-d8		104	70-130

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-009
Description: SW-11 | Matrix: Aqueous
Date Sampled: 07/17/2019 1345 | Project Name: Groundwater
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1812	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

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-009
Description: SW-11 | Matrix: Aqueous
Date Sampled: 07/17/2019 1345 | Project Name: Groundwater
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1812	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		63	37-129
2-Fluorophenol		42	24-127
Nitrobenzene-d5		64	38-127
Phenol-d5		50	28-128
Terphenyl-d14		38	10-148
2,4,6-Tribromophenol		69	35-144

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG17072-010
Description: SED-11
Matrix: Solid
Date Sampled: 07/17/2019 1345
Project Name: Groundwater
% Solids: 35.5 07/18/2019 0107
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 9056A	1	07/31/2019 2158	HKL		24497

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.33		0.20	mg/kg	2

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-010
Description: SED-11 | Matrix: Solid
Date Sampled: 07/17/2019 1345 | Project Name: Groundwater | % Solids: 35.5 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1839	JM1		23498	4.00

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	32		25	ug/kg	1
Benzene	71-43-2	8260B	ND		6.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.3	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.3	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		25	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.3	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.3	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.3	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.3	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.3	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.3	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.3	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.3	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.3	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.3	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.3	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.3	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.3	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.3	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.3	ug/kg	1
Styrene	100-42-5	8260B	ND		6.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.3	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.3	ug/kg	1
Toluene	108-88-3	8260B	ND		6.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.3	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.3	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.3	ug/kg	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-010
Description: SED-11
Matrix: Solid
Date Sampled: 07/17/2019 1345
Project Name: Groundwater
% Solids: 35.5 07/18/2019 0107
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1839	JM1		23498	4.00

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.3	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.3	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	53-142
Bromofluorobenzene		95	47-138
Toluene-d8		116	68-124

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-010
Description: SED-11 | Matrix: Solid
Date Sampled: 07/17/2019 1345 | Project Name: Groundwater | % Solids: 35.5 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1711	SCD	07/23/2019 1708	23488

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		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		320	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-010
Description: SED-11 | Matrix: Solid
Date Sampled: 07/17/2019 1345 | Project Name: Groundwater | % Solids: 35.5 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1711	SCD	07/23/2019 1708	23488

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		320	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		320	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		61	24-137
2-Fluorophenol		68	16-136
Nitrobenzene-d5		59	12-144
Phenol-d5		69	26-148
Terphenyl-d14		67	20-127
2,4,6-Tribromophenol		71	27-128

LOQ = Limit of Quantitation
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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG17072-011
Description: SW-12
Matrix: Aqueous
Date Sampled: 07/17/2019 1515
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	07/19/2019 0159	MDD		23098

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

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-011
Description: SW-12 | Matrix: Aqueous
Date Sampled: 07/17/2019 1515 | Project Name: Groundwater
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1127	JTH		23315

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
1,1,2,2-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
ND = Not detected at or above the LOQ
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-011
Description: SW-12
Matrix: Aqueous
Date Sampled: 07/17/2019 1515
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1127	JTH		23315

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		102	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		106	70-130

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-011
Description: SW-12 | Matrix: Aqueous
Date Sampled: 07/17/2019 1515 | Project Name: Groundwater
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1837	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

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-011
Description: SW-12 | Matrix: Aqueous
Date Sampled: 07/17/2019 1515 | Project Name: Groundwater
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1837	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		66	37-129
2-Fluorophenol		36	24-127
Nitrobenzene-d5		64	38-127
Phenol-d5		51	28-128
Terphenyl-d14		66	10-148
2,4,6-Tribromophenol		71	35-144

LOQ = Limit of Quantitation
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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG17072-012
Description: SED-12
Matrix: Solid
Date Sampled: 07/17/2019 1515
Project Name: Groundwater
% Solids: 35.2 07/18/2019 0107
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 9056A	1	07/30/2019 0838	GMH		24362

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.24		0.20	mg/kg	2

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-012
Description: SED-12 | Matrix: Solid
Date Sampled: 07/17/2019 1515 | Project Name: Groundwater | % Solids: 35.2 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1902	JM1		23498	4.44

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	110		23	ug/kg	1
Benzene	71-43-2	8260B	ND		5.6	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.6	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.6	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	180		23	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.6	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.6	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.6	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.6	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.6	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.6	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.6	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.6	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.6	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.6	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.6	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.6	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.6	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.6	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.6	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.6	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.6	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.6	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.6	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.6	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.6	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.6	ug/kg	1
Styrene	100-42-5	8260B	ND		5.6	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.6	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.6	ug/kg	1
Toluene	108-88-3	8260B	ND		5.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.6	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.6	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.6	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-012
Description: SED-12
Matrix: Solid
Date Sampled: 07/17/2019 1515
Project Name: Groundwater
% Solids: 35.2 07/18/2019 0107
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/23/2019 1902	JM1		23498	4.44

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.6	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.6	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.6	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	53-142
Bromofluorobenzene		95	47-138
Toluene-d8		116	68-124

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-012
Description: SED-12 | Matrix: Solid
Date Sampled: 07/17/2019 1515 | Project Name: Groundwater | % Solids: 35.2 | 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1736	SCD	07/23/2019 1708	23488

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		67	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		67	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		67	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		67	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		67	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		67	ug/kg	1
Caprolactam	105-60-2	8270D	ND		67	ug/kg	1
Carbazole	86-74-8	8270D	ND		67	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		67	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		67	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		67	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		67	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		67	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		67	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		67	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		67	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		67	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		67	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		67	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		67	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		67	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		67	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		67	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		67	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		67	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		67	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		67	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		330	ug/kg	1

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-012
Description: SED-12 | Matrix: Solid
Date Sampled: 07/17/2019 1515 | Project Name: Groundwater | % Solids: 35.2 07/18/2019 0107
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1736	SCD	07/23/2019 1708	23488

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		67	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		67	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		67	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		67	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		67	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		67	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		67	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		67	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		67	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		60	24-137
2-Fluorophenol		67	16-136
Nitrobenzene-d5		56	12-144
Phenol-d5		75	26-148
Terphenyl-d14		67	20-127
2,4,6-Tribromophenol		70	27-128

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG17072-013
Description: TB-01-071719 | Matrix: Aqueous
Date Sampled: 07/17/2019 | Project Name: Groundwater
Date Received: 07/17/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/20/2019 1933	STM		23248

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
1,1,2,2-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
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG17072-013
Description: TB-01-071719
Matrix: Aqueous
Date Sampled: 07/17/2019
Project Name: Groundwater
Date Received: 07/17/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/20/2019 1933	STM		23248

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		91	70-130
Bromofluorobenzene		97	70-130
Toluene-d8		97	70-130

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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QC Summary

Inorganic non-metals - MB

Sample ID: UQ23098-001
Batch: 23098
Analytical Method: 353.2

Matrix: Aqueous

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	07/19/2019 0139

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - LCS

Sample ID: UQ23098-002
Batch: 23098
Analytical Method: 353.2

Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N	0.80	0.77		1	96	90-110	07/19/2019 0140

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ23248-001
Batch: 23248
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	07/20/2019 1745
Benzene	ND		1	1.0	ug/L	07/20/2019 1745
Bromodichloromethane	ND		1	1.0	ug/L	07/20/2019 1745
Bromoform	ND		1	1.0	ug/L	07/20/2019 1745
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	07/20/2019 1745
2-Butanone (MEK)	ND		1	10	ug/L	07/20/2019 1745
Carbon disulfide	ND		1	1.0	ug/L	07/20/2019 1745
Carbon tetrachloride	ND		1	1.0	ug/L	07/20/2019 1745
Chlorobenzene	ND		1	1.0	ug/L	07/20/2019 1745
Chloroethane	ND		1	2.0	ug/L	07/20/2019 1745
Chloroform	ND		1	1.0	ug/L	07/20/2019 1745
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	07/20/2019 1745
Cyclohexane	ND		1	1.0	ug/L	07/20/2019 1745
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	07/20/2019 1745
Dibromochloromethane	ND		1	1.0	ug/L	07/20/2019 1745
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	07/20/2019 1745
1,2-Dichlorobenzene	ND		1	1.0	ug/L	07/20/2019 1745
1,3-Dichlorobenzene	ND		1	1.0	ug/L	07/20/2019 1745
1,4-Dichlorobenzene	ND		1	1.0	ug/L	07/20/2019 1745
Dichlorodifluoromethane	ND		1	2.0	ug/L	07/20/2019 1745
1,1-Dichloroethane	ND		1	1.0	ug/L	07/20/2019 1745
1,2-Dichloroethane	ND		1	1.0	ug/L	07/20/2019 1745
1,1-Dichloroethene	ND		1	1.0	ug/L	07/20/2019 1745
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	07/20/2019 1745
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	07/20/2019 1745
1,2-Dichloropropane	ND		1	1.0	ug/L	07/20/2019 1745
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	07/20/2019 1745
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	07/20/2019 1745
Ethylbenzene	ND		1	1.0	ug/L	07/20/2019 1745
2-Hexanone	ND		1	10	ug/L	07/20/2019 1745
Isopropylbenzene	ND		1	1.0	ug/L	07/20/2019 1745
Methyl acetate	ND		1	1.0	ug/L	07/20/2019 1745
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	07/20/2019 1745
4-Methyl-2-pentanone	ND		1	10	ug/L	07/20/2019 1745
Methylcyclohexane	ND		1	5.0	ug/L	07/20/2019 1745
Methylene chloride	ND		1	1.0	ug/L	07/20/2019 1745
Styrene	ND		1	1.0	ug/L	07/20/2019 1745
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	07/20/2019 1745
Tetrachloroethene	ND		1	1.0	ug/L	07/20/2019 1745
Toluene	ND		1	1.0	ug/L	07/20/2019 1745
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	07/20/2019 1745
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	07/20/2019 1745
1,1,1-Trichloroethane	ND		1	1.0	ug/L	07/20/2019 1745
1,1,2-Trichloroethane	ND		1	1.0	ug/L	07/20/2019 1745

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ23248-001
Batch: 23248
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	07/20/2019 1745
Trichlorofluoromethane	ND		1	1.0	ug/L	07/20/2019 1745
Vinyl chloride	ND		1	1.0	ug/L	07/20/2019 1745
Xylenes (total)	ND		1	1.0	ug/L	07/20/2019 1745

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		91	70-130
Bromofluorobenzene		90	70-130
Toluene-d8		96	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ23248-002
Batch: 23248
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	120		1	116	60-140	07/20/2019 1640
Benzene	50	45		1	89	70-130	07/20/2019 1640
Bromodichloromethane	50	43		1	87	70-130	07/20/2019 1640
Bromoform	50	45		1	90	70-130	07/20/2019 1640
Bromomethane (Methyl bromide)	50	39		1	78	70-130	07/20/2019 1640
2-Butanone (MEK)	100	100		1	102	70-130	07/20/2019 1640
Carbon disulfide	50	42		1	84	70-130	07/20/2019 1640
Carbon tetrachloride	50	42		1	84	70-130	07/20/2019 1640
Chlorobenzene	50	44		1	87	70-130	07/20/2019 1640
Chloroethane	50	43		1	85	70-130	07/20/2019 1640
Chloroform	50	42		1	85	70-130	07/20/2019 1640
Chloromethane (Methyl chloride)	50	39		1	77	60-140	07/20/2019 1640
Cyclohexane	50	37		1	74	70-130	07/20/2019 1640
1,2-Dibromo-3-chloropropane (DBCP)	50	40		1	79	70-130	07/20/2019 1640
Dibromochloromethane	50	46		1	92	70-130	07/20/2019 1640
1,2-Dibromoethane (EDB)	50	46		1	91	70-130	07/20/2019 1640
1,2-Dichlorobenzene	50	41		1	82	70-130	07/20/2019 1640
1,3-Dichlorobenzene	50	40		1	80	70-130	07/20/2019 1640
1,4-Dichlorobenzene	50	38		1	76	70-130	07/20/2019 1640
Dichlorodifluoromethane	50	45		1	90	60-140	07/20/2019 1640
1,1-Dichloroethane	50	43		1	85	70-130	07/20/2019 1640
1,2-Dichloroethane	50	43		1	86	70-130	07/20/2019 1640
1,1-Dichloroethene	50	47		1	94	70-130	07/20/2019 1640
cis-1,2-Dichloroethene	50	43		1	86	70-130	07/20/2019 1640
trans-1,2-Dichloroethene	50	45		1	90	70-130	07/20/2019 1640
1,2-Dichloropropane	50	43		1	85	70-130	07/20/2019 1640
cis-1,3-Dichloropropene	50	46		1	93	70-130	07/20/2019 1640
trans-1,3-Dichloropropene	50	44		1	88	70-130	07/20/2019 1640
Ethylbenzene	50	44		1	88	70-130	07/20/2019 1640
2-Hexanone	100	82		1	82	70-130	07/20/2019 1640
Isopropylbenzene	50	44		1	88	70-130	07/20/2019 1640
Methyl acetate	50	36		1	72	70-130	07/20/2019 1640
Methyl tertiary butyl ether (MTBE)	50	46		1	92	70-130	07/20/2019 1640
4-Methyl-2-pentanone	100	86		1	86	70-130	07/20/2019 1640
Methylcyclohexane	50	41		1	81	70-130	07/20/2019 1640
Methylene chloride	50	42		1	85	70-130	07/20/2019 1640
Styrene	50	44		1	88	70-130	07/20/2019 1640
1,1,2,2-Tetrachloroethane	50	41		1	83	70-130	07/20/2019 1640
Tetrachloroethene	50	45		1	90	70-130	07/20/2019 1640
Toluene	50	44		1	89	70-130	07/20/2019 1640
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	37		1	74	70-130	07/20/2019 1640
1,2,4-Trichlorobenzene	50	40		1	81	70-130	07/20/2019 1640
1,1,1-Trichloroethane	50	40		1	80	70-130	07/20/2019 1640
1,1,2-Trichloroethane	50	45		1	89	70-130	07/20/2019 1640

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ23248-002
Batch: 23248
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	46		1	92	70-130	07/20/2019 1640
Trichlorofluoromethane	50	42		1	85	70-130	07/20/2019 1640
Vinyl chloride	50	39		1	78	70-130	07/20/2019 1640
Xylenes (total)	100	89		1	89	70-130	07/20/2019 1640

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		89	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		93	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ23315-001
Batch: 23315
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	07/22/2019 1040
Benzene	ND		1	1.0	ug/L	07/22/2019 1040
Bromodichloromethane	ND		1	1.0	ug/L	07/22/2019 1040
Bromoform	ND		1	1.0	ug/L	07/22/2019 1040
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	07/22/2019 1040
2-Butanone (MEK)	ND		1	10	ug/L	07/22/2019 1040
Carbon disulfide	ND		1	1.0	ug/L	07/22/2019 1040
Carbon tetrachloride	ND		1	1.0	ug/L	07/22/2019 1040
Chlorobenzene	ND		1	1.0	ug/L	07/22/2019 1040
Chloroethane	ND		1	2.0	ug/L	07/22/2019 1040
Chloroform	ND		1	1.0	ug/L	07/22/2019 1040
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	07/22/2019 1040
Cyclohexane	ND		1	1.0	ug/L	07/22/2019 1040
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	07/22/2019 1040
Dibromochloromethane	ND		1	1.0	ug/L	07/22/2019 1040
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	07/22/2019 1040
1,2-Dichlorobenzene	ND		1	1.0	ug/L	07/22/2019 1040
1,3-Dichlorobenzene	ND		1	1.0	ug/L	07/22/2019 1040
1,4-Dichlorobenzene	ND		1	1.0	ug/L	07/22/2019 1040
Dichlorodifluoromethane	ND		1	2.0	ug/L	07/22/2019 1040
1,1-Dichloroethane	ND		1	1.0	ug/L	07/22/2019 1040
1,2-Dichloroethane	ND		1	1.0	ug/L	07/22/2019 1040
1,1-Dichloroethene	ND		1	1.0	ug/L	07/22/2019 1040
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	07/22/2019 1040
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	07/22/2019 1040
1,2-Dichloropropane	ND		1	1.0	ug/L	07/22/2019 1040
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	07/22/2019 1040
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	07/22/2019 1040
Ethylbenzene	ND		1	1.0	ug/L	07/22/2019 1040
2-Hexanone	ND		1	10	ug/L	07/22/2019 1040
Isopropylbenzene	ND		1	1.0	ug/L	07/22/2019 1040
Methyl acetate	ND		1	1.0	ug/L	07/22/2019 1040
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	07/22/2019 1040
4-Methyl-2-pentanone	ND		1	10	ug/L	07/22/2019 1040
Methylcyclohexane	ND		1	5.0	ug/L	07/22/2019 1040
Methylene chloride	ND		1	1.0	ug/L	07/22/2019 1040
Styrene	ND		1	1.0	ug/L	07/22/2019 1040
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	07/22/2019 1040
Tetrachloroethene	ND		1	1.0	ug/L	07/22/2019 1040
Toluene	ND		1	1.0	ug/L	07/22/2019 1040
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	07/22/2019 1040
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	07/22/2019 1040
1,1,1-Trichloroethane	ND		1	1.0	ug/L	07/22/2019 1040
1,1,2-Trichloroethane	ND		1	1.0	ug/L	07/22/2019 1040

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ23315-001
Batch: 23315
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	07/22/2019 1040
Trichlorofluoromethane	ND		1	1.0	ug/L	07/22/2019 1040
Vinyl chloride	ND		1	1.0	ug/L	07/22/2019 1040
Xylenes (total)	ND		1	1.0	ug/L	07/22/2019 1040

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		107	70-130
Toluene-d8		105	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ23315-002
Batch: 23315
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	120		1	119	60-140	07/22/2019 0931
Benzene	50	51		1	103	70-130	07/22/2019 0931
Bromodichloromethane	50	52		1	104	70-130	07/22/2019 0931
Bromoform	50	51		1	103	70-130	07/22/2019 0931
Bromomethane (Methyl bromide)	50	55		1	110	70-130	07/22/2019 0931
2-Butanone (MEK)	100	120		1	116	70-130	07/22/2019 0931
Carbon disulfide	50	54		1	107	70-130	07/22/2019 0931
Carbon tetrachloride	50	54		1	108	70-130	07/22/2019 0931
Chlorobenzene	50	49		1	98	70-130	07/22/2019 0931
Chloroethane	50	58		1	116	70-130	07/22/2019 0931
Chloroform	50	51		1	103	70-130	07/22/2019 0931
Chloromethane (Methyl chloride)	50	42		1	83	60-140	07/22/2019 0931
Cyclohexane	50	52		1	104	70-130	07/22/2019 0931
1,2-Dibromo-3-chloropropane (DBCP)	50	50		1	99	70-130	07/22/2019 0931
Dibromochloromethane	50	53		1	107	70-130	07/22/2019 0931
1,2-Dibromoethane (EDB)	50	50		1	99	70-130	07/22/2019 0931
1,2-Dichlorobenzene	50	47		1	94	70-130	07/22/2019 0931
1,3-Dichlorobenzene	50	47		1	95	70-130	07/22/2019 0931
1,4-Dichlorobenzene	50	47		1	94	70-130	07/22/2019 0931
Dichlorodifluoromethane	50	35		1	70	60-140	07/22/2019 0931
1,1-Dichloroethane	50	52		1	104	70-130	07/22/2019 0931
1,2-Dichloroethane	50	50		1	99	70-130	07/22/2019 0931
1,1-Dichloroethene	50	58		1	116	70-130	07/22/2019 0931
cis-1,2-Dichloroethene	50	51		1	102	70-130	07/22/2019 0931
trans-1,2-Dichloroethene	50	54		1	109	70-130	07/22/2019 0931
1,2-Dichloropropane	50	50		1	101	70-130	07/22/2019 0931
cis-1,3-Dichloropropene	50	54		1	108	70-130	07/22/2019 0931
trans-1,3-Dichloropropene	50	54		1	109	70-130	07/22/2019 0931
Ethylbenzene	50	51		1	102	70-130	07/22/2019 0931
2-Hexanone	100	97		1	97	70-130	07/22/2019 0931
Isopropylbenzene	50	53		1	106	70-130	07/22/2019 0931
Methyl acetate	50	55		1	110	70-130	07/22/2019 0931
Methyl tertiary butyl ether (MTBE)	50	53		1	106	70-130	07/22/2019 0931
4-Methyl-2-pentanone	100	100		1	100	70-130	07/22/2019 0931
Methylcyclohexane	50	52		1	104	70-130	07/22/2019 0931
Methylene chloride	50	52		1	104	70-130	07/22/2019 0931
Styrene	50	52		1	104	70-130	07/22/2019 0931
1,1,2,2-Tetrachloroethane	50	51		1	102	70-130	07/22/2019 0931
Tetrachloroethene	50	52		1	103	70-130	07/22/2019 0931
Toluene	50	51		1	102	70-130	07/22/2019 0931
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	49		1	99	70-130	07/22/2019 0931
1,2,4-Trichlorobenzene	50	49		1	99	70-130	07/22/2019 0931
1,1,1-Trichloroethane	50	53		1	105	70-130	07/22/2019 0931
1,1,2-Trichloroethane	50	51		1	103	70-130	07/22/2019 0931

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ23315-002
Batch: 23315
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	49		1	99	70-130	07/22/2019 0931
Trichlorofluoromethane	50	53		1	105	70-130	07/22/2019 0931
Vinyl chloride	50	43		1	86	70-130	07/22/2019 0931
Xylenes (total)	100	100		1	105	70-130	07/22/2019 0931

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		100	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		105	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ23498-001
Batch: 23498
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/kg	07/23/2019 1001
Benzene	ND		1	5.0	ug/kg	07/23/2019 1001
Bromodichloromethane	ND		1	5.0	ug/kg	07/23/2019 1001
Bromoform	ND		1	5.0	ug/kg	07/23/2019 1001
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	07/23/2019 1001
2-Butanone (MEK)	ND		1	20	ug/kg	07/23/2019 1001
Carbon disulfide	ND		1	5.0	ug/kg	07/23/2019 1001
Carbon tetrachloride	ND		1	5.0	ug/kg	07/23/2019 1001
Chlorobenzene	ND		1	5.0	ug/kg	07/23/2019 1001
Chloroethane	ND		1	5.0	ug/kg	07/23/2019 1001
Chloroform	ND		1	5.0	ug/kg	07/23/2019 1001
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	07/23/2019 1001
Cyclohexane	ND		1	5.0	ug/kg	07/23/2019 1001
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	07/23/2019 1001
Dibromochloromethane	ND		1	5.0	ug/kg	07/23/2019 1001
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	07/23/2019 1001
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	07/23/2019 1001
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	07/23/2019 1001
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	07/23/2019 1001
Dichlorodifluoromethane	ND		1	5.0	ug/kg	07/23/2019 1001
1,1-Dichloroethane	ND		1	5.0	ug/kg	07/23/2019 1001
1,2-Dichloroethane	ND		1	5.0	ug/kg	07/23/2019 1001
1,1-Dichloroethene	ND		1	5.0	ug/kg	07/23/2019 1001
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	07/23/2019 1001
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	07/23/2019 1001
1,2-Dichloropropane	ND		1	5.0	ug/kg	07/23/2019 1001
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	07/23/2019 1001
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	07/23/2019 1001
Ethylbenzene	ND		1	5.0	ug/kg	07/23/2019 1001
2-Hexanone	ND		1	10	ug/kg	07/23/2019 1001
Isopropylbenzene	ND		1	5.0	ug/kg	07/23/2019 1001
Methyl acetate	ND		1	5.0	ug/kg	07/23/2019 1001
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	07/23/2019 1001
4-Methyl-2-pentanone	ND		1	10	ug/kg	07/23/2019 1001
Methylcyclohexane	ND		1	5.0	ug/kg	07/23/2019 1001
Methylene chloride	ND		1	5.0	ug/kg	07/23/2019 1001
Styrene	ND		1	5.0	ug/kg	07/23/2019 1001
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	07/23/2019 1001
Tetrachloroethene	ND		1	5.0	ug/kg	07/23/2019 1001
Toluene	ND		1	5.0	ug/kg	07/23/2019 1001
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	07/23/2019 1001
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	07/23/2019 1001
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	07/23/2019 1001
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	07/23/2019 1001

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ23498-001
Batch: 23498
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	07/23/2019 1001
Trichlorofluoromethane	ND		1	5.0	ug/kg	07/23/2019 1001
Vinyl chloride	ND		1	5.0	ug/kg	07/23/2019 1001
Xylenes (total)	ND		1	10	ug/kg	07/23/2019 1001

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		107	47-138
Toluene-d8		104	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ23498-002
Batch: 23498
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	101	60-140	07/23/2019 0938
Benzene	50	49		1	99	70-130	07/23/2019 0938
Bromodichloromethane	50	51		1	101	70-130	07/23/2019 0938
Bromoform	50	50		1	101	70-130	07/23/2019 0938
Bromomethane (Methyl bromide)	50	47		1	93	70-130	07/23/2019 0938
2-Butanone (MEK)	100	110		1	106	60-140	07/23/2019 0938
Carbon disulfide	50	48		1	97	70-130	07/23/2019 0938
Carbon tetrachloride	50	49		1	98	70-130	07/23/2019 0938
Chlorobenzene	50	49		1	99	70-130	07/23/2019 0938
Chloroethane	50	49		1	98	70-130	07/23/2019 0938
Chloroform	50	49		1	97	70-130	07/23/2019 0938
Chloromethane (Methyl chloride)	50	43		1	86	60-140	07/23/2019 0938
Cyclohexane	50	46		1	92	70-130	07/23/2019 0938
1,2-Dibromo-3-chloropropane (DBCP)	50	50		1	100	70-130	07/23/2019 0938
Dibromochloromethane	50	53		1	105	70-130	07/23/2019 0938
1,2-Dibromoethane (EDB)	50	52		1	104	70-130	07/23/2019 0938
1,2-Dichlorobenzene	50	50		1	101	70-130	07/23/2019 0938
1,3-Dichlorobenzene	50	50		1	100	70-130	07/23/2019 0938
1,4-Dichlorobenzene	50	49		1	99	70-130	07/23/2019 0938
Dichlorodifluoromethane	50	41		1	82	60-140	07/23/2019 0938
1,1-Dichloroethane	50	48		1	96	70-130	07/23/2019 0938
1,2-Dichloroethane	50	51		1	101	70-130	07/23/2019 0938
1,1-Dichloroethene	50	52		1	104	70-130	07/23/2019 0938
cis-1,2-Dichloroethene	50	49		1	98	70-130	07/23/2019 0938
trans-1,2-Dichloroethene	50	52		1	104	70-130	07/23/2019 0938
1,2-Dichloropropane	50	49		1	98	70-130	07/23/2019 0938
cis-1,3-Dichloropropene	50	50		1	100	70-130	07/23/2019 0938
trans-1,3-Dichloropropene	50	53		1	106	70-130	07/23/2019 0938
Ethylbenzene	50	51		1	101	70-130	07/23/2019 0938
2-Hexanone	100	110		1	109	70-130	07/23/2019 0938
Isopropylbenzene	50	52		1	103	70-130	07/23/2019 0938
Methyl acetate	50	38		1	75	70-130	07/23/2019 0938
Methyl tertiary butyl ether (MTBE)	50	49		1	98	70-130	07/23/2019 0938
4-Methyl-2-pentanone	100	98		1	98	70-130	07/23/2019 0938
Methylcyclohexane	50	48		1	96	70-130	07/23/2019 0938
Methylene chloride	50	50		1	101	70-130	07/23/2019 0938
Styrene	50	50		1	99	70-130	07/23/2019 0938
1,1,2,2-Tetrachloroethane	50	53		1	107	70-130	07/23/2019 0938
Tetrachloroethene	50	52		1	103	70-130	07/23/2019 0938
Toluene	50	48		1	96	70-130	07/23/2019 0938
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	45		1	90	70-130	07/23/2019 0938
1,2,4-Trichlorobenzene	50	51		1	103	70-130	07/23/2019 0938
1,1,1-Trichloroethane	50	48		1	96	70-130	07/23/2019 0938
1,1,2-Trichloroethane	50	51		1	102	70-130	07/23/2019 0938

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ23498-002
Batch: 23498
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	48		1	97	70-130	07/23/2019 0938
Trichlorofluoromethane	50	47		1	94	70-130	07/23/2019 0938
Vinyl chloride	50	43		1	86	70-130	07/23/2019 0938
Xylenes (total)	100	100		1	102	70-130	07/23/2019 0938

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		108	47-138
Toluene-d8		107	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ23005-001
Batch: 23005
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 07/18/2019 1700

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
1,1'-Biphenyl	ND		1	4.0	ug/L	07/24/2019 1131
2,4,5-Trichlorophenol	ND		1	4.0	ug/L	07/24/2019 1131
2,4,6-Trichlorophenol	ND		1	4.0	ug/L	07/24/2019 1131
2,4-Dichlorophenol	ND		1	8.0	ug/L	07/24/2019 1131
2,4-Dimethylphenol	ND		1	4.0	ug/L	07/24/2019 1131
2,4-Dinitrophenol	ND		1	20	ug/L	07/24/2019 1131
2,4-Dinitrotoluene	ND		1	8.0	ug/L	07/24/2019 1131
2,6-Dinitrotoluene	ND		1	8.0	ug/L	07/24/2019 1131
2-Chloronaphthalene	ND		1	4.0	ug/L	07/24/2019 1131
2-Chlorophenol	ND		1	4.0	ug/L	07/24/2019 1131
2-Methylnaphthalene	ND		1	0.80	ug/L	07/24/2019 1131
2-Methylphenol	ND		1	4.0	ug/L	07/24/2019 1131
2-Nitroaniline	ND		1	8.0	ug/L	07/24/2019 1131
2-Nitrophenol	ND		1	4.0	ug/L	07/24/2019 1131
3,3'-Dichlorobenzidine	ND		1	4.0	ug/L	07/24/2019 1131
3+4-Methylphenol	ND		1	4.0	ug/L	07/24/2019 1131
3-Nitroaniline	ND		1	8.0	ug/L	07/24/2019 1131
4,6-Dinitro-2-methylphenol	ND		1	20	ug/L	07/24/2019 1131
4-Bromophenyl phenyl ether	ND		1	4.0	ug/L	07/24/2019 1131
4-Chloro-3-methyl phenol	ND		1	4.0	ug/L	07/24/2019 1131
4-Chloroaniline	ND		1	8.0	ug/L	07/24/2019 1131
4-Chlorophenyl phenyl ether	ND		1	4.0	ug/L	07/24/2019 1131
4-Nitroaniline	ND		1	8.0	ug/L	07/24/2019 1131
4-Nitrophenol	ND		1	20	ug/L	07/24/2019 1131
Acenaphthene	ND		1	0.80	ug/L	07/24/2019 1131
Acenaphthylene	ND		1	0.80	ug/L	07/24/2019 1131
Acetophenone	ND		1	4.0	ug/L	07/24/2019 1131
Anthracene	ND		1	0.80	ug/L	07/24/2019 1131
Atrazine	ND		1	4.0	ug/L	07/24/2019 1131
Benzaldehyde	ND		1	8.0	ug/L	07/24/2019 1131
Benzo(a)anthracene	ND		1	0.80	ug/L	07/24/2019 1131
Benzo(a)pyrene	ND		1	0.80	ug/L	07/24/2019 1131
Benzo(b)fluoranthene	ND		1	0.80	ug/L	07/24/2019 1131
Benzo(g,h,i)perylene	ND		1	0.80	ug/L	07/24/2019 1131
Benzo(k)fluoranthene	ND		1	0.80	ug/L	07/24/2019 1131
bis (2-Chloro-1-methylethyl) ether	ND		1	4.0	ug/L	07/24/2019 1131
bis(2-Chloroethoxy)methane	ND		1	4.0	ug/L	07/24/2019 1131
bis(2-Chloroethyl)ether	ND		1	4.0	ug/L	07/24/2019 1131
bis(2-Ethylhexyl)phthalate	ND		1	4.0	ug/L	07/24/2019 1131
Butyl benzyl phthalate	ND		1	4.0	ug/L	07/24/2019 1131
Caprolactam	ND		1	8.0	ug/L	07/24/2019 1131
Carbazole	ND		1	4.0	ug/L	07/24/2019 1131
Chrysene	ND		1	0.80	ug/L	07/24/2019 1131
Dibenzo(a,h)anthracene	ND		1	0.80	ug/L	07/24/2019 1131

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ23005-001
Batch: 23005
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 07/18/2019 1700

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Dibenzofuran	ND		1	4.0	ug/L	07/24/2019 1131
Diethylphthalate	ND		1	4.0	ug/L	07/24/2019 1131
Dimethyl phthalate	ND		1	4.0	ug/L	07/24/2019 1131
Di-n-butyl phthalate	ND		1	4.0	ug/L	07/24/2019 1131
Di-n-octylphthalate	ND		1	4.0	ug/L	07/24/2019 1131
Fluoranthene	ND		1	0.80	ug/L	07/24/2019 1131
Fluorene	ND		1	0.80	ug/L	07/24/2019 1131
Hexachlorobenzene	ND		1	4.0	ug/L	07/24/2019 1131
Hexachlorobutadiene	ND		1	4.0	ug/L	07/24/2019 1131
Hexachlorocyclopentadiene	ND		1	20	ug/L	07/24/2019 1131
Hexachloroethane	ND		1	4.0	ug/L	07/24/2019 1131
Indeno(1,2,3-c,d)pyrene	ND		1	0.80	ug/L	07/24/2019 1131
Isophorone	ND		1	4.0	ug/L	07/24/2019 1131
Naphthalene	ND		1	0.80	ug/L	07/24/2019 1131
Nitrobenzene	ND		1	4.0	ug/L	07/24/2019 1131
N-Nitrosodi-n-propylamine	ND		1	4.0	ug/L	07/24/2019 1131
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	4.0	ug/L	07/24/2019 1131
Pentachlorophenol	ND		1	20	ug/L	07/24/2019 1131
Phenanthrene	ND		1	0.80	ug/L	07/24/2019 1131
Phenol	ND		1	4.0	ug/L	07/24/2019 1131
Pyrene	ND		1	0.80	ug/L	07/24/2019 1131

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		74	37-129
2-Fluorophenol		47	24-127
Nitrobenzene-d5		73	38-127
Phenol-d5		70	28-128
Terphenyl-d14		93	10-148
2,4,6-Tribromophenol		82	35-144

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ23005-002
Batch: 23005
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 07/18/2019 1700

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	40	27		1	67	30-130	07/24/2019 1156
2,4,5-Trichlorophenol	40	31		1	77	30-123	07/24/2019 1156
2,4,6-Trichlorophenol	40	29		1	73	30-130	07/24/2019 1156
2,4-Dichlorophenol	40	30		1	74	30-121	07/24/2019 1156
2,4-Dimethylphenol	40	26		1	66	20-125	07/24/2019 1156
2,4-Dinitrophenol	80	70		1	87	11-126	07/24/2019 1156
2,4-Dinitrotoluene	40	32		1	80	30-130	07/24/2019 1156
2,6-Dinitrotoluene	40	34		1	84	30-130	07/24/2019 1156
2-Chloronaphthalene	40	28		1	70	30-130	07/24/2019 1156
2-Chlorophenol	40	32		1	79	30-130	07/24/2019 1156
2-Methylnaphthalene	40	27		1	68	40-132	07/24/2019 1156
2-Methylphenol	40	33		1	83	30-130	07/24/2019 1156
2-Nitroaniline	40	33		1	82	30-130	07/24/2019 1156
2-Nitrophenol	40	31		1	77	30-130	07/24/2019 1156
3,3'-Dichlorobenzidine	40	14		1	34	10-126	07/24/2019 1156
3+4-Methylphenol	40	32		1	80	30-130	07/24/2019 1156
3-Nitroaniline	40	26		1	64	30-130	07/24/2019 1156
4,6-Dinitro-2-methylphenol	40	34		1	86	30-130	07/24/2019 1156
4-Bromophenyl phenyl ether	40	28		1	70	30-124	07/24/2019 1156
4-Chloro-3-methyl phenol	40	29		1	73	30-123	07/24/2019 1156
4-Chloroaniline	40	29		1	72	12-157	07/24/2019 1156
4-Chlorophenyl phenyl ether	40	29		1	73	30-121	07/24/2019 1156
4-Nitroaniline	40	32		1	81	30-135	07/24/2019 1156
4-Nitrophenol	80	56		1	70	30-130	07/24/2019 1156
Acenaphthene	40	27		1	68	30-122	07/24/2019 1156
Acenaphthylene	40	28		1	69	30-130	07/24/2019 1156
Acetophenone	40	32		1	80	30-130	07/24/2019 1156
Anthracene	40	28		1	69	30-123	07/24/2019 1156
Atrazine	40	31		1	77	30-130	07/24/2019 1156
Benzaldehyde	40	19		1	47	20-115	07/24/2019 1156
Benzo(a)anthracene	40	29		1	73	40-125	07/24/2019 1156
Benzo(a)pyrene	40	27		1	69	40-128	07/24/2019 1156
Benzo(b)fluoranthene	40	29		1	71	30-130	07/24/2019 1156
Benzo(g,h,i)perylene	40	29		1	74	30-130	07/24/2019 1156
Benzo(k)fluoranthene	40	28		1	71	30-130	07/24/2019 1156
bis (2-Chloro-1-methylethyl) ether	40	29		1	72	30-130	07/24/2019 1156
bis(2-Chloroethoxy)methane	40	28		1	69	30-130	07/24/2019 1156
bis(2-Chloroethyl)ether	40	28		1	70	30-130	07/24/2019 1156
bis(2-Ethylhexyl)phthalate	40	32		1	80	30-130	07/24/2019 1156
Butyl benzyl phthalate	40	32		1	80	30-130	07/24/2019 1156
Caprolactam	40	35		1	87	30-130	07/24/2019 1156
Carbazole	40	27		1	68	30-130	07/24/2019 1156
Chrysene	40	29		1	72	30-130	07/24/2019 1156
Dibenzo(a,h)anthracene	40	28		1	71	30-130	07/24/2019 1156

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ23005-002
Batch: 23005
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 07/18/2019 1700

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Dibenzofuran	40	28		1	71	30-118	07/24/2019 1156
Diethylphthalate	40	29		1	74	40-125	07/24/2019 1156
Dimethyl phthalate	40	30		1	75	40-127	07/24/2019 1156
Di-n-butyl phthalate	40	28		1	71	40-127	07/24/2019 1156
Di-n-octylphthalate	40	27		1	68	30-130	07/24/2019 1156
Fluoranthene	40	28		1	70	40-128	07/24/2019 1156
Fluorene	40	27		1	69	30-124	07/24/2019 1156
Hexachlorobenzene	40	29		1	73	30-125	07/24/2019 1156
Hexachlorobutadiene	40	28		1	71	24-110	07/24/2019 1156
Hexachlorocyclopentadiene	200	120		1	60	22-122	07/24/2019 1156
Hexachloroethane	40	26		1	66	30-130	07/24/2019 1156
Indeno(1,2,3-c,d)pyrene	40	28		1	71	30-130	07/24/2019 1156
Isophorone	40	28		1	70	30-130	07/24/2019 1156
Naphthalene	40	29		1	71	30-130	07/24/2019 1156
Nitrobenzene	40	30		1	74	30-130	07/24/2019 1156
N-Nitrosodi-n-propylamine	40	32		1	79	30-130	07/24/2019 1156
N-Nitrosodiphenylamine (Diphenylamine)	40	28		1	70	30-123	07/24/2019 1156
Pentachlorophenol	80	55		1	69	30-130	07/24/2019 1156
Phenanthrene	40	27		1	67	40-123	07/24/2019 1156
Phenol	40	32		1	79	30-130	07/24/2019 1156
Pyrene	40	30		1	74	40-126	07/24/2019 1156

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		68	37-129
2-Fluorophenol		72	24-127
Nitrobenzene-d5		78	38-127
Phenol-d5		76	28-128
Terphenyl-d14		83	10-148
2,4,6-Tribromophenol		80	35-144

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ23488-001
Batch: 23488
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 07/23/2019 1708

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acenaphthene	ND		1	13	ug/kg	07/25/2019 1235
Acenaphthylene	ND		1	13	ug/kg	07/25/2019 1235
Acetophenone	ND		1	67	ug/kg	07/25/2019 1235
Anthracene	ND		1	13	ug/kg	07/25/2019 1235
Atrazine	ND		1	67	ug/kg	07/25/2019 1235
Benzaldehyde	ND		1	67	ug/kg	07/25/2019 1235
Benzo(a)anthracene	ND		1	13	ug/kg	07/25/2019 1235
Benzo(a)pyrene	ND		1	13	ug/kg	07/25/2019 1235
Benzo(b)fluoranthene	ND		1	13	ug/kg	07/25/2019 1235
Benzo(g,h,i)perylene	ND		1	13	ug/kg	07/25/2019 1235
Benzo(k)fluoranthene	ND		1	13	ug/kg	07/25/2019 1235
1,1'-Biphenyl	ND		1	67	ug/kg	07/25/2019 1235
4-Bromophenyl phenyl ether	ND		1	67	ug/kg	07/25/2019 1235
Butyl benzyl phthalate	ND		1	67	ug/kg	07/25/2019 1235
Caprolactam	ND		1	67	ug/kg	07/25/2019 1235
Carbazole	ND		1	67	ug/kg	07/25/2019 1235
bis (2-Chloro-1-methylethyl) ether	ND		1	67	ug/kg	07/25/2019 1235
4-Chloro-3-methyl phenol	ND		1	67	ug/kg	07/25/2019 1235
4-Chloroaniline	ND		1	67	ug/kg	07/25/2019 1235
bis(2-Chloroethoxy)methane	ND		1	67	ug/kg	07/25/2019 1235
bis(2-Chloroethyl)ether	ND		1	67	ug/kg	07/25/2019 1235
2-Chloronaphthalene	ND		1	67	ug/kg	07/25/2019 1235
2-Chlorophenol	ND		1	67	ug/kg	07/25/2019 1235
4-Chlorophenyl phenyl ether	ND		1	67	ug/kg	07/25/2019 1235
Chrysene	ND		1	13	ug/kg	07/25/2019 1235
Dibenzo(a,h)anthracene	ND		1	13	ug/kg	07/25/2019 1235
Dibenzofuran	ND		1	67	ug/kg	07/25/2019 1235
3,3'-Dichlorobenzidine	ND		1	67	ug/kg	07/25/2019 1235
2,4-Dichlorophenol	ND		1	67	ug/kg	07/25/2019 1235
Diethylphthalate	ND		1	67	ug/kg	07/25/2019 1235
Dimethyl phthalate	ND		1	67	ug/kg	07/25/2019 1235
2,4-Dimethylphenol	ND		1	67	ug/kg	07/25/2019 1235
Di-n-butyl phthalate	ND		1	67	ug/kg	07/25/2019 1235
4,6-Dinitro-2-methylphenol	ND		1	330	ug/kg	07/25/2019 1235
2,4-Dinitrophenol	ND		1	330	ug/kg	07/25/2019 1235
2,4-Dinitrotoluene	ND		1	130	ug/kg	07/25/2019 1235
2,6-Dinitrotoluene	ND		1	130	ug/kg	07/25/2019 1235
Di-n-octylphthalate	ND		1	67	ug/kg	07/25/2019 1235
bis(2-Ethylhexyl)phthalate	ND		1	67	ug/kg	07/25/2019 1235
Fluoranthene	ND		1	13	ug/kg	07/25/2019 1235
Fluorene	ND		1	13	ug/kg	07/25/2019 1235
Hexachlorobenzene	ND		1	67	ug/kg	07/25/2019 1235
Hexachlorobutadiene	ND		1	67	ug/kg	07/25/2019 1235
Hexachlorocyclopentadiene	ND		1	330	ug/kg	07/25/2019 1235

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ23488-001
Batch: 23488
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 07/23/2019 1708

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Hexachloroethane	ND		1	67	ug/kg	07/25/2019 1235
Indeno(1,2,3-c,d)pyrene	ND		1	13	ug/kg	07/25/2019 1235
Isophorone	ND		1	67	ug/kg	07/25/2019 1235
2-Methylnaphthalene	ND		1	13	ug/kg	07/25/2019 1235
2-Methylphenol	ND		1	67	ug/kg	07/25/2019 1235
3+4-Methylphenol	ND		1	130	ug/kg	07/25/2019 1235
Naphthalene	ND		1	13	ug/kg	07/25/2019 1235
2-Nitroaniline	ND		1	130	ug/kg	07/25/2019 1235
3-Nitroaniline	ND		1	130	ug/kg	07/25/2019 1235
4-Nitroaniline	ND		1	130	ug/kg	07/25/2019 1235
Nitrobenzene	ND		1	67	ug/kg	07/25/2019 1235
2-Nitrophenol	ND		1	130	ug/kg	07/25/2019 1235
4-Nitrophenol	ND		1	330	ug/kg	07/25/2019 1235
N-Nitrosodi-n-propylamine	ND		1	67	ug/kg	07/25/2019 1235
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	67	ug/kg	07/25/2019 1235
Pentachlorophenol	ND		1	330	ug/kg	07/25/2019 1235
Phenanthrene	ND		1	13	ug/kg	07/25/2019 1235
Phenol	ND		1	67	ug/kg	07/25/2019 1235
Pyrene	ND		1	13	ug/kg	07/25/2019 1235
2,4,5-Trichlorophenol	ND		1	67	ug/kg	07/25/2019 1235
2,4,6-Trichlorophenol	ND		1	67	ug/kg	07/25/2019 1235

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		69	24-137
2-Fluorophenol		72	16-136
Nitrobenzene-d5		68	12-144
Phenol-d5		69	26-148
Terphenyl-d14		81	20-127
2,4,6-Tribromophenol		78	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ23488-002
Batch: 23488
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 07/23/2019 1708

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	670	400		1	60	46-114	07/25/2019 1300
Acenaphthylene	670	420		1	62	44-122	07/25/2019 1300
Acetophenone	670	410		1	61	48-111	07/25/2019 1300
Anthracene	670	420		1	64	50-119	07/25/2019 1300
Atrazine	670	490		1	74	48-116	07/25/2019 1300
Benzaldehyde	670	120		1	18	10-110	07/25/2019 1300
Benzo(a)anthracene	670	440		1	66	47-121	07/25/2019 1300
Benzo(a)pyrene	670	450		1	68	55-134	07/25/2019 1300
Benzo(b)fluoranthene	670	460		1	69	28-139	07/25/2019 1300
Benzo(g,h,i)perylene	670	470		1	71	36-125	07/25/2019 1300
Benzo(k)fluoranthene	670	450		1	68	47-130	07/25/2019 1300
1,1'-Biphenyl	670	410		1	62	49-110	07/25/2019 1300
4-Bromophenyl phenyl ether	670	430		1	64	46-118	07/25/2019 1300
Butyl benzyl phthalate	670	500		1	75	46-128	07/25/2019 1300
Caprolactam	670	510		1	76	43-121	07/25/2019 1300
Carbazole	670	450		1	68	47-128	07/25/2019 1300
bis (2-Chloro-1-methylethyl) ether	670	360		1	55	31-102	07/25/2019 1300
4-Chloro-3-methyl phenol	670	480		1	71	49-118	07/25/2019 1300
4-Chloroaniline	670	380		1	57	17-106	07/25/2019 1300
bis(2-Chloroethoxy)methane	670	440		1	65	39-108	07/25/2019 1300
bis(2-Chloroethyl)ether	670	420		1	63	32-105	07/25/2019 1300
2-Chloronaphthalene	670	420		1	63	31-127	07/25/2019 1300
2-Chlorophenol	670	450		1	67	37-106	07/25/2019 1300
4-Chlorophenyl phenyl ether	670	430		1	65	47-116	07/25/2019 1300
Chrysene	670	440		1	66	45-126	07/25/2019 1300
Dibenzo(a,h)anthracene	670	450		1	67	45-122	07/25/2019 1300
Dibenzofuran	670	420		1	63	45-112	07/25/2019 1300
3,3'-Dichlorobenzidine	670	390		1	58	10-119	07/25/2019 1300
2,4-Dichlorophenol	670	480		1	72	41-113	07/25/2019 1300
Diethylphthalate	670	430		1	64	49-123	07/25/2019 1300
Dimethyl phthalate	670	450		1	67	48-120	07/25/2019 1300
2,4-Dimethylphenol	670	510		1	76	33-123	07/25/2019 1300
Di-n-butyl phthalate	670	430		1	65	51-129	07/25/2019 1300
4,6-Dinitro-2-methylphenol	670	540		1	81	40-130	07/25/2019 1300
2,4-Dinitrophenol	1300	910		1	68	10-113	07/25/2019 1300
2,4-Dinitrotoluene	670	490		1	73	48-124	07/25/2019 1300
2,6-Dinitrotoluene	670	500		1	75	47-125	07/25/2019 1300
Di-n-octylphthalate	670	420		1	63	49-142	07/25/2019 1300
bis(2-Ethylhexyl)phthalate	670	450		1	68	45-128	07/25/2019 1300
Fluoranthene	670	450		1	67	50-123	07/25/2019 1300
Fluorene	670	410		1	61	48-117	07/25/2019 1300
Hexachlorobenzene	670	470		1	70	44-122	07/25/2019 1300
Hexachlorobutadiene	670	460		1	70	33-103	07/25/2019 1300
Hexachlorocyclopentadiene	3300	2300		1	69	18-121	07/25/2019 1300

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ23488-002
Batch: 23488
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 07/23/2019 1708

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexachloroethane	670	400		1	60	30-96	07/25/2019 1300
Indeno(1,2,3-c,d)pyrene	670	450		1	68	45-123	07/25/2019 1300
Isophorone	670	450		1	67	41-113	07/25/2019 1300
2-Methylnaphthalene	670	440		1	66	40-106	07/25/2019 1300
2-Methylphenol	670	510		1	76	32-107	07/25/2019 1300
3+4-Methylphenol	670	520		1	77	39-108	07/25/2019 1300
Naphthalene	670	440		1	66	36-110	07/25/2019 1300
2-Nitroaniline	670	490		1	73	45-123	07/25/2019 1300
3-Nitroaniline	670	370		1	56	24-127	07/25/2019 1300
4-Nitroaniline	670	520		1	78	48-127	07/25/2019 1300
Nitrobenzene	670	470		1	71	33-114	07/25/2019 1300
2-Nitrophenol	670	480		1	72	35-108	07/25/2019 1300
4-Nitrophenol	1300	800		1	60	18-154	07/25/2019 1300
N-Nitrosodi-n-propylamine	670	440		1	65	32-115	07/25/2019 1300
N-Nitrosodiphenylamine (Diphenylamine)	670	460		1	69	53-150	07/25/2019 1300
Pentachlorophenol	1300	880		1	66	27-138	07/25/2019 1300
Phenanthrene	670	420		1	64	49-117	07/25/2019 1300
Phenol	670	460		1	69	36-108	07/25/2019 1300
Pyrene	670	440		1	67	47-119	07/25/2019 1300
2,4,5-Trichlorophenol	670	460		1	69	46-122	07/25/2019 1300
2,4,6-Trichlorophenol	670	450		1	67	38-115	07/25/2019 1300

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		64	24-137
2-Fluorophenol		64	16-136
Nitrobenzene-d5		73	12-144
Phenol-d5		67	26-148
Terphenyl-d14		74	20-127
2,4,6-Tribromophenol		79	27-128

LOQ = Limit of Quantitation
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LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody
and
Miscellaneous Documents

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

Chain of Custody Record

Number 097502

Client: WESTINGHOUSE	Report to Contact: DIANA JOYNER	Telephone No. / E-mail: 803 647 1420 JOYNERDP@WESTINGHOUSE.COM	Quote No.: 22261
Address: 5801 BLUFF RD	Sampler's Signature:	Analysis (Attach list if more space is needed):	Page 1 of 2
City: HOPKINS	State: SC	Zip Code: 29061	Printed Name: JAMES LEIGHTON
Project Name: WESTINGHOUSE RF			
Project No.: 60595649.9	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Collected Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Other	No of Containers by Preservative Type: Unpres.	HNO3	H2SO4	HCl	NaOH	ZnAc/NaOH	TCL VOC's 8260B	TCL SVOC's 8270D	NO3 353.2	Remarks / Cooler I.D.
SW-19	7-17-19	0845	G	X			3			3			X	X	X	
SED-19		0845	G		X		3					1	X	X	X	
SW-16		1030	G	X			3			3			X	X	X	
SED-16		1030	G		X		3					1	X	X	X	
SW-14		1100	G	X			3			3			X	X	X	
SED-14		1100	G		X		3					1	X	X	X	
SW-13		1200	G	X			3			3			X	X	X	
SED-13		1200	G		X		3					1	X	X	X	
SW-11		1345	G	X			3			3			X	X	X	
SED-11		1345	G		X		3					1	X	X	X	

UG17072
GRW

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☒ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab

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

QC Requirements (Specify)

	Date	Time
1. Relinquished by	7-17-19	1653
2. Relinquished by		
3. Relinquished by		
4. Relinquished by		

	Date	Time
1. Received by		
2. Received by		
3. Received by		
4. Laboratory received by: Darrell Nesbitt	7/17/19	1653

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

LAB USE ONLY
Received on ice (Circle): (Yes) No Ice Pack Receipt Temp. 5.1 °C

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

Document Number: F-AD-135 Effective Date: 06-01-2014

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

Chain of Custody Record

Number 097621

Client: WESTINGHOUSE	Report to Contact: DIANA JOYNER	Telephone No. / E-mail: 803 647 1920 JOYNERDP@WESTINGHOUSE.COM	Quote No.: 22261
Address: 5801 BLUFF RD	Sampler's Signature:	Analysis (Attach list if more space is needed)	Page 2 of 2
City: HOPKINS	State: SC	Zip Code: 29061	Printed Name: JAMES LEGLEITER	
Project Name: WESTINGHOUSE RI			
Project No.: 60595649.9	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	Grab/Comp	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	No of Containers by Preservative Type: Unpres.	HNO3	HCl	NaOH	Sterile Kit	8260B TCL VOCs	8270D TCL SVOCs	NO3 353.2	Remarks / Cooler I.D.
SW-12	7-17-19	1515	G	X			3		3			X	X	X	
SED-12	7-17-19	1515	G		X		3				1	X	X	X	
TB-01-071719	7-17-19	—		X					2			X			

UG17072

GRW

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☒ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab

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

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by	7-17-19	1653	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory received by: DAWN NEWTON	7/17/19	1053

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

LAB USE ONLY

Received on ice (Circle) Yes No Ice Pack

Receipt Temp. 3.4 °C

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

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

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: ME001SC-14

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

Sample Receipt Checklist (SRC)

Client: Westinghouse Cooler Inspected by/date: RSH / 07/17/19 Lot #: UG17072

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: 19-1020

5.1 / 5.1 °C NA / NA °C NA / NA °C NA / NA °C

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

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☐ Yes	☐ No	☑ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☐ Yes	☐ No	☑ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC?
☑ Yes	☐ No		7. Were sample IDs listed on all sample containers?
☑ Yes	☐ No		8. Was collection date & time listed on the COC?
☑ Yes	☐ No		9. Was collection date & time listed on all sample containers?
☑ Yes	☐ No		10. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)? _____
☑ Yes	☐ No		13. Was adequate sample volume available?
☑ Yes	☐ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☐ Yes	☑ No	☐ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	19. Were all applicable NH_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?
☐ Yes	☑ No		21. Was the quote number listed on the container label? If yes, Quote # NA

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

Sample(s) NA _____ were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: 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 ($Na_2S_2O_3$) with Shealy ID: NA.

SR barcode labels applied by: DMN Date: 07/17/19

Comments:

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

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

Project Name: Groundwater

Lot Number:**UG18083**

Date Completed:07/29/2019

07/29/2019 4:35 PM
Approved and released by:
Project Manager: Grant Wilton

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

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

Case Narrative
Westinghouse Electric Company
Lot Number: UG18083

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.

Sample Summary

Westinghouse Electric Company

Lot Number: UG18083

Project Name: Groundwater

Project Number:

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	EB-01-071819	Aqueous	07/18/2019 0750	07/18/2019
002	EB-02-071819	Aqueous	07/18/2019 0800	07/18/2019
003	SED-25	Solid	07/18/2019 0915	07/18/2019
004	SED-26	Solid	07/18/2019 0940	07/18/2019
005	SED-27	Solid	07/18/2019 1030	07/18/2019
006	SED-28	Solid	07/18/2019 1050	07/18/2019
007	SED17	Solid	07/18/2019 1300	07/18/2019
008	SW-17	Aqueous	07/18/2019 1300	07/18/2019
009	DUP-01-071819 (SED)	Solid	07/18/2019	07/18/2019
010	DUP-01-071819 (SW)	Aqueous	07/18/2019	07/18/2019
011	TB-02-071819	Aqueous	07/18/2019	07/18/2019

(11 samples)

Detection Summary

Westinghouse Electric Company

Lot Number: UG18083

Project Name: Groundwater

Project Number:

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	EB-01-071819	Aqueous	Toluene	8260B	1.8		ug/L	6
002	EB-02-071819	Aqueous	Toluene	8260B	1.6		ug/L	11
003	SED-25	Solid	Nitrate - N (soluble)	9056A	0.27		mg/kg	15
004	SED-26	Solid	Nitrate - N (soluble)	9056A	1.4		mg/kg	18
004	SED-26	Solid	Benzo(a)pyrene	8270D	79		ug/kg	19
004	SED-26	Solid	Benzo(b)fluoranthene	8270D	150		ug/kg	19
004	SED-26	Solid	Fluoranthene	8270D	81		ug/kg	19
004	SED-26	Solid	Pyrene	8270D	82		ug/kg	20
005	SED-27	Solid	Nitrate - N (soluble)	9056A	0.30		mg/kg	21
005	SED-27	Solid	bis(2-Ethylhexyl)phthalate	8270D	91		ug/kg	22
006	SED-28	Solid	Anthracene	8270D	110		ug/kg	25
006	SED-28	Solid	Benzo(a)anthracene	8270D	3400		ug/kg	25
006	SED-28	Solid	Benzo(a)pyrene	8270D	3000		ug/kg	25
006	SED-28	Solid	Benzo(b)fluoranthene	8270D	4600		ug/kg	25
006	SED-28	Solid	Benzo(g,h,i)perylene	8270D	1800		ug/kg	25
006	SED-28	Solid	Benzo(k)fluoranthene	8270D	1900		ug/kg	25
006	SED-28	Solid	Chrysene	8270D	3200		ug/kg	25
006	SED-28	Solid	bis(2-Ethylhexyl)phthalate	8270D	270		ug/kg	25
006	SED-28	Solid	Fluoranthene	8270D	7100		ug/kg	25
006	SED-28	Solid	Indeno(1,2,3-c,d)pyrene	8270D	1600		ug/kg	26
006	SED-28	Solid	Phenanthrene	8270D	440		ug/kg	26
006	SED-28	Solid	Pyrene	8270D	5600		ug/kg	26
007	SED17	Solid	Nitrate - N (soluble)	9056A	2.1		mg/kg	27
007	SED17	Solid	Tetrachloroethene	8260B	5.5		ug/kg	28
008	SW-17	Aqueous	Nitrate - N	353.2	3.8		mg/L	32
008	SW-17	Aqueous	Tetrachloroethene	8260B	16		ug/L	33
008	SW-17	Aqueous	Trichloroethene	8260B	1.0		ug/L	34
009	DUP-01-071819 (SED)	Solid	Nitrate - N (soluble)	9056A	0.95		mg/kg	37
010	DUP-01-071819 (SW)	Aqueous	Nitrate - N	353.2	3.8		mg/L	42
010	DUP-01-071819 (SW)	Aqueous	Tetrachloroethene	8260B	16		ug/L	43
010	DUP-01-071819 (SW)	Aqueous	Trichloroethene	8260B	1.0		ug/L	44

(31 detections)

Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG18083-001
Description: EB-01-071819
Matrix: Aqueous
Date Sampled: 07/18/2019 0750
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	07/19/2019 2208	MDD		23225

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
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
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-001
Description: EB-01-071819
Matrix: Aqueous
Date Sampled: 07/18/2019 0750
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1152	JTH		23315

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
1,1,2,2-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	1.8		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
ND = Not detected at or above the LOQ
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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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-001
Description: EB-01-071819
Matrix: Aqueous
Date Sampled: 07/18/2019 0750
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1152	JTH		23315

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		104	70-130
Toluene-d8		105	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-001
Description: EB-01-071819
Matrix: Aqueous
Date Sampled: 07/18/2019 0750
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1902	SCD	07/19/2019 1820	23207

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
ND = Not detected at or above the LOQ
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-001
Description: EB-01-071819
Matrix: Aqueous
Date Sampled: 07/18/2019 0750
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1902	SCD	07/19/2019 1820	23207

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		67	37-129
2-Fluorophenol		44	24-127
Nitrobenzene-d5		67	38-127
Phenol-d5		68	28-128
Terphenyl-d14		83	10-148
2,4,6-Tribromophenol		63	35-144

LOQ = Limit of Quantitation
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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG18083-002
Description: EB-02-071819
Matrix: Aqueous
Date Sampled: 07/18/2019 0800
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	07/19/2019 2212	MDD		23225

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

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-002
Description: EB-02-071819
Matrix: Aqueous
Date Sampled: 07/18/2019 0800
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1217	JTH		23315

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
1,1,2,2-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	1.6		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
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-002
Description: EB-02-071819
Matrix: Aqueous
Date Sampled: 07/18/2019 0800
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1217	JTH		23315

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		104	70-130
Toluene-d8		105	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-002
Description: EB-02-071819
Matrix: Aqueous
Date Sampled: 07/18/2019 0800
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1927	SCD	07/19/2019 1820	23207

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
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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-002
Description: EB-02-071819
Matrix: Aqueous
Date Sampled: 07/18/2019 0800
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1927	SCD	07/19/2019 1820	23207

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		68	37-129
2-Fluorophenol		50	24-127
Nitrobenzene-d5		69	38-127
Phenol-d5		57	28-128
Terphenyl-d14		79	10-148
2,4,6-Tribromophenol		57	35-144

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%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG18083-003
Description: SED-25
Matrix: Solid
Date Sampled: 07/18/2019 0915
Project Name: Groundwater
% Solids: 11.5 07/19/2019 0132
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	07/25/2019 0022	GMH		23696

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.27		0.20	mg/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-003
Description: SED-25 | Matrix: Solid
Date Sampled: 07/18/2019 0915 | Project Name: Groundwater | % Solids: 11.5 | 07/19/2019 0132
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1801	SCD	07/23/2019 1708	23488

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		64	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		64	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		64	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		64	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		64	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		64	ug/kg	1
Caprolactam	105-60-2	8270D	ND		64	ug/kg	1
Carbazole	86-74-8	8270D	ND		64	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		64	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		64	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		64	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		64	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		64	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		64	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		64	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		64	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		64	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		64	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		64	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		64	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		64	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		64	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		64	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		120	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		120	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		64	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		64	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		64	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		64	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-003
Description: SED-25 | Matrix: Solid
Date Sampled: 07/18/2019 0915 | Project Name: Groundwater | % Solids: 11.5 | 07/19/2019 0132
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1801	SCD	07/23/2019 1708	23488

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		64	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		64	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		64	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		120	ug/kg	1
Naphthalene	91-20-3	8270D	ND		13	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		120	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		120	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		120	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		64	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		120	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		64	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		64	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		64	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		64	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		64	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		56	24-137
2-Fluorophenol		66	16-136
Nitrobenzene-d5		57	12-144
Phenol-d5		65	26-148
Terphenyl-d14		67	20-127
2,4,6-Tribromophenol		72	27-128

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%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG18083-004
Description: SED-26
Matrix: Solid
Date Sampled: 07/18/2019 0940
Project Name: Groundwater
% Solids: 64.1 07/19/2019 0132
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	07/25/2019 0038	GMH		23696

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	1.4		0.20	mg/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-004
Description: SED-26 | Matrix: Solid
Date Sampled: 07/18/2019 0940 | Project Name: Groundwater | % Solids: 64.1 | 07/19/2019 0132
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	07/26/2019 2132	SCD	07/23/2019 1708	23488

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		64	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		64	ug/kg	1
Acetophenone	98-86-2	8270D	ND		320	ug/kg	1
Anthracene	120-12-7	8270D	ND		64	ug/kg	1
Atrazine	1912-24-9	8270D	ND		320	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		320	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		64	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	79		64	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	150		64	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		64	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		64	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		320	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		320	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		320	ug/kg	1
Caprolactam	105-60-2	8270D	ND		320	ug/kg	1
Carbazole	86-74-8	8270D	ND		320	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		320	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		320	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		320	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		320	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		320	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		320	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		320	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		320	ug/kg	1
Chrysene	218-01-9	8270D	ND		64	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		64	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		320	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		320	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		320	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		320	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		320	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		320	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		320	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		630	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		630	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		320	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		320	ug/kg	1
Fluoranthene	206-44-0	8270D	81		64	ug/kg	1
Fluorene	86-73-7	8270D	ND		64	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		320	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		320	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-004
Description: SED-26 | Matrix: Solid
Date Sampled: 07/18/2019 0940 | Project Name: Groundwater | % Solids: 64.1 | 07/19/2019 0132
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	07/26/2019 2132	SCD	07/23/2019 1708	23488

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		320	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		64	ug/kg	1
Isophorone	78-59-1	8270D	ND		320	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		64	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		320	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		630	ug/kg	1
Naphthalene	91-20-3	8270D	ND		64	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		630	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		630	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		630	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		320	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		630	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		320	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		320	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		64	ug/kg	1
Phenol	108-95-2	8270D	ND		320	ug/kg	1
Pyrene	129-00-0	8270D	82		64	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		320	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		320	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		74	24-137
2-Fluorophenol		71	16-136
Nitrobenzene-d5		70	12-144
Phenol-d5		69	26-148
Terphenyl-d14		88	20-127
2,4,6-Tribromophenol		82	27-128

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%

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Inorganic non-metals

Client: Westinghouse Electric Company			Laboratory ID: UG18083-005
Description: SED-27			Matrix: Solid
Date Sampled: 07/18/2019 1030	Project Name: Groundwater		% Solids: 23.3 07/19/2019 0132
Date Received: 07/18/2019	Project Number:		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	07/25/2019 0054	GMH		23696

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.30		0.20	mg/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	

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-005
Description: SED-27 | Matrix: Solid
Date Sampled: 07/18/2019 1030 | Project Name: Groundwater | % Solids: 23.3 | 07/19/2019 0132
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1852	SCD	07/23/2019 1708	23488

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		64	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		64	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		64	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		64	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		64	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		64	ug/kg	1
Caprolactam	105-60-2	8270D	ND		64	ug/kg	1
Carbazole	86-74-8	8270D	ND		64	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		64	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		64	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		64	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		64	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		64	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		64	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		64	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		64	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		64	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		64	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		64	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		64	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		64	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		64	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		64	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		64	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	91		64	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		64	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		64	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-005
Description: SED-27 | Matrix: Solid
Date Sampled: 07/18/2019 1030 | Project Name: Groundwater | % Solids: 23.3 07/19/2019 0132
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1852	SCD	07/23/2019 1708	23488

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		64	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		64	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		64	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		64	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		64	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		64	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		64	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		64	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		64	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		62	24-137
2-Fluorophenol		67	16-136
Nitrobenzene-d5		59	12-144
Phenol-d5		72	26-148
Terphenyl-d14		68	20-127
2,4,6-Tribromophenol		59	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG18083-006
Description: SED-28
Matrix: Solid
Date Sampled: 07/18/2019 1050
Project Name: Groundwater
% Solids: 25.1 07/19/2019 0132
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	07/25/2019 0143	GMH		23696

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.20	mg/kg	1

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

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-006
Description: SED-28 | Matrix: Solid
Date Sampled: 07/18/2019 1050 | Project Name: Groundwater | % Solids: 25.1 | 07/19/2019 0132
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1917	SCD	07/23/2019 1708	23488
2	3546	8270D	10	07/26/2019 1509	JCG	07/23/2019 1708	23488

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		65	ug/kg	1
Anthracene	120-12-7	8270D	110		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		65	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		65	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	3400		130	ug/kg	2
Benzo(a)pyrene	50-32-8	8270D	3000		130	ug/kg	2
Benzo(b)fluoranthene	205-99-2	8270D	4600		130	ug/kg	2
Benzo(g,h,i)perylene	191-24-2	8270D	1800		130	ug/kg	2
Benzo(k)fluoranthene	207-08-9	8270D	1900		130	ug/kg	2
1,1'-Biphenyl	92-52-4	8270D	ND		65	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		65	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		65	ug/kg	1
Caprolactam	105-60-2	8270D	ND		65	ug/kg	1
Carbazole	86-74-8	8270D	ND		65	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		65	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		65	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		65	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		65	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		65	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		65	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		65	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		65	ug/kg	1
Chrysene	218-01-9	8270D	3200		130	ug/kg	2
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		13	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		65	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		65	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		65	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		65	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		65	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		65	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		65	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		65	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	270		65	ug/kg	1
Fluoranthene	206-44-0	8270D	7100		130	ug/kg	2
Fluorene	86-73-7	8270D	ND		13	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		65	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		65	ug/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-006
Description: SED-28 | Matrix: Solid
Date Sampled: 07/18/2019 1050 | Project Name: Groundwater | % Solids: 25.1 07/19/2019 0132
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1917	SCD	07/23/2019 1708	23488
2	3546	8270D	10	07/26/2019 1509	JCG	07/23/2019 1708	23488

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	1
Hexachloroethane	67-72-1	8270D	ND		65	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	1600		130	ug/kg	2
Isophorone	78-59-1	8270D	ND		65	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		65	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		65	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		65	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		65	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	440		13	ug/kg	1
Phenol	108-95-2	8270D	ND		65	ug/kg	1
Pyrene	129-00-0	8270D	5600		130	ug/kg	2
2,4,5-Trichlorophenol	95-95-4	8270D	ND		65	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		65	ug/kg	1

Surrogate	Run 1 Q	Run 1 % Recovery	Run 1 Acceptance Limits	Run 2 Q	Run 2 % Recovery	Run 2 Acceptance Limits
2-Fluorobiphenyl		59	24-137		79	24-137
2-Fluorophenol		55	16-136		100	16-136
Nitrobenzene-d5		56	12-144		91	12-144
Phenol-d5		61	26-148		90	26-148
Terphenyl-d14		59	20-127		106	20-127
2,4,6-Tribromophenol		57	27-128		49	27-128

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%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG18083-007
Description: SED17
Matrix: Solid
Date Sampled: 07/18/2019 1300
Project Name: Groundwater
% Solids: 86.2 07/19/2019 0132
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	07/25/2019 0159	GMH		23696

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	2.1		0.20	mg/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-007
Description: SED17 | Matrix: Solid
Date Sampled: 07/18/2019 1300 | Project Name: Groundwater | % Solids: 86.2 07/19/2019 0132
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/25/2019 1517	ECB		23776	5.22

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	ND		19	ug/kg	1
Benzene	71-43-2	8260B	ND		4.8	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.8	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.8	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.8	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		19	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.8	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.8	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.8	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.8	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.8	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.8	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.8	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.8	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.8	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.8	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.8	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.8	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.8	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.8	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.8	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.8	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.8	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.6	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.8	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.8	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.8	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.6	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.8	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.8	ug/kg	1
Styrene	100-42-5	8260B	ND		4.8	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.8	ug/kg	1
Tetrachloroethene	127-18-4	8260B	5.5		4.8	ug/kg	1
Toluene	108-88-3	8260B	ND		4.8	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.8	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.8	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.8	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.8	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UG18083-007	
Description: SED17		Matrix: Solid	
Date Sampled: 07/18/2019 1300	Project Name: Groundwater	% Solids: 86.2	07/19/2019 0132
Date Received: 07/18/2019	Project Number:		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/25/2019 1517	ECB		23776	5.22

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.8	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.6	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		98	53-142
Bromofluorobenzene		105	47-138
Toluene-d8		108	68-124

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-007
Description: SED17 | Matrix: Solid
Date Sampled: 07/18/2019 1300 | Project Name: Groundwater | % Solids: 86.2 | 07/19/2019 0132
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 2007	SCD	07/23/2019 1708	23488

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		67	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		67	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		67	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		67	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		67	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		67	ug/kg	1
Caprolactam	105-60-2	8270D	ND		67	ug/kg	1
Carbazole	86-74-8	8270D	ND		67	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		67	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		67	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		67	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		67	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		67	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		67	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		67	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		67	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		67	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		67	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		67	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		67	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		67	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		67	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		67	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		67	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		67	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		67	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		67	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		330	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-007
Description: SED17 | Matrix: Solid
Date Sampled: 07/18/2019 1300 | Project Name: Groundwater | % Solids: 86.2 07/19/2019 0132
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 2007	SCD	07/23/2019 1708	23488

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		67	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		67	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		67	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		67	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		67	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		67	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		67	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		67	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		67	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		65	24-137
2-Fluorophenol		72	16-136
Nitrobenzene-d5		64	12-144
Phenol-d5		71	26-148
Terphenyl-d14		71	20-127
2,4,6-Tribromophenol		67	27-128

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG18083-008
Description: SW-17
Matrix: Aqueous
Date Sampled: 07/18/2019 1300
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	07/19/2019 2220	MDD		23225

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	3.8		0.040	mg/L	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-008
Description: SW-17 | Matrix: Aqueous
Date Sampled: 07/18/2019 1300 | Project Name: Groundwater
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1241	JTH		23315

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
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	16		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
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-008
Description: SW-17
Matrix: Aqueous
Date Sampled: 07/18/2019 1300
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1241	JTH		23315

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	1.0		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		106	70-130
Toluene-d8		106	70-130

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-008
Description: SW-17 | Matrix: Aqueous
Date Sampled: 07/18/2019 1300 | Project Name: Groundwater
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 2017	SCD	07/19/2019 1820	23207

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

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-008
Description: SW-17
Matrix: Aqueous
Date Sampled: 07/18/2019 1300
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 2017	SCD	07/19/2019 1820	23207

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		66	37-129
2-Fluorophenol		48	24-127
Nitrobenzene-d5		66	38-127
Phenol-d5		59	28-128
Terphenyl-d14		71	10-148
2,4,6-Tribromophenol		66	35-144

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG18083-009
Description: DUP-01-071819 (SED)
Matrix: Solid
Date Sampled: 07/18/2019
Project Name: Groundwater
% Solids: 90.4 07/19/2019 0132
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	07/25/2019 0248	GMH		23696

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.95		0.20	mg/kg	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-009
Description: DUP-01-071819 (SED)
Matrix: Solid
Date Sampled: 07/18/2019
Project Name: Groundwater
% Solids: 90.4 07/19/2019 0132
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/25/2019 1539	ECB		23776	5.24

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	ND		19	ug/kg	1
Benzene	71-43-2	8260B	ND		4.8	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.8	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.8	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.8	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		19	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.8	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.8	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.8	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.8	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.8	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.8	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.8	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.8	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.8	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.8	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.8	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.8	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.8	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.8	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.8	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.8	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.8	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.8	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.8	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.8	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.8	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.8	ug/kg	1
Styrene	100-42-5	8260B	ND		4.8	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.8	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.8	ug/kg	1
Toluene	108-88-3	8260B	ND		4.8	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.8	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.8	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.8	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.8	ug/kg	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-009
Description: DUP-01-071819 (SED)
Matrix: Solid
Date Sampled: 07/18/2019
Project Name: Groundwater
% Solids: 90.4 07/19/2019 0132
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	07/25/2019 1539	ECB		23776	5.24

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.8	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		96	53-142
Bromofluorobenzene		106	47-138
Toluene-d8		108	68-124

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-009
Description: DUP-01-071819 (SED)
Matrix: Solid
Date Sampled: 07/18/2019
Project Name: Groundwater
% Solids: 90.4 07/19/2019 0132
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1942	SCD	07/23/2019 1708	23488

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		64	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		64	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		64	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		64	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		64	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		64	ug/kg	1
Caprolactam	105-60-2	8270D	ND		64	ug/kg	1
Carbazole	86-74-8	8270D	ND		64	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		64	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		64	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		64	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		64	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		64	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		64	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		64	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		64	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		64	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		64	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		64	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		64	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		64	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		64	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		64	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		64	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		64	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		64	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		64	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-009
Description: DUP-01-071819 (SED) | Matrix: Solid
Date Sampled: 07/18/2019 | Project Name: Groundwater | % Solids: 90.4 07/19/2019 0132
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	07/25/2019 1942	SCD	07/23/2019 1708	23488

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		64	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		64	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		64	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		64	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		64	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		64	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		64	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		64	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		64	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		65	24-137
2-Fluorophenol		68	16-136
Nitrobenzene-d5		64	12-144
Phenol-d5		68	26-148
Terphenyl-d14		76	20-127
2,4,6-Tribromophenol		68	27-128

LOQ = Limit of Quantitation
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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UG18083-010
Description: DUP-01-071819 (SW)
Matrix: Aqueous
Date Sampled: 07/18/2019
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	2	07/19/2019 2221	MDD		23225

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	3.8		0.040	mg/L	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-010
Description: DUP-01-071819 (SW)
Matrix: Aqueous
Date Sampled: 07/18/2019
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1307	JTH		23315

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
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		1.0	ug/L	1
Tetrachloroethene	127-18-4	8260B	16		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
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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-010
Description: DUP-01-071819 (SW)
Matrix: Aqueous
Date Sampled: 07/18/2019
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1307	JTH		23315

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	1.0		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		102	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		105	70-130

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-010
Description: DUP-01-071819 (SW)
Matrix: Aqueous
Date Sampled: 07/18/2019
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1952	SCD	07/19/2019 1820	23207

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

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UG18083-010
Description: DUP-01-071819 (SW) | Matrix: Aqueous
Date Sampled: 07/18/2019 | Project Name: Groundwater
Date Received: 07/18/2019 | Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	07/24/2019 1952	SCD	07/19/2019 1820	23207

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		68	37-129
2-Fluorophenol		49	24-127
Nitrobenzene-d5		68	38-127
Phenol-d5		65	28-128
Terphenyl-d14		74	10-148
2,4,6-Tribromophenol		68	35-144

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-011
Description: TB-02-071819
Matrix: Aqueous
Date Sampled: 07/18/2019
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1332	JTH		23315

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
1,1,2,2-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
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UG18083-011
Description: TB-02-071819
Matrix: Aqueous
Date Sampled: 07/18/2019
Project Name: Groundwater
Date Received: 07/18/2019
Project Number:

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	07/22/2019 1332	JTH		23315

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		102	70-130
Bromofluorobenzene		105	70-130
Toluene-d8		106	70-130

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Chain of Custody

and

Miscellaneous Documents

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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

SHEALY Chain of Custody Record

Number 95368

Client: WESTINGHOUSE	Report to Contact: Dana Jeynes	Telephone No. / E-mail: 803 647 1420 JaynesDP@WESTINGHOUSE.COM	Quote No.: 22261
Address: 5801 BLUFF RD	Sampler's Signature:	Analysis (Attach list if more space is needed)	Page: 1 of 1
City: HOPKINS	State: SC	Zip Code: 29061	Printed Name: JAMES LAWHORN	
Project Name: WESTINGHOUSE RF		
Project No.: 605549.9	P.O. No.	

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab / Composite	Matrix: Aqueous	Solid	Non-Aqueous	No. of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	Zinc Ac	TCL VOCs 8260B	TCL SVOCs 8270D	NO3 353.2	Remarks / Cooler I.D.
EB-01-071819	7-18-19	0750	G	X			3			3			X	X	X	TB-02-071819 VOC's
EB-02-071819		0800	G	X			3			3			X	X	X	
SED-25		0915	G		X		3							X	X	
SED-26		0940	G		X		3							X	X	
SED-27		1030	G		X		3							X	X	Possible Low Level RAD!
SED-28		1050	G		X		3							X	X	
SED-17		1300	G		X		3					1	X	X	X	
SW-17		1300	G	X			3			3			X	X	X	
Dup-01-071819 (SED)		—	G		X		3					1	X	X	X	
Dup-01-071819 (SW)		—	G	X			3			3			X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☒ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab

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

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished by	7-18-19	1515	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory received by	7/19	1515

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

LAB USE ONLY — Received on ice (Circle) (Yes) No Ice Pack — Receipt Temp: 4.0 °C

UG18083

GRW

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

Document Number: F-AD-133 Effective Date: 09-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

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

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

Sample Receipt Checklist (SRC)

Client: Westinghouse Cooler Inspected by/date: DMN / 7/18/19 Lot #: UG18083

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: 19-1020

4.0 / 4.0 °C NA / NA °C NA / NA °C NA / NA °C

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

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☐ Yes	☐ No	☑ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☐ Yes	☐ No	☑ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC?
☑ Yes	☐ No		7. Were sample IDs listed on all sample containers?
☑ Yes	☐ No		8. Was collection date & time listed on the COC?
☐ Yes	☑ No		9. Was collection date & time listed on all sample containers?
☑ Yes	☐ No		10. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☑ Yes	☐ No		13. Was adequate sample volume available?
☑ Yes	☐ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☑ Yes	☐ No	☐ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	19. Were all applicable NH_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?
☑ Yes	☐ No		21. Was the quote number listed on the container label? If yes, Quote # 22261

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) Trip BlankS _____ 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 ($Na_2S_2O_3$) with Shealy ID: NA.

SR barcode labels applied by: DMN Date: 7/18/19

Comments: Cooler screened for Radiation in SR on 7/18/19

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

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

Project Name: RI Implementation

Project Number: 60595649

Lot Number:**UK21098**

Date Completed:12/04/2019

12/04/2019 1:57 PM
Approved and released by:
Project Manager: Grant Wilton

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

Shealy Environmental Services, Inc.
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Case Narrative
Westinghouse Electric Company
Lot Number: UK21098

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.

Samples -001, -002, -005, -006, -009: The samples were analyzed at a dilution due to the high concentration of non-target analytes present. The reporting limits were raised accordingly.

Volatile Organic Analysis – Method 8260B
Acetone was reported as an estimated value in samples: -002, -003, -004, -006, -007 as the result was above the upper calibration level. The samples were re-analyzed from the medium level (methanol) vial, but was not reported due to the result being below the LOQ therefore only the low level was reported.

Sample Summary

Westinghouse Electric Company

Lot Number: UK21098

Project Name: RI Implementation

Project Number: 60595649

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SED-30 0"-6"	Solid	11/21/2019 0955	11/21/2019
002	SED-30 6"-12"	Solid	11/21/2019 1000	11/21/2019
003	SED-31 0"-6"	Solid	11/21/2019 1200	11/21/2019
004	SED-31 6"-12"	Solid	11/21/2019 1205	11/21/2019
005	SED-32 0"-6"	Solid	11/21/2019 1400	11/21/2019
006	SED-32 6"-12"	Solid	11/21/2019 1405	11/21/2019
007	SED-33 0"-6"	Solid	11/21/2019 1500	11/21/2019
008	SED-33 6"-12"	Solid	11/21/2019 1505	11/21/2019
009	SED-34 0"-6"	Solid	11/21/2019 1610	11/21/2019
010	SED-34 6"-12"	Solid	11/21/2019 1615	11/21/2019
011	TB-112119	Aqueous	11/21/2019	11/21/2019

(11 samples)

Detection Summary

Westinghouse Electric Company

Lot Number: UK21098

Project Name: RI Implementation

Project Number: 60595649

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	SED-30 0"-6"	Solid	Acetone	8260B	380		ug/kg	7
001	SED-30 0"-6"	Solid	2-Butanone (MEK)	8260B	26		ug/kg	7
002	SED-30 6"-12"	Solid	Acetone	8260B	530	E	ug/kg	12
002	SED-30 6"-12"	Solid	2-Butanone (MEK)	8260B	25		ug/kg	12
003	SED-31 0"-6"	Solid	Acetone	8260B	410	E	ug/kg	17
004	SED-31 6"-12"	Solid	Acetone	8260B	440	E	ug/kg	22
005	SED-32 0"-6"	Solid	Nitrate - N (soluble)	9056A	1.1		mg/kg	26
005	SED-32 0"-6"	Solid	Acetone	8260B	450		ug/kg	27
005	SED-32 0"-6"	Solid	2-Butanone (MEK)	8260B	38		ug/kg	27
006	SED-32 6"-12"	Solid	Acetone	8260B	440	E	ug/kg	32
006	SED-32 6"-12"	Solid	2-Butanone (MEK)	8260B	76		ug/kg	32
007	SED-33 0"-6"	Solid	Acetone	8260B	490	E	ug/kg	37
008	SED-33 6"-12"	Solid	Acetone	8260B	400		ug/kg	42
008	SED-33 6"-12"	Solid	2-Butanone (MEK)	8260B	45		ug/kg	42
009	SED-34 0"-6"	Solid	Nitrate - N (soluble)	9056A	0.62		mg/kg	46
009	SED-34 0"-6"	Solid	Acetone	8260B	200		ug/kg	47
009	SED-34 0"-6"	Solid	2-Butanone (MEK)	8260B	28		ug/kg	47
010	SED-34 6"-12"	Solid	Acetone	8260B	180		ug/kg	52
010	SED-34 6"-12"	Solid	2-Butanone (MEK)	8260B	28		ug/kg	52

(19 detections)

Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UK21098-001	
Description: SED-30 0"-6"		Matrix: Solid	
Date Sampled: 11/21/2019 0955	Project Name: RI Implementation	% Solids: 50.0	11/22/2019 0109
Date Received: 11/21/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/02/2019 2012	SUH		37724

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK21098-001
Description: SED-30 0"-6"
Matrix: Solid
Date Sampled: 11/21/2019 0955
Project Name: RI Implementation
% Solids: 50.0 11/22/2019 0109
Date Received: 11/21/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 0337	ALR1		37042	4.73

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	380		21	ug/kg	1
Benzene	71-43-2	8260B	ND		5.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.3	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.3	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	26		21	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.3	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.3	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.3	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.3	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.3	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.3	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.3	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.3	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.3	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.3	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.3	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.3	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.3	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.3	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.3	ug/kg	1
Styrene	100-42-5	8260B	ND		5.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.3	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.3	ug/kg	1
Toluene	108-88-3	8260B	ND		5.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.3	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.3	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.3	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK21098-001
Description: SED-30 0"-6"
Matrix: Solid
Date Sampled: 11/21/2019 0955
Project Name: RI Implementation
% Solids: 50.0 11/22/2019 0109
Date Received: 11/21/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 0337	ALR1		37042	4.73

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.3	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.3	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		92	53-142
Bromofluorobenzene		87	47-138
Toluene-d8		111	68-124

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-001
Description: SED-30 0"-6" | Matrix: Solid
Date Sampled: 11/21/2019 0955 | Project Name: RI Implementation | % Solids: 50.0 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	11/30/2019 1914	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		63	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		63	ug/kg	1
Acetophenone	98-86-2	8270D	ND		320	ug/kg	1
Anthracene	120-12-7	8270D	ND		63	ug/kg	1
Atrazine	1912-24-9	8270D	ND		320	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		320	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		63	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		63	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		63	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		63	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		63	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		320	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		320	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		320	ug/kg	1
Caprolactam	105-60-2	8270D	ND		320	ug/kg	1
Carbazole	86-74-8	8270D	ND		320	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		320	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		320	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		320	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		320	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		320	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		320	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		320	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		320	ug/kg	1
Chrysene	218-01-9	8270D	ND		63	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		63	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		320	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		320	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		320	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		320	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		320	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		320	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		320	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		620	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		620	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		320	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		320	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		63	ug/kg	1
Fluorene	86-73-7	8270D	ND		63	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		320	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		320	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-001
Description: SED-30 0"-6" | Matrix: Solid
Date Sampled: 11/21/2019 0955 | Project Name: RI Implementation | % Solids: 50.0 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	11/30/2019 1914	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		320	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		63	ug/kg	1
Isophorone	78-59-1	8270D	ND		320	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		63	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		320	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		620	ug/kg	1
Naphthalene	91-20-3	8270D	ND		63	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		620	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		620	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		620	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		320	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		620	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		320	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		320	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		63	ug/kg	1
Phenol	108-95-2	8270D	ND		320	ug/kg	1
Pyrene	129-00-0	8270D	ND		63	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		320	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		320	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		53	24-137
2-Fluorophenol		48	16-136
Nitrobenzene-d5		48	12-144
Phenol-d5		52	26-148
Terphenyl-d14		57	20-127
2,4,6-Tribromophenol		88	27-128

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK21098-002
Description: SED-30 6"-12"
Matrix: Solid
Date Sampled: 11/21/2019 1000
Project Name: RI Implementation
% Solids: 44.7 11/22/2019 0109
Date Received: 11/21/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/02/2019 2033	SUH		37724

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-002
Description: SED-30 6"-12" | Matrix: Solid
Date Sampled: 11/21/2019 1000 | Project Name: RI Implementation | % Solids: 44.7 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	11/27/2019 0340	ALR1		37193	4.11

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	530	E	24	ug/kg	2
Benzene	71-43-2	8260B	ND		6.1	ug/kg	2
Bromodichloromethane	75-27-4	8260B	ND		6.1	ug/kg	2
Bromoform	75-25-2	8260B	ND		6.1	ug/kg	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.1	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	25		24	ug/kg	2
Carbon disulfide	75-15-0	8260B	ND		6.1	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		6.1	ug/kg	2
Chlorobenzene	108-90-7	8260B	ND		6.1	ug/kg	2
Chloroethane	75-00-3	8260B	ND		6.1	ug/kg	2
Chloroform	67-66-3	8260B	ND		6.1	ug/kg	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.1	ug/kg	2
Cyclohexane	110-82-7	8260B	ND		6.1	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.1	ug/kg	2
Dibromochloromethane	124-48-1	8260B	ND		6.1	ug/kg	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.1	ug/kg	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.1	ug/kg	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.1	ug/kg	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.1	ug/kg	2
Dichlorodifluoromethane	75-71-8	8260B	ND		6.1	ug/kg	2
1,1-Dichloroethane	75-34-3	8260B	ND		6.1	ug/kg	2
1,2-Dichloroethane	107-06-2	8260B	ND		6.1	ug/kg	2
1,1-Dichloroethene	75-35-4	8260B	ND		6.1	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.1	ug/kg	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.1	ug/kg	2
1,2-Dichloropropane	78-87-5	8260B	ND		6.1	ug/kg	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.1	ug/kg	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.1	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		6.1	ug/kg	2
2-Hexanone	591-78-6	8260B	ND		12	ug/kg	2
Isopropylbenzene	98-82-8	8260B	ND		6.1	ug/kg	2
Methyl acetate	79-20-9	8260B	ND		6.1	ug/kg	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.1	ug/kg	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	ug/kg	2
Methylcyclohexane	108-87-2	8260B	ND		6.1	ug/kg	2
Methylene chloride	75-09-2	8260B	ND		6.1	ug/kg	2
Styrene	100-42-5	8260B	ND		6.1	ug/kg	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.1	ug/kg	2
Tetrachloroethene	127-18-4	8260B	ND		6.1	ug/kg	2
Toluene	108-88-3	8260B	ND		6.1	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.1	ug/kg	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.1	ug/kg	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.1	ug/kg	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.1	ug/kg	2

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK21098-002
Description: SED-30 6"-12"
Matrix: Solid
Date Sampled: 11/21/2019 1000
Project Name: RI Implementation
% Solids: 44.7 11/22/2019 0109
Date Received: 11/21/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	11/27/2019 0340	ALR1		37193	4.11

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.1	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		6.1	ug/kg	2
Vinyl chloride	75-01-4	8260B	ND		6.1	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		111	53-142
Bromofluorobenzene		88	47-138
Toluene-d8		114	68-124

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-002
Description: SED-30 6"-12" | Matrix: Solid
Date Sampled: 11/21/2019 1000 | Project Name: RI Implementation | % Solids: 44.7 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	11/30/2019 2031	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		64	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		64	ug/kg	1
Acetophenone	98-86-2	8270D	ND		320	ug/kg	1
Anthracene	120-12-7	8270D	ND		64	ug/kg	1
Atrazine	1912-24-9	8270D	ND		320	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		320	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		64	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		64	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		64	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		64	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		64	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		320	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		320	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		320	ug/kg	1
Caprolactam	105-60-2	8270D	ND		320	ug/kg	1
Carbazole	86-74-8	8270D	ND		320	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		320	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		320	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		320	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		320	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		320	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		320	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		320	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		320	ug/kg	1
Chrysene	218-01-9	8270D	ND		64	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		64	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		320	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		320	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		320	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		320	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		320	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		320	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		320	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		620	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		620	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		320	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		320	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		64	ug/kg	1
Fluorene	86-73-7	8270D	ND		64	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		320	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		320	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-002
Description: SED-30 6"-12" | Matrix: Solid
Date Sampled: 11/21/2019 1000 | Project Name: RI Implementation | % Solids: 44.7 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	11/30/2019 2031	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		320	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		64	ug/kg	1
Isophorone	78-59-1	8270D	ND		320	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		64	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		320	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		620	ug/kg	1
Naphthalene	91-20-3	8270D	ND		64	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		620	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		620	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		620	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		320	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		620	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		320	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		320	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		64	ug/kg	1
Phenol	108-95-2	8270D	ND		320	ug/kg	1
Pyrene	129-00-0	8270D	ND		64	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		320	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		320	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		39	24-137
2-Fluorophenol		38	16-136
Nitrobenzene-d5		37	12-144
Phenol-d5		39	26-148
Terphenyl-d14		45	20-127
2,4,6-Tribromophenol		86	27-128

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Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UK21098-003	
Description: SED-31 0"-6"		Matrix: Solid	
Date Sampled: 11/21/2019 1200	Project Name: RI Implementation	% Solids: 66.7	11/22/2019 0109
Date Received: 11/21/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/02/2019 2054	SUH		37724

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-003
Description: SED-31 0"-6" | Matrix: Solid
Date Sampled: 11/21/2019 1200 | Project Name: RI Implementation | % Solids: 66.7 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1309	JM1		37128	6.25

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	410	E	16	ug/kg	1
Benzene	71-43-2	8260B	ND		4.0	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.0	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.0	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.0	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		16	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.0	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.0	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.0	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.0	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.0	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.0	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.0	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.0	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.0	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.0	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.0	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.0	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.0	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.0	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.0	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.0	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.0	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.0	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.0	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.0	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.0	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.0	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.0	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.0	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.0	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.0	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.0	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.0	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.0	ug/kg	1
Styrene	100-42-5	8260B	ND		4.0	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.0	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.0	ug/kg	1
Toluene	108-88-3	8260B	ND		4.0	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.0	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.0	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.0	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.0	ug/kg	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK21098-003	
Description: SED-31 0"-6"		Matrix: Solid	
Date Sampled: 11/21/2019 1200	Project Name: RI Implementation	% Solids: 66.7	11/22/2019 0109
Date Received: 11/21/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1309	JM1		37128	6.25

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.0	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.0	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.0	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	53-142
Bromofluorobenzene		97	47-138
Toluene-d8		107	68-124

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-003
Description: SED-31 0"-6" | Matrix: Solid
Date Sampled: 11/21/2019 1200 | Project Name: RI Implementation | % Solids: 66.7 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 1822	SCD	11/29/2019 1156	37405

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		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		320	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-003
Description: SED-31 0"-6" | Matrix: Solid
Date Sampled: 11/21/2019 1200 | Project Name: RI Implementation | % Solids: 66.7 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 1822	SCD	11/29/2019 1156	37405

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		320	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		320	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		56	24-137
2-Fluorophenol		56	16-136
Nitrobenzene-d5		52	12-144
Phenol-d5		58	26-148
Terphenyl-d14		63	20-127
2,4,6-Tribromophenol		52	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK21098-004
Description: SED-31 6"-12"
Matrix: Solid
Date Sampled: 11/21/2019 1205
Project Name: RI Implementation
% Solids: 74.4 11/22/2019 0109
Date Received: 11/21/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/02/2019 2115	SUH		37724

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK21098-004
Description: SED-31 6"-12"
Matrix: Solid
Date Sampled: 11/21/2019 1205
Project Name: RI Implementation
% Solids: 74.4 11/22/2019 0109
Date Received: 11/21/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1332	JM1		37128	5.99

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	440	E	17	ug/kg	1
Benzene	71-43-2	8260B	ND		4.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		17	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.3	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.3	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.2	ug/kg	1
Styrene	100-42-5	8260B	ND		4.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.2	ug/kg	1
Toluene	108-88-3	8260B	ND		4.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.2	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK21098-004	
Description: SED-31 6"-12"		Matrix: Solid	
Date Sampled: 11/21/2019 1205	Project Name: RI Implementation	% Solids: 74.4	11/22/2019 0109
Date Received: 11/21/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1332	JM1		37128	5.99

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.3	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	53-142
Bromofluorobenzene		96	47-138
Toluene-d8		103	68-124

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-004
Description: SED-31 6"-12" | Matrix: Solid
Date Sampled: 11/21/2019 1205 | Project Name: RI Implementation | % Solids: 74.4 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 1848	SCD	11/29/2019 1156	37405

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		63	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		63	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		63	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		63	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		63	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		63	ug/kg	1
Caprolactam	105-60-2	8270D	ND		63	ug/kg	1
Carbazole	86-74-8	8270D	ND		63	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		63	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		63	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		63	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		63	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		63	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		63	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		63	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		63	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		63	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		63	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		63	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		63	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		63	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		63	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		63	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		310	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		310	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		120	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		120	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		63	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		63	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		63	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		63	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		310	ug/kg	1

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P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-004
Description: SED-31 6"-12" | Matrix: Solid
Date Sampled: 11/21/2019 1205 | Project Name: RI Implementation | % Solids: 74.4 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 1848	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		63	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		63	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		63	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		120	ug/kg	1
Naphthalene	91-20-3	8270D	ND		13	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		120	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		120	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		120	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		63	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		120	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		310	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		63	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		63	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		310	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		63	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		63	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		63	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		62	24-137
2-Fluorophenol		63	16-136
Nitrobenzene-d5		57	12-144
Phenol-d5		68	26-148
Terphenyl-d14		74	20-127
2,4,6-Tribromophenol		57	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UK21098-005	
Description: SED-32 0"-6"		Matrix: Solid	
Date Sampled: 11/21/2019 1400	Project Name: RI Implementation	% Solids: 49.0	11/22/2019 0109
Date Received: 11/21/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/02/2019 2136	SUH		37724

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	1.1		0.50	mg/kg	1

LOQ = Limit of Quantitation
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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK21098-005	
Description: SED-32 0"-6"		Matrix: Solid	
Date Sampled: 11/21/2019 1400	Project Name: RI Implementation	% Solids: 49.0	11/22/2019 0109
Date Received: 11/21/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1354	JM1		37128	4.26

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	450		23	ug/kg	1
Benzene	71-43-2	8260B	ND		5.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	38		23	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.9	ug/kg	1
Styrene	100-42-5	8260B	ND		5.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.9	ug/kg	1
Toluene	108-88-3	8260B	ND		5.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.9	ug/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK21098-005
Description: SED-32 0"-6"
Matrix: Solid
Date Sampled: 11/21/2019 1400
Project Name: RI Implementation
% Solids: 49.0 11/22/2019 0109
Date Received: 11/21/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1354	JM1		37128	4.26

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.9	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		89	53-142
Bromofluorobenzene		80	47-138
Toluene-d8		118	68-124

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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-005
Description: SED-32 0"-6" | Matrix: Solid
Date Sampled: 11/21/2019 1400 | Project Name: RI Implementation | % Solids: 49.0 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	11/30/2019 2056	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		65	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		65	ug/kg	1
Acetophenone	98-86-2	8270D	ND		330	ug/kg	1
Anthracene	120-12-7	8270D	ND		65	ug/kg	1
Atrazine	1912-24-9	8270D	ND		330	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		330	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		65	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		65	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		65	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		65	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		65	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		330	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		330	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		330	ug/kg	1
Caprolactam	105-60-2	8270D	ND		330	ug/kg	1
Carbazole	86-74-8	8270D	ND		330	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		330	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		330	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		330	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		330	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		330	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		330	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		330	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		330	ug/kg	1
Chrysene	218-01-9	8270D	ND		65	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		65	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		330	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		330	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		330	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		330	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		330	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		330	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		330	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		640	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		640	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		330	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		330	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		65	ug/kg	1
Fluorene	86-73-7	8270D	ND		65	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		330	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		330	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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N = Recovery is out of criteria
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-005
Description: SED-32 0"-6" | Matrix: Solid
Date Sampled: 11/21/2019 1400 | Project Name: RI Implementation | % Solids: 49.0 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	11/30/2019 2056	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		330	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		65	ug/kg	1
Isophorone	78-59-1	8270D	ND		330	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		65	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		330	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		640	ug/kg	1
Naphthalene	91-20-3	8270D	ND		65	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		640	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		640	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		640	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		330	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		640	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		330	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		330	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		65	ug/kg	1
Phenol	108-95-2	8270D	ND		330	ug/kg	1
Pyrene	129-00-0	8270D	ND		65	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		330	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		330	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		59	24-137
2-Fluorophenol		55	16-136
Nitrobenzene-d5		59	12-144
Phenol-d5		58	26-148
Terphenyl-d14		63	20-127
2,4,6-Tribromophenol		95	27-128

LOQ = Limit of Quantitation
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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK21098-006
Description: SED-32 6"-12"
Matrix: Solid
Date Sampled: 11/21/2019 1405
Project Name: RI Implementation
% Solids: 57.0 11/22/2019 0109
Date Received: 11/21/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/02/2019 2157	SUH		37724

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-006
Description: SED-32 6"-12" | Matrix: Solid
Date Sampled: 11/21/2019 1405 | Project Name: RI Implementation | % Solids: 57.0 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1417	JM1		37128	4.67

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	440	E	21	ug/kg	1
Benzene	71-43-2	8260B	ND		5.4	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.4	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.4	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	76		21	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.4	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.4	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.4	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.4	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.4	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.4	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.4	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.4	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.4	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.4	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.4	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.4	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.4	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.4	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.4	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.4	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.4	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.4	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.4	ug/kg	1
Styrene	100-42-5	8260B	ND		5.4	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.4	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.4	ug/kg	1
Toluene	108-88-3	8260B	ND		5.4	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.4	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.4	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.4	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.4	ug/kg	1

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

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK21098-006	
Description: SED-32 6"-12"		Matrix: Solid	
Date Sampled: 11/21/2019 1405	Project Name: RI Implementation	% Solids: 57.0	11/22/2019 0109
Date Received: 11/21/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1417	JM1		37128	4.67

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.4	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.4	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		91	53-142
Bromofluorobenzene		84	47-138
Toluene-d8		114	68-124

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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-006
Description: SED-32 6"-12" | Matrix: Solid
Date Sampled: 11/21/2019 1405 | Project Name: RI Implementation | % Solids: 57.0 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	11/30/2019 2122	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		63	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		63	ug/kg	1
Acetophenone	98-86-2	8270D	ND		320	ug/kg	1
Anthracene	120-12-7	8270D	ND		63	ug/kg	1
Atrazine	1912-24-9	8270D	ND		320	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		320	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		63	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		63	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		63	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		63	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		63	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		320	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		320	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		320	ug/kg	1
Caprolactam	105-60-2	8270D	ND		320	ug/kg	1
Carbazole	86-74-8	8270D	ND		320	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		320	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		320	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		320	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		320	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		320	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		320	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		320	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		320	ug/kg	1
Chrysene	218-01-9	8270D	ND		63	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		63	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		320	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		320	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		320	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		320	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		320	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		320	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		320	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		620	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		620	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		320	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		320	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		63	ug/kg	1
Fluorene	86-73-7	8270D	ND		63	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		320	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		320	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	1

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-006
Description: SED-32 6"-12" | Matrix: Solid
Date Sampled: 11/21/2019 1405 | Project Name: RI Implementation | % Solids: 57.0 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	11/30/2019 2122	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		320	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		63	ug/kg	1
Isophorone	78-59-1	8270D	ND		320	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		63	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		320	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		620	ug/kg	1
Naphthalene	91-20-3	8270D	ND		63	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		620	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		620	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		620	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		320	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		620	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		320	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		320	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		63	ug/kg	1
Phenol	108-95-2	8270D	ND		320	ug/kg	1
Pyrene	129-00-0	8270D	ND		63	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		320	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		320	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		54	24-137
2-Fluorophenol		60	16-136
Nitrobenzene-d5		54	12-144
Phenol-d5		71	26-148
Terphenyl-d14		59	20-127
2,4,6-Tribromophenol		93	27-128

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%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK21098-007
Description: SED-33 0"-6"
Matrix: Solid
Date Sampled: 11/21/2019 1500
Project Name: RI Implementation
% Solids: 56.6 11/22/2019 0109
Date Received: 11/21/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/02/2019 2219	SUH		37724

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-007
Description: SED-33 0"-6" | Matrix: Solid
Date Sampled: 11/21/2019 1500 | Project Name: RI Implementation | % Solids: 56.6 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1439	JM1		37128	4.99

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	490	E	20	ug/kg	1
Benzene	71-43-2	8260B	ND		5.0	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.0	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		20	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.0	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.0	ug/kg	1
Styrene	100-42-5	8260B	ND		5.0	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	ug/kg	1
Toluene	108-88-3	8260B	ND		5.0	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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N = Recovery is out of criteria
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E = Quantitation of compound exceeded the calibration range
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK21098-007	
Description: SED-33 0"-6"		Matrix: Solid	
Date Sampled: 11/21/2019 1500	Project Name: RI Implementation	% Solids: 56.6	11/22/2019 0109
Date Received: 11/21/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1439	JM1		37128	4.99

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		10	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	53-142
Bromofluorobenzene		93	47-138
Toluene-d8		104	68-124

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-007
Description: SED-33 0"-6" | Matrix: Solid
Date Sampled: 11/21/2019 1500 | Project Name: RI Implementation | % Solids: 56.6 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 2147	SCD	11/29/2019 1156	37405

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		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		320	ug/kg	1

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-007
Description: SED-33 0"-6" | Matrix: Solid
Date Sampled: 11/21/2019 1500 | Project Name: RI Implementation | % Solids: 56.6 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 2147	SCD	11/29/2019 1156	37405

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		320	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		320	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		57	24-137
2-Fluorophenol		59	16-136
Nitrobenzene-d5		56	12-144
Phenol-d5		62	26-148
Terphenyl-d14		64	20-127
2,4,6-Tribromophenol		51	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK21098-008
Description: SED-33 6"-12"
Matrix: Solid
Date Sampled: 11/21/2019 1505
Project Name: RI Implementation
% Solids: 65.6 11/22/2019 0109
Date Received: 11/21/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/02/2019 2240	SUH		37724

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-008
Description: SED-33 6"-12" | Matrix: Solid
Date Sampled: 11/21/2019 1505 | Project Name: RI Implementation | % Solids: 65.6 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1502	JM1		37128	4.44

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	400		23	ug/kg	1
Benzene	71-43-2	8260B	ND		5.6	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.6	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.6	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	45		23	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.6	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.6	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.6	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.6	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.6	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.6	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.6	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.6	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.6	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.6	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.6	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.6	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.6	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.6	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.6	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.6	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.6	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.6	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.6	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.6	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.6	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.6	ug/kg	1
Styrene	100-42-5	8260B	ND		5.6	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.6	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.6	ug/kg	1
Toluene	108-88-3	8260B	ND		5.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.6	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.6	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.6	ug/kg	1

LOQ = Limit of Quantitation
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W = Reported on wet weight basis
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P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK21098-008	
Description: SED-33 6"-12"		Matrix: Solid	
Date Sampled: 11/21/2019 1505	Project Name: RI Implementation	% Solids: 65.6	11/22/2019 0109
Date Received: 11/21/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1502	JM1		37128	4.44

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.6	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.6	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.6	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	53-142
Bromofluorobenzene		86	47-138
Toluene-d8		108	68-124

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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-008
Description: SED-33 6"-12" | Matrix: Solid
Date Sampled: 11/21/2019 1505 | Project Name: RI Implementation | % Solids: 65.6 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 2005	SCD	11/29/2019 1156	37405

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		65	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		65	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		65	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		65	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		65	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		65	ug/kg	1
Caprolactam	105-60-2	8270D	ND		65	ug/kg	1
Carbazole	86-74-8	8270D	ND		65	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		65	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		65	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		65	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		65	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		65	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		65	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		65	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		65	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		65	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		65	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		65	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		65	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		65	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		65	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		65	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		65	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		65	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		65	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		65	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-008
Description: SED-33 6"-12" | Matrix: Solid
Date Sampled: 11/21/2019 1505 | Project Name: RI Implementation | % Solids: 65.6 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 2005	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		65	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		65	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		65	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		65	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		65	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		65	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		65	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		65	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		65	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		54	24-137
2-Fluorophenol		56	16-136
Nitrobenzene-d5		52	12-144
Phenol-d5		60	26-148
Terphenyl-d14		62	20-127
2,4,6-Tribromophenol		48	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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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%

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Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UK21098-009	
Description: SED-34 0"-6"		Matrix: Solid	
Date Sampled: 11/21/2019 1610	Project Name: RI Implementation	% Solids: 53.7	11/22/2019 0109
Date Received: 11/21/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/02/2019 2301	SUH		37724

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.62		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-009
Description: SED-34 0"-6" | Matrix: Solid
Date Sampled: 11/21/2019 1610 | Project Name: RI Implementation | % Solids: 53.7 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1525	JM1		37128	4.26

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	200		23	ug/kg	1
Benzene	71-43-2	8260B	ND		5.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	28		23	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		12	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.9	ug/kg	1
Styrene	100-42-5	8260B	ND		5.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.9	ug/kg	1
Toluene	108-88-3	8260B	ND		5.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.9	ug/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK21098-009
Description: SED-34 0"-6"
Matrix: Solid
Date Sampled: 11/21/2019 1610
Project Name: RI Implementation
% Solids: 53.7
11/22/2019 0109
Date Received: 11/21/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1525	JM1		37128	4.26

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.9	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		91	53-142
Bromofluorobenzene		84	47-138
Toluene-d8		114	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

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-009
Description: SED-34 0"-6" | Matrix: Solid
Date Sampled: 11/21/2019 1610 | Project Name: RI Implementation | % Solids: 53.7 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	11/30/2019 2212	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		65	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		65	ug/kg	1
Acetophenone	98-86-2	8270D	ND		330	ug/kg	1
Anthracene	120-12-7	8270D	ND		65	ug/kg	1
Atrazine	1912-24-9	8270D	ND		330	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		330	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		65	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		65	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		65	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		65	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		65	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		330	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		330	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		330	ug/kg	1
Caprolactam	105-60-2	8270D	ND		330	ug/kg	1
Carbazole	86-74-8	8270D	ND		330	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		330	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		330	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		330	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		330	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		330	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		330	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		330	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		330	ug/kg	1
Chrysene	218-01-9	8270D	ND		65	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		65	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		330	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		330	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		330	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		330	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		330	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		330	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		330	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		630	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		630	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		330	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		330	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		65	ug/kg	1
Fluorene	86-73-7	8270D	ND		65	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		330	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		330	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-009
Description: SED-34 0"-6" | Matrix: Solid
Date Sampled: 11/21/2019 1610 | Project Name: RI Implementation | % Solids: 53.7 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	11/30/2019 2212	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		330	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		65	ug/kg	1
Isophorone	78-59-1	8270D	ND		330	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		65	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		330	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		630	ug/kg	1
Naphthalene	91-20-3	8270D	ND		65	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		630	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		630	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		630	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		330	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		630	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		330	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		330	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		65	ug/kg	1
Phenol	108-95-2	8270D	ND		330	ug/kg	1
Pyrene	129-00-0	8270D	ND		65	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		330	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		330	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		55	24-137
2-Fluorophenol		59	16-136
Nitrobenzene-d5		53	12-144
Phenol-d5		67	26-148
Terphenyl-d14		61	20-127
2,4,6-Tribromophenol		91	27-128

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%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK21098-010
Description: SED-34 6"-12"
Matrix: Solid
Date Sampled: 11/21/2019 1615
Project Name: RI Implementation
% Solids: 60.5 11/22/2019 0109
Date Received: 11/21/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 0004	SUH		37724

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK21098-010	
Description: SED-34 6"-12"		Matrix: Solid	
Date Sampled: 11/21/2019 1615	Project Name: RI Implementation	% Solids: 60.5	11/22/2019 0109
Date Received: 11/21/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1547	JM1		37128	4.84

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	180		21	ug/kg	1
Benzene	71-43-2	8260B	ND		5.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	28		21	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.2	ug/kg	1
Styrene	100-42-5	8260B	ND		5.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.2	ug/kg	1
Toluene	108-88-3	8260B	ND		5.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.2	ug/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK21098-010	
Description: SED-34 6"-12"		Matrix: Solid	
Date Sampled: 11/21/2019 1615	Project Name: RI Implementation	% Solids: 60.5	11/22/2019 0109
Date Received: 11/21/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 1547	JM1		37128	4.84

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		10	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	53-142
Bromofluorobenzene		84	47-138
Toluene-d8		110	68-124

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-010
Description: SED-34 6"-12" | Matrix: Solid
Date Sampled: 11/21/2019 1615 | Project Name: RI Implementation | % Solids: 60.5 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 2237	SCD	11/29/2019 1156	37405

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		64	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		64	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		64	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		64	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		64	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		64	ug/kg	1
Caprolactam	105-60-2	8270D	ND		64	ug/kg	1
Carbazole	86-74-8	8270D	ND		64	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		64	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		64	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		64	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		64	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		64	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		64	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		64	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		64	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		64	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		64	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		64	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		64	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		64	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		64	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		64	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		310	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		310	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		120	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		120	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		64	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		64	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		64	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		64	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		310	ug/kg	1

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-010
Description: SED-34 6"-12" | Matrix: Solid
Date Sampled: 11/21/2019 1615 | Project Name: RI Implementation | % Solids: 60.5 | 11/22/2019 0109
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 2237	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		64	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		64	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		64	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		120	ug/kg	1
Naphthalene	91-20-3	8270D	ND		13	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		120	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		120	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		120	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		64	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		120	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		310	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		64	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		64	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		310	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		64	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		64	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		64	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		46	24-137
2-Fluorophenol		48	16-136
Nitrobenzene-d5		44	12-144
Phenol-d5		50	26-148
Terphenyl-d14		51	20-127
2,4,6-Tribromophenol		43	27-128

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK21098-011
Description: TB-112119
Matrix: Aqueous
Date Sampled: 11/21/2019
Project Name: RI Implementation
Date Received: 11/21/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/26/2019 0200	JTH		37056

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
1,1,2,2-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

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK21098-011
Description: TB-112119 | Matrix: Aqueous
Date Sampled: 11/21/2019 | Project Name: RI Implementation
Date Received: 11/21/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/26/2019 0200	JTH		37056

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		105	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		107	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%

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QC Summary

Inorganic non-metals - MB

Sample ID: UQ37724-001
Batch: 37724
Analytical Method: 9056A

Matrix: Solid

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N (soluble)	ND		1	0.50	mg/kg	12/02/2019 1557

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - LCS

Sample ID: UQ37724-002
Batch: 37724
Analytical Method: 9056A

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.80	0.77		1	96	80-120	12/02/2019 1621

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37042-001
Batch: 37042
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/kg	11/25/2019 2140
Benzene	ND		1	5.0	ug/kg	11/25/2019 2140
Bromodichloromethane	ND		1	5.0	ug/kg	11/25/2019 2140
Bromoform	ND		1	5.0	ug/kg	11/25/2019 2140
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	11/25/2019 2140
2-Butanone (MEK)	ND		1	20	ug/kg	11/25/2019 2140
Carbon disulfide	ND		1	5.0	ug/kg	11/25/2019 2140
Carbon tetrachloride	ND		1	5.0	ug/kg	11/25/2019 2140
Chlorobenzene	ND		1	5.0	ug/kg	11/25/2019 2140
Chloroethane	ND		1	5.0	ug/kg	11/25/2019 2140
Chloroform	ND		1	5.0	ug/kg	11/25/2019 2140
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	11/25/2019 2140
Cyclohexane	ND		1	5.0	ug/kg	11/25/2019 2140
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	11/25/2019 2140
Dibromochloromethane	ND		1	5.0	ug/kg	11/25/2019 2140
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	11/25/2019 2140
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	11/25/2019 2140
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	11/25/2019 2140
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	11/25/2019 2140
Dichlorodifluoromethane	ND		1	5.0	ug/kg	11/25/2019 2140
1,1-Dichloroethane	ND		1	5.0	ug/kg	11/25/2019 2140
1,2-Dichloroethane	ND		1	5.0	ug/kg	11/25/2019 2140
1,1-Dichloroethene	ND		1	5.0	ug/kg	11/25/2019 2140
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	11/25/2019 2140
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	11/25/2019 2140
1,2-Dichloropropane	ND		1	5.0	ug/kg	11/25/2019 2140
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	11/25/2019 2140
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	11/25/2019 2140
Ethylbenzene	ND		1	5.0	ug/kg	11/25/2019 2140
2-Hexanone	ND		1	10	ug/kg	11/25/2019 2140
Isopropylbenzene	ND		1	5.0	ug/kg	11/25/2019 2140
Methyl acetate	ND		1	5.0	ug/kg	11/25/2019 2140
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	11/25/2019 2140
4-Methyl-2-pentanone	ND		1	10	ug/kg	11/25/2019 2140
Methylcyclohexane	ND		1	5.0	ug/kg	11/25/2019 2140
Methylene chloride	ND		1	5.0	ug/kg	11/25/2019 2140
Styrene	ND		1	5.0	ug/kg	11/25/2019 2140
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	11/25/2019 2140
Tetrachloroethene	ND		1	5.0	ug/kg	11/25/2019 2140
Toluene	ND		1	5.0	ug/kg	11/25/2019 2140
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	11/25/2019 2140
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	11/25/2019 2140
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	11/25/2019 2140
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	11/25/2019 2140

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37042-001
Batch: 37042
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	11/25/2019 2140
Trichlorofluoromethane	ND		1	5.0	ug/kg	11/25/2019 2140
Vinyl chloride	ND		1	5.0	ug/kg	11/25/2019 2140
Xylenes (total)	ND		1	10	ug/kg	11/25/2019 2140

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		95	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		100	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37042-002
Batch: 37042
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	104	60-140	11/25/2019 2008
Benzene	50	52		1	104	70-130	11/25/2019 2008
Bromodichloromethane	50	53		1	106	70-130	11/25/2019 2008
Bromoform	50	52		1	104	70-130	11/25/2019 2008
Bromomethane (Methyl bromide)	50	54		1	108	70-130	11/25/2019 2008
2-Butanone (MEK)	100	91		1	91	60-140	11/25/2019 2008
Carbon disulfide	50	52		1	105	70-130	11/25/2019 2008
Carbon tetrachloride	50	55		1	109	70-130	11/25/2019 2008
Chlorobenzene	50	52		1	104	70-130	11/25/2019 2008
Chloroethane	50	57		1	115	70-130	11/25/2019 2008
Chloroform	50	53		1	106	70-130	11/25/2019 2008
Chloromethane (Methyl chloride)	50	51		1	103	60-140	11/25/2019 2008
Cyclohexane	50	58		1	117	70-130	11/25/2019 2008
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	95	70-130	11/25/2019 2008
Dibromochloromethane	50	52		1	103	70-130	11/25/2019 2008
1,2-Dibromoethane (EDB)	50	50		1	100	70-130	11/25/2019 2008
1,2-Dichlorobenzene	50	52		1	104	70-130	11/25/2019 2008
1,3-Dichlorobenzene	50	52		1	105	70-130	11/25/2019 2008
1,4-Dichlorobenzene	50	52		1	105	70-130	11/25/2019 2008
Dichlorodifluoromethane	50	56		1	112	60-140	11/25/2019 2008
1,1-Dichloroethane	50	53		1	106	70-130	11/25/2019 2008
1,2-Dichloroethane	50	51		1	101	70-130	11/25/2019 2008
1,1-Dichloroethene	50	63		1	126	70-130	11/25/2019 2008
cis-1,2-Dichloroethene	50	53		1	106	70-130	11/25/2019 2008
trans-1,2-Dichloroethene	50	58		1	116	70-130	11/25/2019 2008
1,2-Dichloropropane	50	52		1	104	70-130	11/25/2019 2008
cis-1,3-Dichloropropene	50	56		1	111	70-130	11/25/2019 2008
trans-1,3-Dichloropropene	50	54		1	108	70-130	11/25/2019 2008
Ethylbenzene	50	53		1	105	70-130	11/25/2019 2008
2-Hexanone	100	95		1	95	70-130	11/25/2019 2008
Isopropylbenzene	50	52		1	104	70-130	11/25/2019 2008
Methyl acetate	50	48		1	96	70-130	11/25/2019 2008
Methyl tertiary butyl ether (MTBE)	50	52		1	104	70-130	11/25/2019 2008
4-Methyl-2-pentanone	100	96		1	96	70-130	11/25/2019 2008
Methylcyclohexane	50	61		1	121	70-130	11/25/2019 2008
Methylene chloride	50	51		1	101	70-130	11/25/2019 2008
Styrene	50	53		1	105	70-130	11/25/2019 2008
1,1,2,2-Tetrachloroethane	50	49		1	98	70-130	11/25/2019 2008
Tetrachloroethene	50	53		1	107	70-130	11/25/2019 2008
Toluene	50	50		1	99	70-130	11/25/2019 2008
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	57		1	114	70-130	11/25/2019 2008
1,2,4-Trichlorobenzene	50	53		1	106	70-130	11/25/2019 2008
1,1,1-Trichloroethane	50	54		1	108	70-130	11/25/2019 2008
1,1,2-Trichloroethane	50	49		1	99	70-130	11/25/2019 2008

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37042-002
Batch: 37042
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	52		1	105	70-130	11/25/2019 2008
Trichlorofluoromethane	50	57		1	114	70-130	11/25/2019 2008
Vinyl chloride	50	50		1	100	70-130	11/25/2019 2008
Xylenes (total)	100	110		1	106	70-130	11/25/2019 2008

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		93	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		101	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37042-003
Batch: 37042
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	91		1	91	14	60-140	20	11/25/2019 2031
Benzene	50	49		1	97	7.0	70-130	20	11/25/2019 2031
Bromodichloromethane	50	50		1	100	6.1	70-130	20	11/25/2019 2031
Bromoform	50	50		1	100	4.5	70-130	20	11/25/2019 2031
Bromomethane (Methyl bromide)	50	49		1	99	9.0	70-130	20	11/25/2019 2031
2-Butanone (MEK)	100	85		1	85	7.0	60-140	20	11/25/2019 2031
Carbon disulfide	50	47		1	94	10	70-130	20	11/25/2019 2031
Carbon tetrachloride	50	50		1	100	8.7	70-130	20	11/25/2019 2031
Chlorobenzene	50	49		1	97	6.2	70-130	20	11/25/2019 2031
Chloroethane	50	52		1	105	9.0	70-130	20	11/25/2019 2031
Chloroform	50	49		1	99	7.5	70-130	20	11/25/2019 2031
Chloromethane (Methyl chloride)	50	46		1	93	10	60-140	20	11/25/2019 2031
Cyclohexane	50	53		1	106	10	70-130	20	11/25/2019 2031
1,2-Dibromo-3-chloropropane (DBCP)	50	47		1	94	1.9	70-130	20	11/25/2019 2031
Dibromochloromethane	50	50		1	101	2.7	70-130	20	11/25/2019 2031
1,2-Dibromoethane (EDB)	50	49		1	98	1.9	70-130	20	11/25/2019 2031
1,2-Dichlorobenzene	50	49		1	99	4.8	70-130	20	11/25/2019 2031
1,3-Dichlorobenzene	50	50		1	99	5.4	70-130	20	11/25/2019 2031
1,4-Dichlorobenzene	50	49		1	99	6.2	70-130	20	11/25/2019 2031
Dichlorodifluoromethane	50	50		1	99	12	60-140	20	11/25/2019 2031
1,1-Dichloroethane	50	49		1	98	7.7	70-130	20	11/25/2019 2031
1,2-Dichloroethane	50	48		1	96	6.0	70-130	20	11/25/2019 2031
1,1-Dichloroethene	50	57		1	113	11	70-130	20	11/25/2019 2031
cis-1,2-Dichloroethene	50	49		1	98	7.8	70-130	20	11/25/2019 2031
trans-1,2-Dichloroethene	50	52		1	104	10	70-130	20	11/25/2019 2031
1,2-Dichloropropane	50	49		1	99	4.7	70-130	20	11/25/2019 2031
cis-1,3-Dichloropropene	50	53		1	105	5.4	70-130	20	11/25/2019 2031
trans-1,3-Dichloropropene	50	53		1	105	3.1	70-130	20	11/25/2019 2031
Ethylbenzene	50	50		1	99	5.7	70-130	20	11/25/2019 2031
2-Hexanone	100	87		1	87	8.9	70-130	20	11/25/2019 2031
Isopropylbenzene	50	48		1	97	6.9	70-130	20	11/25/2019 2031
Methyl acetate	50	47		1	93	3.4	70-130	20	11/25/2019 2031
Methyl tertiary butyl ether (MTBE)	50	47		1	95	9.0	70-130	20	11/25/2019 2031
4-Methyl-2-pentanone	100	91		1	91	5.3	70-130	20	11/25/2019 2031
Methylcyclohexane	50	55		1	110	9.4	70-130	20	11/25/2019 2031
Methylene chloride	50	46		1	93	9.1	70-130	20	11/25/2019 2031
Styrene	50	49		1	99	6.0	70-130	20	11/25/2019 2031
1,1,2,2-Tetrachloroethane	50	48		1	96	2.2	70-130	20	11/25/2019 2031
Tetrachloroethene	50	50		1	100	6.5	70-130	20	11/25/2019 2031
Toluene	50	47		1	95	4.4	70-130	20	11/25/2019 2031
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	53		1	105	7.8	70-130	20	11/25/2019 2031
1,2,4-Trichlorobenzene	50	49		1	97	9.2	70-130	20	11/25/2019 2031
1,1,1-Trichloroethane	50	49		1	97	10	70-130	20	11/25/2019 2031
1,1,2-Trichloroethane	50	49		1	97	1.9	70-130	20	11/25/2019 2031

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37042-003
Batch: 37042
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	49		1	98	6.9	70-130	20	11/25/2019 2031
Trichlorofluoromethane	50	51		1	102	12	70-130	20	11/25/2019 2031
Vinyl chloride	50	46		1	91	9.5	70-130	20	11/25/2019 2031
Xylenes (total)	100	99		1	99	6.6	70-130	20	11/25/2019 2031

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		92	53-142
Bromofluorobenzene		97	47-138
Toluene-d8		101	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37056-001
Batch: 37056
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	11/25/2019 2232
Benzene	ND		1	1.0	ug/L	11/25/2019 2232
Bromodichloromethane	ND		1	1.0	ug/L	11/25/2019 2232
Bromoform	ND		1	1.0	ug/L	11/25/2019 2232
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	11/25/2019 2232
2-Butanone (MEK)	ND		1	10	ug/L	11/25/2019 2232
Carbon disulfide	ND		1	1.0	ug/L	11/25/2019 2232
Carbon tetrachloride	ND		1	1.0	ug/L	11/25/2019 2232
Chlorobenzene	ND		1	1.0	ug/L	11/25/2019 2232
Chloroethane	ND		1	2.0	ug/L	11/25/2019 2232
Chloroform	ND		1	1.0	ug/L	11/25/2019 2232
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	11/25/2019 2232
Cyclohexane	ND		1	1.0	ug/L	11/25/2019 2232
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	11/25/2019 2232
Dibromochloromethane	ND		1	1.0	ug/L	11/25/2019 2232
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	11/25/2019 2232
1,2-Dichlorobenzene	ND		1	1.0	ug/L	11/25/2019 2232
1,3-Dichlorobenzene	ND		1	1.0	ug/L	11/25/2019 2232
1,4-Dichlorobenzene	ND		1	1.0	ug/L	11/25/2019 2232
Dichlorodifluoromethane	ND		1	2.0	ug/L	11/25/2019 2232
1,1-Dichloroethane	ND		1	1.0	ug/L	11/25/2019 2232
1,2-Dichloroethane	ND		1	1.0	ug/L	11/25/2019 2232
1,1-Dichloroethene	ND		1	1.0	ug/L	11/25/2019 2232
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	11/25/2019 2232
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	11/25/2019 2232
1,2-Dichloropropane	ND		1	1.0	ug/L	11/25/2019 2232
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	11/25/2019 2232
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	11/25/2019 2232
Ethylbenzene	ND		1	1.0	ug/L	11/25/2019 2232
2-Hexanone	ND		1	10	ug/L	11/25/2019 2232
Isopropylbenzene	ND		1	1.0	ug/L	11/25/2019 2232
Methyl acetate	ND		1	1.0	ug/L	11/25/2019 2232
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	11/25/2019 2232
4-Methyl-2-pentanone	ND		1	10	ug/L	11/25/2019 2232
Methylcyclohexane	ND		1	5.0	ug/L	11/25/2019 2232
Methylene chloride	ND		1	1.0	ug/L	11/25/2019 2232
Styrene	ND		1	1.0	ug/L	11/25/2019 2232
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	11/25/2019 2232
Tetrachloroethene	ND		1	1.0	ug/L	11/25/2019 2232
Toluene	ND		1	1.0	ug/L	11/25/2019 2232
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	11/25/2019 2232
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	11/25/2019 2232
1,1,1-Trichloroethane	ND		1	1.0	ug/L	11/25/2019 2232
1,1,2-Trichloroethane	ND		1	1.0	ug/L	11/25/2019 2232

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37056-001
Batch: 37056
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	11/25/2019 2232
Trichlorofluoromethane	ND		1	1.0	ug/L	11/25/2019 2232
Vinyl chloride	ND		1	1.0	ug/L	11/25/2019 2232
Xylenes (total)	ND		1	1.0	ug/L	11/25/2019 2232

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		104	70-130
Bromofluorobenzene		104	70-130
Toluene-d8		110	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37056-002
Batch: 37056
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	120		1	123	60-140	11/25/2019 2109
Benzene	50	53		1	105	70-130	11/25/2019 2109
Bromodichloromethane	50	54		1	107	70-130	11/25/2019 2109
Bromoform	50	55		1	109	70-130	11/25/2019 2109
Bromomethane (Methyl bromide)	50	47		1	94	70-130	11/25/2019 2109
2-Butanone (MEK)	100	110		1	111	70-130	11/25/2019 2109
Carbon disulfide	50	52		1	104	70-130	11/25/2019 2109
Carbon tetrachloride	50	53		1	106	70-130	11/25/2019 2109
Chlorobenzene	50	52		1	105	70-130	11/25/2019 2109
Chloroethane	50	57		1	115	70-130	11/25/2019 2109
Chloroform	50	53		1	107	70-130	11/25/2019 2109
Chloromethane (Methyl chloride)	50	50		1	99	60-140	11/25/2019 2109
Cyclohexane	50	53		1	106	70-130	11/25/2019 2109
1,2-Dibromo-3-chloropropane (DBCP)	50	53		1	106	70-130	11/25/2019 2109
Dibromochloromethane	50	54		1	108	70-130	11/25/2019 2109
1,2-Dibromoethane (EDB)	50	52		1	104	70-130	11/25/2019 2109
1,2-Dichlorobenzene	50	52		1	104	70-130	11/25/2019 2109
1,3-Dichlorobenzene	50	53		1	106	70-130	11/25/2019 2109
1,4-Dichlorobenzene	50	52		1	103	70-130	11/25/2019 2109
Dichlorodifluoromethane	50	55		1	110	60-140	11/25/2019 2109
1,1-Dichloroethane	50	55		1	109	70-130	11/25/2019 2109
1,2-Dichloroethane	50	51		1	101	70-130	11/25/2019 2109
1,1-Dichloroethene	50	61		1	122	70-130	11/25/2019 2109
cis-1,2-Dichloroethene	50	54		1	108	70-130	11/25/2019 2109
trans-1,2-Dichloroethene	50	57		1	115	70-130	11/25/2019 2109
1,2-Dichloropropane	50	55		1	110	70-130	11/25/2019 2109
cis-1,3-Dichloropropene	50	58		1	115	70-130	11/25/2019 2109
trans-1,3-Dichloropropene	50	58		1	117	70-130	11/25/2019 2109
Ethylbenzene	50	54		1	108	70-130	11/25/2019 2109
2-Hexanone	100	110		1	110	70-130	11/25/2019 2109
Isopropylbenzene	50	53		1	107	70-130	11/25/2019 2109
Methyl acetate	50	57		1	114	70-130	11/25/2019 2109
Methyl tertiary butyl ether (MTBE)	50	52		1	105	70-130	11/25/2019 2109
4-Methyl-2-pentanone	100	110		1	109	70-130	11/25/2019 2109
Methylcyclohexane	50	56		1	112	70-130	11/25/2019 2109
Methylene chloride	50	51		1	102	70-130	11/25/2019 2109
Styrene	50	54		1	108	70-130	11/25/2019 2109
1,1,2,2-Tetrachloroethane	50	50		1	101	70-130	11/25/2019 2109
Tetrachloroethene	50	54		1	108	70-130	11/25/2019 2109
Toluene	50	53		1	107	70-130	11/25/2019 2109
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	53		1	106	70-130	11/25/2019 2109
1,2,4-Trichlorobenzene	50	52		1	104	70-130	11/25/2019 2109
1,1,1-Trichloroethane	50	53		1	106	70-130	11/25/2019 2109
1,1,2-Trichloroethane	50	51		1	103	70-130	11/25/2019 2109

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37056-002
Batch: 37056
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	52		1	105	70-130	11/25/2019 2109
Trichlorofluoromethane	50	55		1	109	70-130	11/25/2019 2109
Vinyl chloride	50	48		1	96	70-130	11/25/2019 2109
Xylenes (total)	100	110		1	108	70-130	11/25/2019 2109

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		99	70-130
Bromofluorobenzene		108	70-130
Toluene-d8		109	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37056-003
Batch: 37056
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	100		1	105	16	60-140	20	11/26/2019 0248
Benzene	50	50		1	100	5.1	70-130	20	11/26/2019 0248
Bromodichloromethane	50	52		1	103	3.7	70-130	20	11/26/2019 0248
Bromoform	50	50		1	99	9.5	70-130	20	11/26/2019 0248
Bromomethane (Methyl bromide)	50	48		1	96	2.5	70-130	20	11/26/2019 0248
2-Butanone (MEK)	100	100		1	102	8.4	70-130	20	11/26/2019 0248
Carbon disulfide	50	51		1	101	3.2	70-130	20	11/26/2019 0248
Carbon tetrachloride	50	52		1	104	1.7	70-130	20	11/26/2019 0248
Chlorobenzene	50	49		1	97	7.4	70-130	20	11/26/2019 0248
Chloroethane	50	56		1	113	1.4	70-130	20	11/26/2019 0248
Chloroform	50	53		1	106	1.3	70-130	20	11/26/2019 0248
Chloromethane (Methyl chloride)	50	49		1	97	2.0	60-140	20	11/26/2019 0248
Cyclohexane	50	52		1	103	2.2	70-130	20	11/26/2019 0248
1,2-Dibromo-3-chloropropane (DBCP)	50	47		1	95	11	70-130	20	11/26/2019 0248
Dibromochloromethane	50	51		1	101	6.6	70-130	20	11/26/2019 0248
1,2-Dibromoethane (EDB)	50	49		1	97	7.1	70-130	20	11/26/2019 0248
1,2-Dichlorobenzene	50	48		1	97	7.7	70-130	20	11/26/2019 0248
1,3-Dichlorobenzene	50	48		1	96	10	70-130	20	11/26/2019 0248
1,4-Dichlorobenzene	50	47		1	94	8.8	70-130	20	11/26/2019 0248
Dichlorodifluoromethane	50	53		1	107	2.8	60-140	20	11/26/2019 0248
1,1-Dichloroethane	50	54		1	107	1.9	70-130	20	11/26/2019 0248
1,2-Dichloroethane	50	49		1	98	3.3	70-130	20	11/26/2019 0248
1,1-Dichloroethene	50	59		1	118	3.1	70-130	20	11/26/2019 0248
cis-1,2-Dichloroethene	50	52		1	105	3.2	70-130	20	11/26/2019 0248
trans-1,2-Dichloroethene	50	55		1	111	3.2	70-130	20	11/26/2019 0248
1,2-Dichloropropane	50	52		1	105	5.1	70-130	20	11/26/2019 0248
cis-1,3-Dichloropropene	50	54		1	107	7.1	70-130	20	11/26/2019 0248
trans-1,3-Dichloropropene	50	53		1	106	10	70-130	20	11/26/2019 0248
Ethylbenzene	50	49		1	99	9.0	70-130	20	11/26/2019 0248
2-Hexanone	100	100		1	103	7.1	70-130	20	11/26/2019 0248
Isopropylbenzene	50	49		1	98	8.2	70-130	20	11/26/2019 0248
Methyl acetate	50	56		1	111	2.1	70-130	20	11/26/2019 0248
Methyl tertiary butyl ether (MTBE)	50	50		1	101	4.1	70-130	20	11/26/2019 0248
4-Methyl-2-pentanone	100	100		1	104	5.2	70-130	20	11/26/2019 0248
Methylcyclohexane	50	52		1	103	8.8	70-130	20	11/26/2019 0248
Methylene chloride	50	50		1	99	2.2	70-130	20	11/26/2019 0248
Styrene	50	50		1	101	6.7	70-130	20	11/26/2019 0248
1,1,2,2-Tetrachloroethane	50	46		1	93	8.4	70-130	20	11/26/2019 0248
Tetrachloroethene	50	49		1	98	9.3	70-130	20	11/26/2019 0248
Toluene	50	49		1	99	7.7	70-130	20	11/26/2019 0248
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	52		1	103	2.4	70-130	20	11/26/2019 0248
1,2,4-Trichlorobenzene	50	46		1	93	11	70-130	20	11/26/2019 0248
1,1,1-Trichloroethane	50	51		1	103	3.1	70-130	20	11/26/2019 0248
1,1,2-Trichloroethane	50	48		1	96	6.8	70-130	20	11/26/2019 0248

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37056-003
Batch: 37056
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	49		1	98	6.7	70-130	20	11/26/2019 0248
Trichlorofluoromethane	50	54		1	107	1.8	70-130	20	11/26/2019 0248
Vinyl chloride	50	47		1	93	2.2	70-130	20	11/26/2019 0248
Xylenes (total)	100	99		1	99	8.2	70-130	20	11/26/2019 0248

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		106	70-130
Toluene-d8		108	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37128-001
Batch: 37128
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/kg	11/26/2019 1047
Benzene	ND		1	5.0	ug/kg	11/26/2019 1047
Bromodichloromethane	ND		1	5.0	ug/kg	11/26/2019 1047
Bromoform	ND		1	5.0	ug/kg	11/26/2019 1047
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	11/26/2019 1047
2-Butanone (MEK)	ND		1	20	ug/kg	11/26/2019 1047
Carbon disulfide	ND		1	5.0	ug/kg	11/26/2019 1047
Carbon tetrachloride	ND		1	5.0	ug/kg	11/26/2019 1047
Chlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1047
Chloroethane	ND		1	5.0	ug/kg	11/26/2019 1047
Chloroform	ND		1	5.0	ug/kg	11/26/2019 1047
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	11/26/2019 1047
Cyclohexane	ND		1	5.0	ug/kg	11/26/2019 1047
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	11/26/2019 1047
Dibromochloromethane	ND		1	5.0	ug/kg	11/26/2019 1047
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	11/26/2019 1047
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1047
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1047
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1047
Dichlorodifluoromethane	ND		1	5.0	ug/kg	11/26/2019 1047
1,1-Dichloroethane	ND		1	5.0	ug/kg	11/26/2019 1047
1,2-Dichloroethane	ND		1	5.0	ug/kg	11/26/2019 1047
1,1-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 1047
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 1047
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 1047
1,2-Dichloropropane	ND		1	5.0	ug/kg	11/26/2019 1047
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	11/26/2019 1047
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	11/26/2019 1047
Ethylbenzene	ND		1	5.0	ug/kg	11/26/2019 1047
2-Hexanone	ND		1	10	ug/kg	11/26/2019 1047
Isopropylbenzene	ND		1	5.0	ug/kg	11/26/2019 1047
Methyl acetate	ND		1	5.0	ug/kg	11/26/2019 1047
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	11/26/2019 1047
4-Methyl-2-pentanone	ND		1	10	ug/kg	11/26/2019 1047
Methylcyclohexane	ND		1	5.0	ug/kg	11/26/2019 1047
Methylene chloride	ND		1	5.0	ug/kg	11/26/2019 1047
Styrene	ND		1	5.0	ug/kg	11/26/2019 1047
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	11/26/2019 1047
Tetrachloroethene	ND		1	5.0	ug/kg	11/26/2019 1047
Toluene	ND		1	5.0	ug/kg	11/26/2019 1047
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	11/26/2019 1047
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1047
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	11/26/2019 1047
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	11/26/2019 1047

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37128-001
Batch: 37128
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	11/26/2019 1047
Trichlorofluoromethane	ND		1	5.0	ug/kg	11/26/2019 1047
Vinyl chloride	ND		1	5.0	ug/kg	11/26/2019 1047
Xylenes (total)	ND		1	10	ug/kg	11/26/2019 1047

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		95	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		99	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37128-002
Batch: 37128
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	100	60-140	11/26/2019 1024
Benzene	50	49		1	99	70-130	11/26/2019 1024
Bromodichloromethane	50	51		1	102	70-130	11/26/2019 1024
Bromoform	50	51		1	102	70-130	11/26/2019 1024
Bromomethane (Methyl bromide)	50	47		1	94	70-130	11/26/2019 1024
2-Butanone (MEK)	100	94		1	94	60-140	11/26/2019 1024
Carbon disulfide	50	47		1	95	70-130	11/26/2019 1024
Carbon tetrachloride	50	51		1	102	70-130	11/26/2019 1024
Chlorobenzene	50	50		1	101	70-130	11/26/2019 1024
Chloroethane	50	51		1	102	70-130	11/26/2019 1024
Chloroform	50	51		1	102	70-130	11/26/2019 1024
Chloromethane (Methyl chloride)	50	45		1	90	60-140	11/26/2019 1024
Cyclohexane	50	49		1	98	70-130	11/26/2019 1024
1,2-Dibromo-3-chloropropane (DBCP)	50	47		1	94	70-130	11/26/2019 1024
Dibromochloromethane	50	51		1	103	70-130	11/26/2019 1024
1,2-Dibromoethane (EDB)	50	50		1	100	70-130	11/26/2019 1024
1,2-Dichlorobenzene	50	50		1	99	70-130	11/26/2019 1024
1,3-Dichlorobenzene	50	50		1	101	70-130	11/26/2019 1024
1,4-Dichlorobenzene	50	50		1	101	70-130	11/26/2019 1024
Dichlorodifluoromethane	50	41		1	83	60-140	11/26/2019 1024
1,1-Dichloroethane	50	50		1	100	70-130	11/26/2019 1024
1,2-Dichloroethane	50	49		1	98	70-130	11/26/2019 1024
1,1-Dichloroethene	50	55		1	111	70-130	11/26/2019 1024
cis-1,2-Dichloroethene	50	50		1	101	70-130	11/26/2019 1024
trans-1,2-Dichloroethene	50	54		1	108	70-130	11/26/2019 1024
1,2-Dichloropropane	50	51		1	102	70-130	11/26/2019 1024
cis-1,3-Dichloropropene	50	54		1	108	70-130	11/26/2019 1024
trans-1,3-Dichloropropene	50	54		1	107	70-130	11/26/2019 1024
Ethylbenzene	50	52		1	103	70-130	11/26/2019 1024
2-Hexanone	100	99		1	99	70-130	11/26/2019 1024
Isopropylbenzene	50	50		1	100	70-130	11/26/2019 1024
Methyl acetate	50	48		1	95	70-130	11/26/2019 1024
Methyl tertiary butyl ether (MTBE)	50	49		1	98	70-130	11/26/2019 1024
4-Methyl-2-pentanone	100	95		1	95	70-130	11/26/2019 1024
Methylcyclohexane	50	49		1	99	70-130	11/26/2019 1024
Methylene chloride	50	47		1	95	70-130	11/26/2019 1024
Styrene	50	51		1	102	70-130	11/26/2019 1024
1,1,2,2-Tetrachloroethane	50	48		1	96	70-130	11/26/2019 1024
Tetrachloroethene	50	51		1	102	70-130	11/26/2019 1024
Toluene	50	49		1	98	70-130	11/26/2019 1024
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	47		1	94	70-130	11/26/2019 1024
1,2,4-Trichlorobenzene	50	50		1	101	70-130	11/26/2019 1024
1,1,1-Trichloroethane	50	49		1	99	70-130	11/26/2019 1024
1,1,2-Trichloroethane	50	50		1	99	70-130	11/26/2019 1024

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37128-002
Batch: 37128
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	50		1	100	70-130	11/26/2019 1024
Trichlorofluoromethane	50	46		1	92	70-130	11/26/2019 1024
Vinyl chloride	50	43		1	86	70-130	11/26/2019 1024
Xylenes (total)	100	100		1	103	70-130	11/26/2019 1024

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		92	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		101	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: UK21098-008DU
Batch: 37128
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Acetone	400	450		1	12	20	11/26/2019 1849
Benzene	ND	ND		1	0.00	20	11/26/2019 1849
Bromodichloromethane	ND	ND		1	0.00	20	11/26/2019 1849
Bromoform	ND	ND		1	0.00	20	11/26/2019 1849
Bromomethane (Methyl bromide)	ND	ND		1	0.00	20	11/26/2019 1849
2-Butanone (MEK)	45	ND		1	0.00	20	11/26/2019 1849
Carbon disulfide	ND	ND		1	0.00	20	11/26/2019 1849
Carbon tetrachloride	ND	ND		1	0.00	20	11/26/2019 1849
Chlorobenzene	ND	ND		1	0.00	20	11/26/2019 1849
Chloroethane	ND	ND		1	0.00	20	11/26/2019 1849
Chloroform	ND	ND		1	0.00	20	11/26/2019 1849
Chloromethane (Methyl chloride)	ND	ND		1	0.00	20	11/26/2019 1849
Cyclohexane	ND	ND		1	0.00	20	11/26/2019 1849
1,2-Dibromo-3-chloropropane (DBCP)	ND	ND		1	0.00	20	11/26/2019 1849
Dibromochloromethane	ND	ND		1	0.00	20	11/26/2019 1849
1,2-Dibromoethane (EDB)	ND	ND		1	0.00	20	11/26/2019 1849
1,2-Dichlorobenzene	ND	ND		1	0.00	20	11/26/2019 1849
1,3-Dichlorobenzene	ND	ND		1	0.00	20	11/26/2019 1849
1,4-Dichlorobenzene	ND	ND		1	0.00	20	11/26/2019 1849
Dichlorodifluoromethane	ND	ND		1	0.00	20	11/26/2019 1849
1,1-Dichloroethane	ND	ND		1	0.00	20	11/26/2019 1849
1,2-Dichloroethane	ND	ND		1	0.00	20	11/26/2019 1849
1,1-Dichloroethene	ND	ND		1	0.00	20	11/26/2019 1849
cis-1,2-Dichloroethene	ND	ND		1	0.00	20	11/26/2019 1849
trans-1,2-Dichloroethene	ND	ND		1	0.00	20	11/26/2019 1849
1,2-Dichloropropane	ND	ND		1	0.00	20	11/26/2019 1849
cis-1,3-Dichloropropene	ND	ND		1	0.00	20	11/26/2019 1849
trans-1,3-Dichloropropene	ND	ND		1	0.00	20	11/26/2019 1849
Ethylbenzene	ND	ND		1	0.00	20	11/26/2019 1849
2-Hexanone	ND	ND		1	0.00	20	11/26/2019 1849
Isopropylbenzene	ND	ND		1	0.00	20	11/26/2019 1849
Methyl acetate	ND	ND		1	0.00	20	11/26/2019 1849
Methyl tertiary butyl ether (MTBE)	ND	ND		1	0.00	20	11/26/2019 1849
4-Methyl-2-pentanone	ND	ND		1	0.00	20	11/26/2019 1849
Methylcyclohexane	ND	ND		1	0.00	20	11/26/2019 1849
Methylene chloride	ND	ND		1	0.00	20	11/26/2019 1849
Styrene	ND	ND		1	0.00	20	11/26/2019 1849
1,1,2,2-Tetrachloroethane	ND	ND		1	0.00	20	11/26/2019 1849
Tetrachloroethene	ND	ND		1	0.00	20	11/26/2019 1849
Toluene	ND	ND		1	0.00	20	11/26/2019 1849
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND		1	0.00	20	11/26/2019 1849
1,2,4-Trichlorobenzene	ND	ND		1	0.00	20	11/26/2019 1849
1,1,1-Trichloroethane	ND	ND		1	0.00	20	11/26/2019 1849
1,1,2-Trichloroethane	ND	ND		1	0.00	20	11/26/2019 1849

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - Duplicate

Sample ID: UK21098-008DU
Batch: 37128
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Result (ug/kg)	Q	Dil	% RPD	% RPD Limit	Analysis Date
Trichloroethene	ND	ND		1	0.00	20	11/26/2019 1849
Trichlorofluoromethane	ND	ND		1	0.00	20	11/26/2019 1849
Vinyl chloride	ND	ND		1	0.00	20	11/26/2019 1849
Xylenes (total)	ND	ND		1	0.00	20	11/26/2019 1849

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		88	53-142
Bromofluorobenzene		84	47-138
Toluene-d8		111	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: UK21098-010MS
Batch: 37128
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	180	110	380	N	1	172	70-130	11/26/2019 1826
Benzene	ND	57	52		1	90	70-130	11/26/2019 1826
Bromodichloromethane	ND	57	49		1	86	70-130	11/26/2019 1826
Bromoform	ND	57	46		1	80	70-130	11/26/2019 1826
Bromomethane (Methyl bromide)	ND	57	52		1	90	70-130	11/26/2019 1826
2-Butanone (MEK)	28	110	69	N	1	36	70-130	11/26/2019 1826
Carbon disulfide	ND	57	53		1	93	70-130	11/26/2019 1826
Carbon tetrachloride	ND	57	54		1	94	70-130	11/26/2019 1826
Chlorobenzene	ND	57	54		1	93	70-130	11/26/2019 1826
Chloroethane	ND	57	60		1	104	70-130	11/26/2019 1826
Chloroform	ND	57	52		1	90	70-130	11/26/2019 1826
Chloromethane (Methyl chloride)	ND	57	52		1	90	60-140	11/26/2019 1826
Cyclohexane	ND	57	56		1	97	70-130	11/26/2019 1826
1,2-Dibromo-3-chloropropane (DBCP)	ND	57	56		1	98	70-130	11/26/2019 1826
Dibromochloromethane	ND	57	52		1	90	70-130	11/26/2019 1826
1,2-Dibromoethane (EDB)	ND	57	52		1	91	70-130	11/26/2019 1826
1,2-Dichlorobenzene	ND	57	56		1	97	70-130	11/26/2019 1826
1,3-Dichlorobenzene	ND	57	62		1	108	70-130	11/26/2019 1826
1,4-Dichlorobenzene	ND	57	61		1	107	70-130	11/26/2019 1826
Dichlorodifluoromethane	ND	57	52		1	91	60-140	11/26/2019 1826
1,1-Dichloroethane	ND	57	53		1	92	70-130	11/26/2019 1826
1,2-Dichloroethane	ND	57	48		1	83	70-130	11/26/2019 1826
1,1-Dichloroethene	ND	57	63		1	110	70-130	11/26/2019 1826
cis-1,2-Dichloroethene	ND	57	52		1	90	70-130	11/26/2019 1826
trans-1,2-Dichloroethene	ND	57	58		1	102	70-130	11/26/2019 1826
1,2-Dichloropropane	ND	57	51		1	89	70-130	11/26/2019 1826
cis-1,3-Dichloropropene	ND	57	51		1	89	70-130	11/26/2019 1826
trans-1,3-Dichloropropene	ND	57	57		1	99	70-130	11/26/2019 1826
Ethylbenzene	ND	57	57		1	99	70-130	11/26/2019 1826
2-Hexanone	ND	110	81		1	71	70-130	11/26/2019 1826
Isopropylbenzene	ND	57	52		1	90	70-130	11/26/2019 1826
Methyl acetate	ND	57	94	N	1	163	70-130	11/26/2019 1826
Methyl tertiary butyl ether (MTBE)	ND	57	49		1	85	70-130	11/26/2019 1826
4-Methyl-2-pentanone	ND	110	87		1	76	70-130	11/26/2019 1826
Methylcyclohexane	ND	57	50		1	86	70-130	11/26/2019 1826
Methylene chloride	ND	57	51		1	89	70-130	11/26/2019 1826
Styrene	ND	57	49		1	86	70-130	11/26/2019 1826
1,1,2,2-Tetrachloroethane	ND	57	68		1	117	70-130	11/26/2019 1826
Tetrachloroethene	ND	57	59		1	102	70-130	11/26/2019 1826
Toluene	ND	57	58		1	101	70-130	11/26/2019 1826
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	57	59		1	102	70-130	11/26/2019 1826
1,2,4-Trichlorobenzene	ND	57	35	N	1	61	70-130	11/26/2019 1826
1,1,1-Trichloroethane	ND	57	54		1	94	70-130	11/26/2019 1826
1,1,2-Trichloroethane	ND	57	54		1	94	70-130	11/26/2019 1826

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: UK21098-010MS
Batch: 37128
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	57	52		1	90	70-130	11/26/2019 1826
Trichlorofluoromethane	ND	57	59		1	103	70-130	11/26/2019 1826
Vinyl chloride	ND	57	53		1	92	70-130	11/26/2019 1826
Xylenes (total)	ND	110	110		1	96	70-130	11/26/2019 1826

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		87	53-142
Bromofluorobenzene		82	47-138
Toluene-d8		112	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37193-001
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/kg	11/26/2019 1952
Benzene	ND		1	5.0	ug/kg	11/26/2019 1952
Bromodichloromethane	ND		1	5.0	ug/kg	11/26/2019 1952
Bromoform	ND		1	5.0	ug/kg	11/26/2019 1952
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	11/26/2019 1952
2-Butanone (MEK)	ND		1	20	ug/kg	11/26/2019 1952
Carbon disulfide	ND		1	5.0	ug/kg	11/26/2019 1952
Carbon tetrachloride	ND		1	5.0	ug/kg	11/26/2019 1952
Chlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
Chloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
Chloroform	ND		1	5.0	ug/kg	11/26/2019 1952
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	11/26/2019 1952
Cyclohexane	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	11/26/2019 1952
Dibromochloromethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
Dichlorodifluoromethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,1-Dichloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dichloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,1-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dichloropropane	ND		1	5.0	ug/kg	11/26/2019 1952
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	11/26/2019 1952
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	11/26/2019 1952
Ethylbenzene	ND		1	5.0	ug/kg	11/26/2019 1952
2-Hexanone	ND		1	10	ug/kg	11/26/2019 1952
Isopropylbenzene	ND		1	5.0	ug/kg	11/26/2019 1952
Methyl acetate	ND		1	5.0	ug/kg	11/26/2019 1952
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	11/26/2019 1952
4-Methyl-2-pentanone	ND		1	10	ug/kg	11/26/2019 1952
Methylcyclohexane	ND		1	5.0	ug/kg	11/26/2019 1952
Methylene chloride	ND		1	5.0	ug/kg	11/26/2019 1952
Styrene	ND		1	5.0	ug/kg	11/26/2019 1952
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
Tetrachloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
Toluene	ND		1	5.0	ug/kg	11/26/2019 1952
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	11/26/2019 1952

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37193-001
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
Trichlorofluoromethane	ND		1	5.0	ug/kg	11/26/2019 1952
Vinyl chloride	ND		1	5.0	ug/kg	11/26/2019 1952
Xylenes (total)	ND		1	10	ug/kg	11/26/2019 1952

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		109	53-142
Bromofluorobenzene		110	47-138
Toluene-d8		119	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37193-002
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	104	60-140	11/26/2019 1851
Benzene	50	50		1	100	70-130	11/26/2019 1851
Bromodichloromethane	50	51		1	103	70-130	11/26/2019 1851
Bromoform	50	53		1	105	70-130	11/26/2019 1851
Bromomethane (Methyl bromide)	50	48		1	95	70-130	11/26/2019 1851
2-Butanone (MEK)	100	100		1	102	60-140	11/26/2019 1851
Carbon disulfide	50	49		1	97	70-130	11/26/2019 1851
Carbon tetrachloride	50	52		1	103	70-130	11/26/2019 1851
Chlorobenzene	50	50		1	101	70-130	11/26/2019 1851
Chloroethane	50	53		1	107	70-130	11/26/2019 1851
Chloroform	50	50		1	100	70-130	11/26/2019 1851
Chloromethane (Methyl chloride)	50	44		1	88	60-140	11/26/2019 1851
Cyclohexane	50	54		1	108	70-130	11/26/2019 1851
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	97	70-130	11/26/2019 1851
Dibromochloromethane	50	52		1	104	70-130	11/26/2019 1851
1,2-Dibromoethane (EDB)	50	51		1	102	70-130	11/26/2019 1851
1,2-Dichlorobenzene	50	51		1	101	70-130	11/26/2019 1851
1,3-Dichlorobenzene	50	51		1	101	70-130	11/26/2019 1851
1,4-Dichlorobenzene	50	51		1	102	70-130	11/26/2019 1851
Dichlorodifluoromethane	50	49		1	99	60-140	11/26/2019 1851
1,1-Dichloroethane	50	49		1	99	70-130	11/26/2019 1851
1,2-Dichloroethane	50	48		1	95	70-130	11/26/2019 1851
1,1-Dichloroethene	50	59		1	118	70-130	11/26/2019 1851
cis-1,2-Dichloroethene	50	50		1	101	70-130	11/26/2019 1851
trans-1,2-Dichloroethene	50	55		1	110	70-130	11/26/2019 1851
1,2-Dichloropropane	50	51		1	102	70-130	11/26/2019 1851
cis-1,3-Dichloropropene	50	53		1	106	70-130	11/26/2019 1851
trans-1,3-Dichloropropene	50	53		1	106	70-130	11/26/2019 1851
Ethylbenzene	50	52		1	103	70-130	11/26/2019 1851
2-Hexanone	100	100		1	100	70-130	11/26/2019 1851
Isopropylbenzene	50	50		1	101	70-130	11/26/2019 1851
Methyl acetate	50	47		1	94	70-130	11/26/2019 1851
Methyl tertiary butyl ether (MTBE)	50	48		1	97	70-130	11/26/2019 1851
4-Methyl-2-pentanone	100	94		1	94	70-130	11/26/2019 1851
Methylcyclohexane	50	55		1	110	70-130	11/26/2019 1851
Methylene chloride	50	48		1	96	70-130	11/26/2019 1851
Styrene	50	51		1	101	70-130	11/26/2019 1851
1,1,2,2-Tetrachloroethane	50	47		1	94	70-130	11/26/2019 1851
Tetrachloroethene	50	57		1	113	70-130	11/26/2019 1851
Toluene	50	51		1	102	70-130	11/26/2019 1851
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	52		1	104	70-130	11/26/2019 1851
1,2,4-Trichlorobenzene	50	53		1	106	70-130	11/26/2019 1851
1,1,1-Trichloroethane	50	51		1	103	70-130	11/26/2019 1851
1,1,2-Trichloroethane	50	49		1	98	70-130	11/26/2019 1851

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37193-002
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	53		1	106	70-130	11/26/2019 1851
Trichlorofluoromethane	50	54		1	108	70-130	11/26/2019 1851
Vinyl chloride	50	44		1	88	70-130	11/26/2019 1851
Xylenes (total)	100	100		1	102	70-130	11/26/2019 1851

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		103	53-142
Bromofluorobenzene		120	47-138
Toluene-d8		118	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37193-003
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	97		1	97	7.2	60-140	20	11/26/2019 1929
Benzene	50	47		1	94	7.0	70-130	20	11/26/2019 1929
Bromodichloromethane	50	49		1	98	4.6	70-130	20	11/26/2019 1929
Bromoform	50	52		1	103	1.9	70-130	20	11/26/2019 1929
Bromomethane (Methyl bromide)	50	44		1	89	6.7	70-130	20	11/26/2019 1929
2-Butanone (MEK)	100	95		1	95	6.2	60-140	20	11/26/2019 1929
Carbon disulfide	50	43		1	87	11	70-130	20	11/26/2019 1929
Carbon tetrachloride	50	46		1	92	11	70-130	20	11/26/2019 1929
Chlorobenzene	50	48		1	96	4.6	70-130	20	11/26/2019 1929
Chloroethane	50	48		1	96	10	70-130	20	11/26/2019 1929
Chloroform	50	46		1	93	7.7	70-130	20	11/26/2019 1929
Chloromethane (Methyl chloride)	50	40		1	79	11	60-140	20	11/26/2019 1929
Cyclohexane	50	47		1	94	14	70-130	20	11/26/2019 1929
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	96	0.97	70-130	20	11/26/2019 1929
Dibromochloromethane	50	50		1	100	4.0	70-130	20	11/26/2019 1929
1,2-Dibromoethane (EDB)	50	49		1	98	4.2	70-130	20	11/26/2019 1929
1,2-Dichlorobenzene	50	50		1	99	1.7	70-130	20	11/26/2019 1929
1,3-Dichlorobenzene	50	50		1	99	2.2	70-130	20	11/26/2019 1929
1,4-Dichlorobenzene	50	49		1	99	2.9	70-130	20	11/26/2019 1929
Dichlorodifluoromethane	50	44		1	87	13	60-140	20	11/26/2019 1929
1,1-Dichloroethane	50	45		1	90	9.0	70-130	20	11/26/2019 1929
1,2-Dichloroethane	50	45		1	89	6.5	70-130	20	11/26/2019 1929
1,1-Dichloroethene	50	52		1	105	12	70-130	20	11/26/2019 1929
cis-1,2-Dichloroethene	50	46		1	92	9.0	70-130	20	11/26/2019 1929
trans-1,2-Dichloroethene	50	50		1	99	11	70-130	20	11/26/2019 1929
1,2-Dichloropropane	50	48		1	96	5.7	70-130	20	11/26/2019 1929
cis-1,3-Dichloropropene	50	51		1	102	4.4	70-130	20	11/26/2019 1929
trans-1,3-Dichloropropene	50	51		1	102	3.2	70-130	20	11/26/2019 1929
Ethylbenzene	50	48		1	96	7.2	70-130	20	11/26/2019 1929
2-Hexanone	100	98		1	98	1.8	70-130	20	11/26/2019 1929
Isopropylbenzene	50	48		1	96	5.2	70-130	20	11/26/2019 1929
Methyl acetate	50	46		1	91	3.0	70-130	20	11/26/2019 1929
Methyl tertiary butyl ether (MTBE)	50	46		1	92	4.6	70-130	20	11/26/2019 1929
4-Methyl-2-pentanone	100	91		1	91	3.2	70-130	20	11/26/2019 1929
Methylcyclohexane	50	49		1	98	11	70-130	20	11/26/2019 1929
Methylene chloride	50	45		1	89	7.3	70-130	20	11/26/2019 1929
Styrene	50	48		1	96	5.1	70-130	20	11/26/2019 1929
1,1,2,2-Tetrachloroethane	50	47		1	93	1.2	70-130	20	11/26/2019 1929
Tetrachloroethene	50	52		1	105	7.7	70-130	20	11/26/2019 1929
Toluene	50	48		1	96	6.5	70-130	20	11/26/2019 1929
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	46		1	92	13	70-130	20	11/26/2019 1929
1,2,4-Trichlorobenzene	50	52		1	105	1.3	70-130	20	11/26/2019 1929
1,1,1-Trichloroethane	50	46		1	92	11	70-130	20	11/26/2019 1929
1,1,2-Trichloroethane	50	48		1	96	1.6	70-130	20	11/26/2019 1929

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37193-003
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	49		1	97	8.2	70-130	20	11/26/2019 1929
Trichlorofluoromethane	50	48		1	96	12	70-130	20	11/26/2019 1929
Vinyl chloride	50	40		1	80	10	70-130	20	11/26/2019 1929
Xylenes (total)	100	97		1	97	6.0	70-130	20	11/26/2019 1929

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		120	47-138
Toluene-d8		119	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ37405-001
Batch: 37405
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1156

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acenaphthene	ND		1	13	ug/kg	11/30/2019 1642
Acenaphthylene	ND		1	13	ug/kg	11/30/2019 1642
Acetophenone	ND		1	67	ug/kg	11/30/2019 1642
Anthracene	ND		1	13	ug/kg	11/30/2019 1642
Atrazine	ND		1	67	ug/kg	11/30/2019 1642
Benzaldehyde	ND		1	67	ug/kg	11/30/2019 1642
Benzo(a)anthracene	ND		1	13	ug/kg	11/30/2019 1642
Benzo(a)pyrene	ND		1	13	ug/kg	11/30/2019 1642
Benzo(b)fluoranthene	ND		1	13	ug/kg	11/30/2019 1642
Benzo(g,h,i)perylene	ND		1	13	ug/kg	11/30/2019 1642
Benzo(k)fluoranthene	ND		1	13	ug/kg	11/30/2019 1642
1,1'-Biphenyl	ND		1	67	ug/kg	11/30/2019 1642
4-Bromophenyl phenyl ether	ND		1	67	ug/kg	11/30/2019 1642
Butyl benzyl phthalate	ND		1	67	ug/kg	11/30/2019 1642
Caprolactam	ND		1	67	ug/kg	11/30/2019 1642
Carbazole	ND		1	67	ug/kg	11/30/2019 1642
bis (2-Chloro-1-methylethyl) ether	ND		1	67	ug/kg	11/30/2019 1642
4-Chloro-3-methyl phenol	ND		1	67	ug/kg	11/30/2019 1642
4-Chloroaniline	ND		1	67	ug/kg	11/30/2019 1642
bis(2-Chloroethoxy)methane	ND		1	67	ug/kg	11/30/2019 1642
bis(2-Chloroethyl)ether	ND		1	67	ug/kg	11/30/2019 1642
2-Chloronaphthalene	ND		1	67	ug/kg	11/30/2019 1642
2-Chlorophenol	ND		1	67	ug/kg	11/30/2019 1642
4-Chlorophenyl phenyl ether	ND		1	67	ug/kg	11/30/2019 1642
Chrysene	ND		1	13	ug/kg	11/30/2019 1642
Dibenzo(a,h)anthracene	ND		1	13	ug/kg	11/30/2019 1642
Dibenzofuran	ND		1	67	ug/kg	11/30/2019 1642
3,3'-Dichlorobenzidine	ND		1	67	ug/kg	11/30/2019 1642
2,4-Dichlorophenol	ND		1	67	ug/kg	11/30/2019 1642
Diethylphthalate	ND		1	67	ug/kg	11/30/2019 1642
Dimethyl phthalate	ND		1	67	ug/kg	11/30/2019 1642
2,4-Dimethylphenol	ND		1	67	ug/kg	11/30/2019 1642
Di-n-butyl phthalate	ND		1	67	ug/kg	11/30/2019 1642
4,6-Dinitro-2-methylphenol	ND		1	330	ug/kg	11/30/2019 1642
2,4-Dinitrophenol	ND		1	330	ug/kg	11/30/2019 1642
2,4-Dinitrotoluene	ND		1	130	ug/kg	11/30/2019 1642
2,6-Dinitrotoluene	ND		1	130	ug/kg	11/30/2019 1642
Di-n-octylphthalate	ND		1	67	ug/kg	11/30/2019 1642
bis(2-Ethylhexyl)phthalate	ND		1	67	ug/kg	11/30/2019 1642
Fluoranthene	ND		1	13	ug/kg	11/30/2019 1642
Fluorene	ND		1	13	ug/kg	11/30/2019 1642
Hexachlorobenzene	ND		1	67	ug/kg	11/30/2019 1642
Hexachlorobutadiene	ND		1	67	ug/kg	11/30/2019 1642
Hexachlorocyclopentadiene	ND		1	330	ug/kg	11/30/2019 1642

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ37405-001
Batch: 37405
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1156

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Hexachloroethane	ND		1	67	ug/kg	11/30/2019 1642
Indeno(1,2,3-c,d)pyrene	ND		1	13	ug/kg	11/30/2019 1642
Isophorone	ND		1	67	ug/kg	11/30/2019 1642
2-Methylnaphthalene	ND		1	13	ug/kg	11/30/2019 1642
2-Methylphenol	ND		1	67	ug/kg	11/30/2019 1642
3+4-Methylphenol	ND		1	130	ug/kg	11/30/2019 1642
Naphthalene	ND		1	13	ug/kg	11/30/2019 1642
2-Nitroaniline	ND		1	130	ug/kg	11/30/2019 1642
3-Nitroaniline	ND		1	130	ug/kg	11/30/2019 1642
4-Nitroaniline	ND		1	130	ug/kg	11/30/2019 1642
Nitrobenzene	ND		1	67	ug/kg	11/30/2019 1642
2-Nitrophenol	ND		1	130	ug/kg	11/30/2019 1642
4-Nitrophenol	ND		1	330	ug/kg	11/30/2019 1642
N-Nitrosodi-n-propylamine	ND		1	67	ug/kg	11/30/2019 1642
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	67	ug/kg	11/30/2019 1642
Pentachlorophenol	ND		1	330	ug/kg	11/30/2019 1642
Phenanthrene	ND		1	13	ug/kg	11/30/2019 1642
Phenol	ND		1	67	ug/kg	11/30/2019 1642
Pyrene	ND		1	13	ug/kg	11/30/2019 1642
2,4,5-Trichlorophenol	ND		1	67	ug/kg	11/30/2019 1642
2,4,6-Trichlorophenol	ND		1	67	ug/kg	11/30/2019 1642

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		69	24-137
2-Fluorophenol		68	16-136
Nitrobenzene-d5		68	12-144
Phenol-d5		76	26-148
Terphenyl-d14		84	20-127
2,4,6-Tribromophenol		52	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37405-002
Batch: 37405
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1156

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	670	490		1	73	46-114	11/30/2019 1707
Acenaphthylene	670	490		1	74	44-122	11/30/2019 1707
Acetophenone	670	450		1	67	48-111	11/30/2019 1707
Anthracene	670	500		1	75	50-119	11/30/2019 1707
Atrazine	670	490		1	73	48-116	11/30/2019 1707
Benzaldehyde	670	400		1	60	10-110	11/30/2019 1707
Benzo(a)anthracene	670	490		1	73	47-121	11/30/2019 1707
Benzo(a)pyrene	670	520		1	79	55-134	11/30/2019 1707
Benzo(b)fluoranthene	670	490		1	74	28-139	11/30/2019 1707
Benzo(g,h,i)perylene	670	520		1	77	36-125	11/30/2019 1707
Benzo(k)fluoranthene	670	500		1	75	47-130	11/30/2019 1707
1,1'-Biphenyl	670	470		1	71	49-110	11/30/2019 1707
4-Bromophenyl phenyl ether	670	420		1	63	46-118	11/30/2019 1707
Butyl benzyl phthalate	670	650		1	98	46-128	11/30/2019 1707
Caprolactam	670	560		1	85	43-121	11/30/2019 1707
Carbazole	670	500		1	75	47-128	11/30/2019 1707
bis (2-Chloro-1-methylethyl) ether	670	350		1	52	31-102	11/30/2019 1707
4-Chloro-3-methyl phenol	670	570		1	85	49-118	11/30/2019 1707
4-Chloroaniline	670	390		1	58	17-106	11/30/2019 1707
bis(2-Chloroethoxy)methane	670	460		1	68	39-108	11/30/2019 1707
bis(2-Chloroethyl)ether	670	490		1	74	32-105	11/30/2019 1707
2-Chloronaphthalene	670	470		1	70	31-127	11/30/2019 1707
2-Chlorophenol	670	500		1	75	37-106	11/30/2019 1707
4-Chlorophenyl phenyl ether	670	470		1	71	47-116	11/30/2019 1707
Chrysene	670	490		1	73	45-126	11/30/2019 1707
Dibenzo(a,h)anthracene	670	520		1	78	45-122	11/30/2019 1707
Dibenzofuran	670	480		1	73	45-112	11/30/2019 1707
3,3'-Dichlorobenzidine	670	430		1	64	10-119	11/30/2019 1707
2,4-Dichlorophenol	670	490		1	73	41-113	11/30/2019 1707
Diethylphthalate	670	550		1	82	49-123	11/30/2019 1707
Dimethyl phthalate	670	510		1	76	48-120	11/30/2019 1707
2,4-Dimethylphenol	670	650		1	98	33-123	11/30/2019 1707
Di-n-butyl phthalate	670	540		1	81	51-129	11/30/2019 1707
4,6-Dinitro-2-methylphenol	670	470		1	71	40-130	11/30/2019 1707
2,4-Dinitrophenol	1300	890		1	67	10-113	11/30/2019 1707
2,4-Dinitrotoluene	670	540		1	81	48-124	11/30/2019 1707
2,6-Dinitrotoluene	670	510		1	76	47-125	11/30/2019 1707
Di-n-octylphthalate	670	580		1	87	49-142	11/30/2019 1707
bis(2-Ethylhexyl)phthalate	670	550		1	83	45-128	11/30/2019 1707
Fluoranthene	670	470		1	70	50-123	11/30/2019 1707
Fluorene	670	500		1	76	48-117	11/30/2019 1707
Hexachlorobenzene	670	400		1	60	44-122	11/30/2019 1707
Hexachlorobutadiene	670	440		1	65	33-103	11/30/2019 1707
Hexachlorocyclopentadiene	3300	2300		1	69	18-121	11/30/2019 1707

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37405-002
Batch: 37405
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1156

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexachloroethane	670	460		1	69	30-96	11/30/2019 1707
Indeno(1,2,3-c,d)pyrene	670	520		1	78	45-123	11/30/2019 1707
Isophorone	670	500		1	75	41-113	11/30/2019 1707
2-Methylnaphthalene	670	470		1	70	40-106	11/30/2019 1707
2-Methylphenol	670	500		1	75	32-107	11/30/2019 1707
3+4-Methylphenol	670	530		1	80	39-108	11/30/2019 1707
Naphthalene	670	480		1	73	36-110	11/30/2019 1707
2-Nitroaniline	670	540		1	81	45-123	11/30/2019 1707
3-Nitroaniline	670	480		1	71	24-127	11/30/2019 1707
4-Nitroaniline	670	580		1	87	48-127	11/30/2019 1707
Nitrobenzene	670	480		1	72	33-114	11/30/2019 1707
2-Nitrophenol	670	460		1	70	35-108	11/30/2019 1707
4-Nitrophenol	1300	1500		1	109	18-154	11/30/2019 1707
N-Nitrosodi-n-propylamine	670	540		1	81	32-115	11/30/2019 1707
N-Nitrosodiphenylamine (Diphenylamine)	670	490		1	73	53-150	11/30/2019 1707
Pentachlorophenol	1300	820		1	61	27-138	11/30/2019 1707
Phenanthrene	670	480		1	73	49-117	11/30/2019 1707
Phenol	670	520		1	78	36-108	11/30/2019 1707
Pyrene	670	520		1	77	47-119	11/30/2019 1707
2,4,5-Trichlorophenol	670	470		1	71	46-122	11/30/2019 1707
2,4,6-Trichlorophenol	670	470		1	70	38-115	11/30/2019 1707

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		68	24-137
2-Fluorophenol		72	16-136
Nitrobenzene-d5		66	12-144
Phenol-d5		75	26-148
Terphenyl-d14		80	20-127
2,4,6-Tribromophenol		55	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody
and
Miscellaneous Documents

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

SHEALY Chain of Custody Record

Number 101672

Client: WESTINGHOUSE	Report to Contact: DIANA JOYNER	Telephone No. / E-mail: 803 647 1720 JOYNERDP@WESTINGHOUSE.COM	Quote No.
Address: 5801 BLUFF RD	Sampler's Signature:	Analysis (Attach list if more space is needed)	Page 1 of 1
City: HOPKINS	State: SC	Zip Code:	Printed Name:
Project Name: RI IMPLEMENTATION			
Project No.: 60595649	P.O. No.		

UK21098

SRW

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Comp	Matrix: Aqueous	Soil	Other	No. of Containers by Preservative Type: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnOAc/NaOH	VOC's 8260	SVOC's 8270	TARGETS	Remarks / Cooler I.D.
SED-30 0"-6"	11-21-19	0955	G		X		1					1	X	X	X	TB-112119-01 VOC's
SED-30 6"-12"		1000	G		X		1					1	X	X	X	
SED-31 0"-6"		1200	G		X		1					1	X	X	X	
SED-31 6"-12"		1205	G		X		1					1	X	X	X	
SED-32 0"-6"		1400	G		X		1					1	X	X	X	
SED-32 6"-12"		1405	G		X		1					1	X	X	X	
SED-33 0"-6"		1500	G		X		1					1	X	X	X	
SED-33 6"-12"		1505	G		X		1					1	X	X	X	
SED-34 0"-6"		1610	G		X		1					1	X	X	X	
SED-34 6"-12"		1615	G		X		1					1	X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☑ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☑ Disposal by Lab

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

QC Requirements (Specify)

	Date	Time
1. Relinquished by	11-21-19	1739
2. Relinquished by		
3. Relinquished by		
4. Relinquished by		

	Date	Time
1. Received by		
2. Received by		
3. Received by		
4. Laboratory received by	11/21/19	1739

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

LAB USE ONLY
Received on Ice (Circle) Yes No Ice Pack
Receipt Temp. 1.2 °C

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

Document Number: F-AD-138 Effective Date: 08-01-2014

SHEALY ENVIRONMENTAL SERVICES, INC.

Shealy Environmental Services, Inc.
Document Number: MB0018C-14

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

Sample Receipt Checklist (SRC)

Client: Westinghouse Cooler Inspected by/date: BMG / 11/21/19 Lot #: UK21098

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: 19-2044

1.2 / 1.2 °C NA / NA °C NA / NA °C NA / NA °C

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

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☐ Yes	☐ No	☑ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☐ Yes	☐ No	☑ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC?
☑ Yes	☐ No		7. Were sample IDs listed on all sample containers?
☑ Yes	☐ No		8. Was collection date & time listed on the COC?
☑ Yes	☐ No		9. Was collection date & time listed on all sample containers?
☑ Yes	☐ No		10. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☑ Yes	☐ No		13. Was adequate sample volume available?
☑ Yes	☐ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☐ Yes	☑ No	☐ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	19. Were all applicable NH_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?
☐ Yes	☑ No		21. Was the quote number listed on the container label? If yes, Quote # NA

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

Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: 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 ($Na_2S_2O_3$) with Shealy ID: NA.

SR barcode labels applied by: BMG Date: 11/21/19

Comments:

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

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

Project Name: RI Implementation

Project Number: 60595649

Lot Number:**UK22073**

Date Completed:12/04/2019

12/06/2019 11:15 AM
Approved and released by:
Project Manager: Grant Wilton

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

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

Case Narrative
Westinghouse Electric Company
Lot Number: UK22073

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.

Nitrate Analysis – Method 9056A
Sample -011: The original analysis was performed while there were irregularities in the baseline causing inaccurate responses. Reanalysis of the was performed outside of the analytical holding time. The out of hold analysis is reported.

Volatile Organic Analysis – Method 8260B
Samples -001, -003, -007: Acetone was reported as an estimated value in as the result was above the upper calibration level. The sample was re-analyzed from the medium level (methanol) vial, but was not reported due to the result being below the LOQ therefore only the low level was reported.

Semivolatile Organic Analysis – Method 8270D
Samples -008, -009: The samples were analyzed at a 5X dilution due to the high concentration of non-target analytes present. The reporting limits were raised accordingly.

Sample Summary

Westinghouse Electric Company

Lot Number: UK22073

Project Name: RI Implementation

Project Number: 60595649

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SED-35 0"-6"	Solid	11/22/2019 0840	11/22/2019
002	SED-35 6"-12"	Solid	11/22/2019 0845	11/22/2019
003	SED-36 0"-6"	Solid	11/22/2019 1000	11/22/2019
004	SED-36 6"-12"	Solid	11/22/2019 1005	11/22/2019
005	SED-37 0"-6"	Solid	11/22/2019 1120	11/22/2019
006	SED-37 6"-12"	Solid	11/22/2019 1125	11/22/2019
007	SED-37 6"-12" DUP	Solid	11/22/2019 1125	11/22/2019
008	SED-40 0"-6"	Solid	11/22/2019 1220	11/22/2019
009	SED-38 0"-6"	Solid	11/22/2019 1450	11/22/2019
010	SED-39 6"-12"	Solid	11/22/2019 1520	11/22/2019
011	EB-01-112219	Aqueous	11/22/2019 1320	11/22/2019
012	TB-01-112219	Aqueous	11/22/2019	11/22/2019

(12 samples)

Detection Summary

Westinghouse Electric Company

Lot Number: UK22073

Project Name: RI Implementation

Project Number: 60595649

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	SED-35 0"-6"	Solid	Acetone	8260B	390	E	ug/kg	7
002	SED-35 6"-12"	Solid	Acetone	8260B	310		ug/kg	12
003	SED-36 0"-6"	Solid	Acetone	8260B	370	E	ug/kg	17
004	SED-36 6"-12"	Solid	Nitrate - N (soluble)	9056A	0.55		mg/kg	21
004	SED-36 6"-12"	Solid	Acetone	8260B	350		ug/kg	22
005	SED-37 0"-6"	Solid	Acetone	8260B	300		ug/kg	27
006	SED-37 6"-12"	Solid	Acetone	8260B	350		ug/kg	32
007	SED-37 6"-12" DUP	Solid	Acetone	8260B	360	E	ug/kg	37
008	SED-40 0"-6"	Solid	Acetone	8260B	260		ug/kg	42
009	SED-38 0"-6"	Solid	Nitrate - N (soluble)	9056A	0.66		mg/kg	46
009	SED-38 0"-6"	Solid	Acetone	8260B	400		ug/kg	47

(11 detections)

Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UK22073-001	
Description: SED-35 0"-6"		Matrix: Solid	
Date Sampled: 11/22/2019 0840	Project Name: RI Implementation	% Solids: 62.2	11/23/2019 1841
Date Received: 11/22/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 1422	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK22073-001
Description: SED-35 0"-6"
Matrix: Solid
Date Sampled: 11/22/2019 0840
Project Name: RI Implementation
% Solids: 62.2 11/23/2019 1841
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2035	ALR1		37193	5.63

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	390	E	18	ug/kg	1
Benzene	71-43-2	8260B	ND		4.4	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.4	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.4	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		18	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.4	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.4	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.4	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.4	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.4	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.4	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.4	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.4	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.4	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.4	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.4	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.4	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.4	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.4	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.9	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.4	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.4	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.4	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.9	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.4	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.4	ug/kg	1
Styrene	100-42-5	8260B	ND		4.4	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.4	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.4	ug/kg	1
Toluene	108-88-3	8260B	ND		4.4	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.4	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.4	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.4	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.4	ug/kg	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK22073-001	
Description: SED-35 0"-6"		Matrix: Solid	
Date Sampled: 11/22/2019 0840	Project Name: RI Implementation	% Solids: 62.2	11/23/2019 1841
Date Received: 11/22/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2035	ALR1		37193	5.63

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.4	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.4	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	53-142
Bromofluorobenzene		109	47-138
Toluene-d8		122	68-124

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-001
Description: SED-35 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 0840 | Project Name: RI Implementation | % Solids: 62.2 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/29/2019 1601	SCD	11/25/2019 1328	36920

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		65	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		65	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		65	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		65	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		65	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		65	ug/kg	1
Caprolactam	105-60-2	8270D	ND		65	ug/kg	1
Carbazole	86-74-8	8270D	ND		65	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		65	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		65	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		65	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		65	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		65	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		65	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		65	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		65	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		65	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		65	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		65	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		65	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		65	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		65	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		65	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		65	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		65	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		65	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		65	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-001
Description: SED-35 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 0840 | Project Name: RI Implementation | % Solids: 62.2 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/29/2019 1601	SCD	11/25/2019 1328	36920

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		65	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		65	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		65	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		65	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		65	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		65	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		65	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		65	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		65	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		65	24-137
2-Fluorophenol		72	16-136
Nitrobenzene-d5		59	12-144
Phenol-d5		79	26-148
Terphenyl-d14		70	20-127
2,4,6-Tribromophenol		58	27-128

LOQ = Limit of Quantitation
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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK22073-002
Description: SED-35 6"-12"
Matrix: Solid
Date Sampled: 11/22/2019 0845
Project Name: RI Implementation
% Solids: 69.7 11/23/2019 1841
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 1443	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-002
Description: SED-35 6"-12" | Matrix: Solid
Date Sampled: 11/22/2019 0845 | Project Name: RI Implementation | % Solids: 69.7 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2059	ALR1		37193	5.86

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	310		17	ug/kg	1
Benzene	71-43-2	8260B	ND		4.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.3	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.3	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		17	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.3	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.3	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.3	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.3	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.3	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.3	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.3	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.3	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.3	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.3	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.3	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.5	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.3	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.3	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.5	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.3	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.3	ug/kg	1
Styrene	100-42-5	8260B	ND		4.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.3	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.3	ug/kg	1
Toluene	108-88-3	8260B	ND		4.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.3	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.3	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.3	ug/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK22073-002	
Description: SED-35 6"-12"		Matrix: Solid	
Date Sampled: 11/22/2019 0845	Project Name: RI Implementation	% Solids: 69.7	11/23/2019 1841
Date Received: 11/22/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2059	ALR1		37193	5.86

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.3	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.3	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.5	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	53-142
Bromofluorobenzene		111	47-138
Toluene-d8		122	68-124

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-002
Description: SED-35 6"-12" | Matrix: Solid
Date Sampled: 11/22/2019 0845 | Project Name: RI Implementation | % Solids: 69.7 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 2303	SCD	11/29/2019 1156	37405

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		65	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		65	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		65	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		65	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		65	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		65	ug/kg	1
Caprolactam	105-60-2	8270D	ND		65	ug/kg	1
Carbazole	86-74-8	8270D	ND		65	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		65	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		65	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		65	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		65	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		65	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		65	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		65	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		65	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		65	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		65	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		65	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		65	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		65	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		65	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		65	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		65	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		65	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		65	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		65	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	1

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-002
Description: SED-35 6"-12" | Matrix: Solid
Date Sampled: 11/22/2019 0845 | Project Name: RI Implementation | % Solids: 69.7 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 2303	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		65	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		65	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		65	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		65	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		65	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		65	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		65	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		65	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		65	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		58	24-137
2-Fluorophenol		59	16-136
Nitrobenzene-d5		52	12-144
Phenol-d5		64	26-148
Terphenyl-d14		70	20-127
2,4,6-Tribromophenol		51	27-128

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK22073-003
Description: SED-36 0"-6"
Matrix: Solid
Date Sampled: 11/22/2019 1000
Project Name: RI Implementation
% Solids: 64.3 11/23/2019 1841
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 1504	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-003
Description: SED-36 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 1000 | Project Name: RI Implementation | % Solids: 64.3 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2123	ALR1		37193	5.66

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	370	E	18	ug/kg	1
Benzene	71-43-2	8260B	ND		4.4	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.4	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.4	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		18	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.4	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.4	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.4	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.4	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.4	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.4	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.4	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.4	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.4	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.4	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.4	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.4	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.4	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.4	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.8	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.4	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.4	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.4	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.4	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.4	ug/kg	1
Styrene	100-42-5	8260B	ND		4.4	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.4	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.4	ug/kg	1
Toluene	108-88-3	8260B	ND		4.4	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.4	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.4	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.4	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.4	ug/kg	1

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK22073-003
Description: SED-36 0"-6"
Matrix: Solid
Date Sampled: 11/22/2019 1000
Project Name: RI Implementation
% Solids: 64.3 11/23/2019 1841
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2123	ALR1		37193	5.66

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.4	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.4	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	53-142
Bromofluorobenzene		104	47-138
Toluene-d8		121	68-124

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-003
Description: SED-36 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 1000 | Project Name: RI Implementation | % Solids: 64.3 | 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 2328	SCD	11/29/2019 1156	37405

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		64	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		64	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		64	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		64	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		64	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		64	ug/kg	1
Caprolactam	105-60-2	8270D	ND		64	ug/kg	1
Carbazole	86-74-8	8270D	ND		64	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		64	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		64	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		64	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		64	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		64	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		64	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		64	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		64	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		64	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		64	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		64	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		64	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		64	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		64	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		64	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		120	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		120	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		64	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		64	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		64	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		64	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-003
Description: SED-36 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 1000 | Project Name: RI Implementation | % Solids: 64.3 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 2328	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		64	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		64	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		64	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		120	ug/kg	1
Naphthalene	91-20-3	8270D	ND		13	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		120	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		120	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		120	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		64	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		120	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		64	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		64	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		64	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		64	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		64	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		62	24-137
2-Fluorophenol		73	16-136
Nitrobenzene-d5		60	12-144
Phenol-d5		74	26-148
Terphenyl-d14		69	20-127
2,4,6-Tribromophenol		54	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UK22073-004	
Description: SED-36 6"-12"		Matrix: Solid	
Date Sampled: 11/22/2019 1005	Project Name: RI Implementation	% Solids: 69.6	11/23/2019 1841
Date Received: 11/22/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 1525	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.55		0.50	mg/kg	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-004
Description: SED-36 6"-12" | Matrix: Solid
Date Sampled: 11/22/2019 1005 | Project Name: RI Implementation | % Solids: 69.6 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2146	ALR1		37193	5.01

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	350		20	ug/kg	1
Benzene	71-43-2	8260B	ND		5.0	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.0	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.0	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.0	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		20	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.0	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.0	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.0	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.0	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.0	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.0	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.0	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.0	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.0	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.0	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.0	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.0	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.0	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.0	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.0	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.0	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.0	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.0	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.0	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.0	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.0	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.0	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.0	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.0	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.0	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.0	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.0	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.0	ug/kg	1
Styrene	100-42-5	8260B	ND		5.0	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.0	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.0	ug/kg	1
Toluene	108-88-3	8260B	ND		5.0	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.0	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.0	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.0	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.0	ug/kg	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK22073-004
Description: SED-36 6"-12"
Matrix: Solid
Date Sampled: 11/22/2019 1005
Project Name: RI Implementation
% Solids: 69.6 11/23/2019 1841
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2146	ALR1		37193	5.01

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.0	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.0	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.0	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		10	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		109	53-142
Bromofluorobenzene		106	47-138
Toluene-d8		120	68-124

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-004
Description: SED-36 6"-12" | Matrix: Solid
Date Sampled: 11/22/2019 1005 | Project Name: RI Implementation | % Solids: 69.6 | 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 2353	SCD	11/29/2019 1156	37405

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		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		320	ug/kg	1

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-004
Description: SED-36 6"-12" | Matrix: Solid
Date Sampled: 11/22/2019 1005 | Project Name: RI Implementation | % Solids: 69.6 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	11/30/2019 2353	SCD	11/29/2019 1156	37405

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		320	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		320	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		61	24-137
2-Fluorophenol		73	16-136
Nitrobenzene-d5		60	12-144
Phenol-d5		71	26-148
Terphenyl-d14		69	20-127
2,4,6-Tribromophenol		54	27-128

LOQ = Limit of Quantitation
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Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UK22073-005	
Description: SED-37 0"-6"		Matrix: Solid	
Date Sampled: 11/22/2019 1120	Project Name: RI Implementation	% Solids: 54.0	11/23/2019 1841
Date Received: 11/22/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 1546	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-005
Description: SED-37 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 1120 | Project Name: RI Implementation | % Solids: 54.0 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2210	ALR1		37193	5.09

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	300		20	ug/kg	1
Benzene	71-43-2	8260B	ND		4.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		20	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.8	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.9	ug/kg	1
Styrene	100-42-5	8260B	ND		4.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.9	ug/kg	1
Toluene	108-88-3	8260B	ND		4.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.9	ug/kg	1

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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK22073-005	
Description: SED-37 0"-6"		Matrix: Solid	
Date Sampled: 11/22/2019 1120	Project Name: RI Implementation	% Solids: 54.0	11/23/2019 1841
Date Received: 11/22/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2210	ALR1		37193	5.09

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	53-142
Bromofluorobenzene		100	47-138
Toluene-d8		120	68-124

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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-005
Description: SED-37 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 1120 | Project Name: RI Implementation | % Solids: 54.0 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/01/2019 0018	SCD	11/29/2019 1156	37405

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		65	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		65	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		65	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		65	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		65	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		65	ug/kg	1
Caprolactam	105-60-2	8270D	ND		65	ug/kg	1
Carbazole	86-74-8	8270D	ND		65	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		65	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		65	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		65	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		65	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		65	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		65	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		65	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		65	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		65	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		65	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		65	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		65	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		65	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		65	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		65	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		65	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		65	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		65	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		65	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-005
Description: SED-37 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 1120 | Project Name: RI Implementation | % Solids: 54.0 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/01/2019 0018	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		65	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		65	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		65	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		65	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		65	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		65	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		65	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		65	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		65	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		62	24-137
2-Fluorophenol		74	16-136
Nitrobenzene-d5		61	12-144
Phenol-d5		74	26-148
Terphenyl-d14		69	20-127
2,4,6-Tribromophenol		54	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK22073-006
Description: SED-37 6"-12"
Matrix: Solid
Date Sampled: 11/22/2019 1125
Project Name: RI Implementation
% Solids: 66.1 11/23/2019 1841
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 1607	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company			Laboratory ID: UK22073-006
Description: SED-37 6"-12"			Matrix: Solid
Date Sampled: 11/22/2019 1125	Project Name: RI Implementation		% Solids: 66.1 11/23/2019 1841
Date Received: 11/22/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2234	ALR1		37193	5.59

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	350		18	ug/kg	1
Benzene	71-43-2	8260B	ND		4.5	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.5	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.5	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.5	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		18	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.5	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.5	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.5	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.5	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.5	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.5	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.5	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.5	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.5	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.5	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.5	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.5	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.5	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.5	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.5	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.5	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.5	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.5	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.5	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.5	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.5	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.5	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.5	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.9	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.5	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.5	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.5	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.9	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.5	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.5	ug/kg	1
Styrene	100-42-5	8260B	ND		4.5	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.5	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.5	ug/kg	1
Toluene	108-88-3	8260B	ND		4.5	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.5	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.5	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.5	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.5	ug/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK22073-006	
Description: SED-37 6"-12"		Matrix: Solid	
Date Sampled: 11/22/2019 1125	Project Name: RI Implementation	% Solids: 66.1	11/23/2019 1841
Date Received: 11/22/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2234	ALR1		37193	5.59

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.5	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.5	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.5	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		111	53-142
Bromofluorobenzene		107	47-138
Toluene-d8		122	68-124

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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-006
Description: SED-37 6"-12" | Matrix: Solid
Date Sampled: 11/22/2019 1125 | Project Name: RI Implementation | % Solids: 66.1 | 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/01/2019 0043	SCD	11/29/2019 1156	37405

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		65	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		65	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		65	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		65	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		65	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		65	ug/kg	1
Caprolactam	105-60-2	8270D	ND		65	ug/kg	1
Carbazole	86-74-8	8270D	ND		65	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		65	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		65	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		65	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		65	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		65	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		65	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		65	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		65	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		65	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		65	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		65	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		65	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		65	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		65	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		65	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		65	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		65	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		65	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		65	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-006
Description: SED-37 6"-12" | Matrix: Solid
Date Sampled: 11/22/2019 1125 | Project Name: RI Implementation | % Solids: 66.1 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/01/2019 0043	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		65	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		65	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		65	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		65	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		65	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		65	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		65	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		65	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		65	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		58	24-137
2-Fluorophenol		70	16-136
Nitrobenzene-d5		56	12-144
Phenol-d5		69	26-148
Terphenyl-d14		65	20-127
2,4,6-Tribromophenol		53	27-128

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%

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Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UK22073-007	
Description: SED-37 6"-12" DUP		Matrix: Solid	
Date Sampled: 11/22/2019 1125	Project Name: RI Implementation	% Solids: 64.5	11/23/2019 1841
Date Received: 11/22/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 1628	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-007
Description: SED-37 6"-12" DUP | Matrix: Solid
Date Sampled: 11/22/2019 1125 | Project Name: RI Implementation | % Solids: 64.5 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2258	ALR1		37193	5.62

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	360	E	18	ug/kg	1
Benzene	71-43-2	8260B	ND		4.4	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.4	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.4	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.4	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		18	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.4	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.4	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.4	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.4	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.4	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.4	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.4	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.4	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.4	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.4	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.4	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.4	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.4	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.4	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.4	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.4	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.4	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.4	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.4	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.4	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.4	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.4	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.4	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		8.9	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.4	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.4	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.4	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		8.9	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.4	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.4	ug/kg	1
Styrene	100-42-5	8260B	ND		4.4	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.4	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.4	ug/kg	1
Toluene	108-88-3	8260B	ND		4.4	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.4	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.4	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.4	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.4	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK22073-007
Description: SED-37 6"-12" DUP
Matrix: Solid
Date Sampled: 11/22/2019 1125
Project Name: RI Implementation
% Solids: 64.5 11/23/2019 1841
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2258	ALR1		37193	5.62

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.4	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.4	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.4	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		8.9	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		112	53-142
Bromofluorobenzene		105	47-138
Toluene-d8		124	68-124

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-007
Description: SED-37 6"-12" DUP | Matrix: Solid
Date Sampled: 11/22/2019 1125 | Project Name: RI Implementation | % Solids: 64.5 | 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/01/2019 0109	SCD	11/29/2019 1156	37405

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		64	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		64	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		64	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		64	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		64	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		64	ug/kg	1
Caprolactam	105-60-2	8270D	ND		64	ug/kg	1
Carbazole	86-74-8	8270D	ND		64	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		64	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		64	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		64	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		64	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		64	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		64	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		64	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		64	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		64	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		64	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		64	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		64	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		64	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		64	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		64	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		310	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		310	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		120	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		120	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		64	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		64	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		64	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		64	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		310	ug/kg	1

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-007
Description: SED-37 6"-12" DUP | Matrix: Solid
Date Sampled: 11/22/2019 1125 | Project Name: RI Implementation | % Solids: 64.5 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/01/2019 0109	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		64	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		64	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		64	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		120	ug/kg	1
Naphthalene	91-20-3	8270D	ND		13	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		120	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		120	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		120	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		64	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		120	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		310	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		64	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		64	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		310	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		64	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		64	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		64	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		55	24-137
2-Fluorophenol		64	16-136
Nitrobenzene-d5		53	12-144
Phenol-d5		65	26-148
Terphenyl-d14		66	20-127
2,4,6-Tribromophenol		50	27-128

LOQ = Limit of Quantitation
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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK22073-008
Description: SED-40 0"-6"
Matrix: Solid
Date Sampled: 11/22/2019 1220
Project Name: RI Implementation
% Solids: 58.9 11/23/2019 1841
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 1649	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-008
Description: SED-40 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 1220 | Project Name: RI Implementation | % Solids: 58.9 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2159	ALR1		37197	4.71

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	260		21	ug/kg	1
Benzene	71-43-2	8260B	ND		5.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.3	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.3	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		21	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.3	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.3	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.3	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.3	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.3	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.3	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.3	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.3	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.3	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.3	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.3	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		11	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.3	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.3	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		11	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.3	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.3	ug/kg	1
Styrene	100-42-5	8260B	ND		5.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.3	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.3	ug/kg	1
Toluene	108-88-3	8260B	ND		5.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.3	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.3	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.3	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK22073-008	
Description: SED-40 0"-6"		Matrix: Solid	
Date Sampled: 11/22/2019 1220	Project Name: RI Implementation	% Solids: 58.9	11/23/2019 1841
Date Received: 11/22/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/26/2019 2159	ALR1		37197	4.71

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.3	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.3	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		11	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		93	53-142
Bromofluorobenzene		83	47-138
Toluene-d8		117	68-124

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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-008
Description: SED-40 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 1220 | Project Name: RI Implementation | % Solids: 58.9 | 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	11/30/2019 1940	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		64	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		64	ug/kg	1
Acetophenone	98-86-2	8270D	ND		320	ug/kg	1
Anthracene	120-12-7	8270D	ND		64	ug/kg	1
Atrazine	1912-24-9	8270D	ND		320	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		320	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		64	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		64	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		64	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		64	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		64	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		320	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		320	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		320	ug/kg	1
Caprolactam	105-60-2	8270D	ND		320	ug/kg	1
Carbazole	86-74-8	8270D	ND		320	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		320	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		320	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		320	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		320	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		320	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		320	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		320	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		320	ug/kg	1
Chrysene	218-01-9	8270D	ND		64	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		64	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		320	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		320	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		320	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		320	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		320	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		320	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		320	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		630	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		630	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		320	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		320	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		64	ug/kg	1
Fluorene	86-73-7	8270D	ND		64	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		320	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		320	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-008
Description: SED-40 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 1220 | Project Name: RI Implementation | % Solids: 58.9 | 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	11/30/2019 1940	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		320	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		64	ug/kg	1
Isophorone	78-59-1	8270D	ND		320	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		64	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		320	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		630	ug/kg	1
Naphthalene	91-20-3	8270D	ND		64	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		630	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		630	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		630	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		320	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		630	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		320	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		320	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		64	ug/kg	1
Phenol	108-95-2	8270D	ND		320	ug/kg	1
Pyrene	129-00-0	8270D	ND		64	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		320	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		320	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		48	24-137
2-Fluorophenol		45	16-136
Nitrobenzene-d5		50	12-144
Phenol-d5		45	26-148
Terphenyl-d14		53	20-127
2,4,6-Tribromophenol		92	27-128

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%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK22073-009
Description: SED-38 0"-6"
Matrix: Solid
Date Sampled: 11/22/2019 1450
Project Name: RI Implementation
% Solids: 72.5 11/23/2019 1841
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 1834	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.66		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-009
Description: SED-38 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 1450 | Project Name: RI Implementation | % Solids: 72.5 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	12/02/2019 1059	JM1		37558	4.19

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	400		24	ug/kg	2
Benzene	71-43-2	8260B	ND		6.0	ug/kg	2
Bromodichloromethane	75-27-4	8260B	ND		6.0	ug/kg	2
Bromoform	75-25-2	8260B	ND		6.0	ug/kg	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.0	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	ND		24	ug/kg	2
Carbon disulfide	75-15-0	8260B	ND		6.0	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		6.0	ug/kg	2
Chlorobenzene	108-90-7	8260B	ND		6.0	ug/kg	2
Chloroethane	75-00-3	8260B	ND		6.0	ug/kg	2
Chloroform	67-66-3	8260B	ND		6.0	ug/kg	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.0	ug/kg	2
Cyclohexane	110-82-7	8260B	ND		6.0	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.0	ug/kg	2
Dibromochloromethane	124-48-1	8260B	ND		6.0	ug/kg	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.0	ug/kg	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.0	ug/kg	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.0	ug/kg	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.0	ug/kg	2
Dichlorodifluoromethane	75-71-8	8260B	ND		6.0	ug/kg	2
1,1-Dichloroethane	75-34-3	8260B	ND		6.0	ug/kg	2
1,2-Dichloroethane	107-06-2	8260B	ND		6.0	ug/kg	2
1,1-Dichloroethene	75-35-4	8260B	ND		6.0	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.0	ug/kg	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.0	ug/kg	2
1,2-Dichloropropane	78-87-5	8260B	ND		6.0	ug/kg	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.0	ug/kg	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.0	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		6.0	ug/kg	2
2-Hexanone	591-78-6	8260B	ND		12	ug/kg	2
Isopropylbenzene	98-82-8	8260B	ND		6.0	ug/kg	2
Methyl acetate	79-20-9	8260B	ND		6.0	ug/kg	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.0	ug/kg	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		12	ug/kg	2
Methylcyclohexane	108-87-2	8260B	ND		6.0	ug/kg	2
Methylene chloride	75-09-2	8260B	ND		6.0	ug/kg	2
Styrene	100-42-5	8260B	ND		6.0	ug/kg	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.0	ug/kg	2
Tetrachloroethene	127-18-4	8260B	ND		6.0	ug/kg	2
Toluene	108-88-3	8260B	ND		6.0	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.0	ug/kg	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.0	ug/kg	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.0	ug/kg	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.0	ug/kg	2

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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK22073-009
Description: SED-38 0"-6"
Matrix: Solid
Date Sampled: 11/22/2019 1450
Project Name: RI Implementation
% Solids: 72.5 11/23/2019 1841
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	12/02/2019 1059	JM1		37558	4.19

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.0	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		6.0	ug/kg	2
Vinyl chloride	75-01-4	8260B	ND		6.0	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		85	53-142
Bromofluorobenzene		87	47-138
Toluene-d8		112	68-124

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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-009
Description: SED-38 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 1450 | Project Name: RI Implementation | % Solids: 72.5 | 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/01/2019 0134	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		65	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		65	ug/kg	1
Acetophenone	98-86-2	8270D	ND		330	ug/kg	1
Anthracene	120-12-7	8270D	ND		65	ug/kg	1
Atrazine	1912-24-9	8270D	ND		330	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		330	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		65	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		65	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		65	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		65	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		65	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		330	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		330	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		330	ug/kg	1
Caprolactam	105-60-2	8270D	ND		330	ug/kg	1
Carbazole	86-74-8	8270D	ND		330	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		330	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		330	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		330	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		330	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		330	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		330	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		330	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		330	ug/kg	1
Chrysene	218-01-9	8270D	ND		65	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		65	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		330	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		330	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		330	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		330	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		330	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		330	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		330	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		640	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		640	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		330	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		330	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		65	ug/kg	1
Fluorene	86-73-7	8270D	ND		65	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		330	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		330	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-009
Description: SED-38 0"-6" | Matrix: Solid
Date Sampled: 11/22/2019 1450 | Project Name: RI Implementation | % Solids: 72.5 | 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/01/2019 0134	SCD	11/29/2019 1156	37405

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		330	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		65	ug/kg	1
Isophorone	78-59-1	8270D	ND		330	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		65	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		330	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		640	ug/kg	1
Naphthalene	91-20-3	8270D	ND		65	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		640	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		640	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		640	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		330	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		640	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		330	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		330	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		65	ug/kg	1
Phenol	108-95-2	8270D	ND		330	ug/kg	1
Pyrene	129-00-0	8270D	ND		65	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		330	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		330	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		58	24-137
2-Fluorophenol		57	16-136
Nitrobenzene-d5		59	12-144
Phenol-d5		58	26-148
Terphenyl-d14		66	20-127
2,4,6-Tribromophenol		93	27-128

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

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK22073-010
Description: SED-39 6"-12"
Matrix: Solid
Date Sampled: 11/22/2019 1520
Project Name: RI Implementation
% Solids: 57.4
11/23/2019 1841
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 1855	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
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P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-010
Description: SED-39 6"-12" | Matrix: Solid
Date Sampled: 11/22/2019 1520 | Project Name: RI Implementation | % Solids: 57.4 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	12/02/2019 1122	JM1		37558	5.14

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	ND		19	ug/kg	2
Benzene	71-43-2	8260B	ND		4.9	ug/kg	2
Bromodichloromethane	75-27-4	8260B	ND		4.9	ug/kg	2
Bromoform	75-25-2	8260B	ND		4.9	ug/kg	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.9	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	ND		19	ug/kg	2
Carbon disulfide	75-15-0	8260B	ND		4.9	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		4.9	ug/kg	2
Chlorobenzene	108-90-7	8260B	ND		4.9	ug/kg	2
Chloroethane	75-00-3	8260B	ND		4.9	ug/kg	2
Chloroform	67-66-3	8260B	ND		4.9	ug/kg	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.9	ug/kg	2
Cyclohexane	110-82-7	8260B	ND		4.9	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.9	ug/kg	2
Dibromochloromethane	124-48-1	8260B	ND		4.9	ug/kg	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.9	ug/kg	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.9	ug/kg	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.9	ug/kg	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.9	ug/kg	2
Dichlorodifluoromethane	75-71-8	8260B	ND		4.9	ug/kg	2
1,1-Dichloroethane	75-34-3	8260B	ND		4.9	ug/kg	2
1,2-Dichloroethane	107-06-2	8260B	ND		4.9	ug/kg	2
1,1-Dichloroethene	75-35-4	8260B	ND		4.9	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.9	ug/kg	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.9	ug/kg	2
1,2-Dichloropropane	78-87-5	8260B	ND		4.9	ug/kg	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.9	ug/kg	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.9	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		4.9	ug/kg	2
2-Hexanone	591-78-6	8260B	ND		9.7	ug/kg	2
Isopropylbenzene	98-82-8	8260B	ND		4.9	ug/kg	2
Methyl acetate	79-20-9	8260B	ND		4.9	ug/kg	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.9	ug/kg	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.7	ug/kg	2
Methylcyclohexane	108-87-2	8260B	ND		4.9	ug/kg	2
Methylene chloride	75-09-2	8260B	ND		4.9	ug/kg	2
Styrene	100-42-5	8260B	ND		4.9	ug/kg	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.9	ug/kg	2
Tetrachloroethene	127-18-4	8260B	ND		4.9	ug/kg	2
Toluene	108-88-3	8260B	ND		4.9	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.9	ug/kg	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.9	ug/kg	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.9	ug/kg	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.9	ug/kg	2

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK22073-010
Description: SED-39 6"-12"
Matrix: Solid
Date Sampled: 11/22/2019 1520
Project Name: RI Implementation
% Solids: 57.4 11/23/2019 1841
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	12/02/2019 1122	JM1		37558	5.14

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.9	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		4.9	ug/kg	2
Vinyl chloride	75-01-4	8260B	ND		4.9	ug/kg	2
Xylenes (total)	1330-20-7	8260B	ND		9.7	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	53-142
Bromofluorobenzene		87	47-138
Toluene-d8		111	68-124

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-010
Description: SED-39 6"-12" | Matrix: Solid
Date Sampled: 11/22/2019 1520 | Project Name: RI Implementation | % Solids: 57.4 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/01/2019 0159	SCD	11/29/2019 1156	37405

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

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK22073-010
Description: SED-39 6"-12" | Matrix: Solid
Date Sampled: 11/22/2019 1520 | Project Name: RI Implementation | % Solids: 57.4 | 11/23/2019 1841
Date Received: 11/22/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/01/2019 0159	SCD	11/29/2019 1156	37405

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		55	24-137
2-Fluorophenol		56	16-136
Nitrobenzene-d5		53	12-144
Phenol-d5		59	26-148
Terphenyl-d14		64	20-127
2,4,6-Tribromophenol		49	27-128

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK22073-011
Description: EB-01-112219
Matrix: Aqueous
Date Sampled: 11/22/2019 1320
Project Name: RI Implementation
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
2		(Nitrate - N) 353.2	1	11/26/2019 1225	AMR		37124

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N		353.2	ND	H	0.020	mg/L	2

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK22073-011
Description: EB-01-112219
Matrix: Aqueous
Date Sampled: 11/22/2019 1320
Project Name: RI Implementation
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/25/2019 1222	JJG		36932

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
1,1,2,2-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
ND = Not detected at or above the LOQ
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK22073-011
Description: EB-01-112219
Matrix: Aqueous
Date Sampled: 11/22/2019 1320
Project Name: RI Implementation
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/25/2019 1222	JJG		36932

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		96	70-130
Bromofluorobenzene		87	70-130
Toluene-d8		95	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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK22073-011
Description: EB-01-112219
Matrix: Aqueous
Date Sampled: 11/22/2019 1320
Project Name: RI Implementation
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/01/2019 2008	SCD	11/27/2019 1752	37330

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
ND = Not detected at or above the LOQ
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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK22073-011
Description: EB-01-112219
Matrix: Aqueous
Date Sampled: 11/22/2019 1320
Project Name: RI Implementation
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/01/2019 2008	SCD	11/27/2019 1752	37330

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		61	37-129
2-Fluorophenol		36	24-127
Nitrobenzene-d5		54	38-127
Phenol-d5		48	28-128
Terphenyl-d14		79	10-148
2,4,6-Tribromophenol		59	35-144

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK22073-012
Description: TB-01-112219
Matrix: Aqueous
Date Sampled: 11/22/2019
Project Name: RI Implementation
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/25/2019 1313	JM1		36951

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
1,1,2,2-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
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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK22073-012
Description: TB-01-112219
Matrix: Aqueous
Date Sampled: 11/22/2019
Project Name: RI Implementation
Date Received: 11/22/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/25/2019 1313	JM1		36951

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		90	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		97	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%

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QC Summary

Inorganic non-metals - MB

Sample ID: UQ37124-001
Batch: 37124
Analytical Method: 353.2

Matrix: Aqueous

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	11/26/2019 1223

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - LCS

Sample ID: UQ37124-002
Batch: 37124
Analytical Method: 353.2

Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N	0.80	0.80		1	100	90-110	11/26/2019 1224

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - MB

Sample ID: UQ37869-001
Batch: 37869
Analytical Method: 9056A

Matrix: Solid

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N (soluble)	ND		1	0.50	mg/kg	12/03/2019 1028

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - LCS

Sample ID: UQ37869-002
Batch: 37869
Analytical Method: 9056A

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.80	0.78		1	98	80-120	12/03/2019 1051

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - MS

Sample ID: UK22073-008MS
Batch: 37869
Analytical Method: 9056A
Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	ND	8.0	7.4		1	93	80-120	12/03/2019 1710

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - MSD

Sample ID: UK22073-008MD
Batch: 37869
Analytical Method: 9056A
Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N (soluble)	ND	8.0	7.4		1	92	0.51	80-120	20	12/03/2019 1731

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ36932-001
Batch: 36932
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	11/25/2019 1106
Benzene	ND		1	1.0	ug/L	11/25/2019 1106
Bromodichloromethane	ND		1	1.0	ug/L	11/25/2019 1106
Bromoform	ND		1	1.0	ug/L	11/25/2019 1106
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	11/25/2019 1106
2-Butanone (MEK)	ND		1	10	ug/L	11/25/2019 1106
Carbon disulfide	ND		1	1.0	ug/L	11/25/2019 1106
Carbon tetrachloride	ND		1	1.0	ug/L	11/25/2019 1106
Chlorobenzene	ND		1	1.0	ug/L	11/25/2019 1106
Chloroethane	ND		1	2.0	ug/L	11/25/2019 1106
Chloroform	ND		1	1.0	ug/L	11/25/2019 1106
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	11/25/2019 1106
Cyclohexane	ND		1	1.0	ug/L	11/25/2019 1106
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	11/25/2019 1106
Dibromochloromethane	ND		1	1.0	ug/L	11/25/2019 1106
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	11/25/2019 1106
1,2-Dichlorobenzene	ND		1	1.0	ug/L	11/25/2019 1106
1,3-Dichlorobenzene	ND		1	1.0	ug/L	11/25/2019 1106
1,4-Dichlorobenzene	ND		1	1.0	ug/L	11/25/2019 1106
Dichlorodifluoromethane	ND		1	2.0	ug/L	11/25/2019 1106
1,1-Dichloroethane	ND		1	1.0	ug/L	11/25/2019 1106
1,2-Dichloroethane	ND		1	1.0	ug/L	11/25/2019 1106
1,1-Dichloroethene	ND		1	1.0	ug/L	11/25/2019 1106
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	11/25/2019 1106
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	11/25/2019 1106
1,2-Dichloropropane	ND		1	1.0	ug/L	11/25/2019 1106
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	11/25/2019 1106
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	11/25/2019 1106
Ethylbenzene	ND		1	1.0	ug/L	11/25/2019 1106
2-Hexanone	ND		1	10	ug/L	11/25/2019 1106
Isopropylbenzene	ND		1	1.0	ug/L	11/25/2019 1106
Methyl acetate	ND		1	1.0	ug/L	11/25/2019 1106
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	11/25/2019 1106
4-Methyl-2-pentanone	ND		1	10	ug/L	11/25/2019 1106
Methylcyclohexane	ND		1	5.0	ug/L	11/25/2019 1106
Methylene chloride	ND		1	1.0	ug/L	11/25/2019 1106
Styrene	ND		1	1.0	ug/L	11/25/2019 1106
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	11/25/2019 1106
Tetrachloroethene	ND		1	1.0	ug/L	11/25/2019 1106
Toluene	ND		1	1.0	ug/L	11/25/2019 1106
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	11/25/2019 1106
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	11/25/2019 1106
1,1,1-Trichloroethane	ND		1	1.0	ug/L	11/25/2019 1106
1,1,2-Trichloroethane	ND		1	1.0	ug/L	11/25/2019 1106

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ36932-001
Batch: 36932
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	11/25/2019 1106
Trichlorofluoromethane	ND		1	1.0	ug/L	11/25/2019 1106
Vinyl chloride	ND		1	1.0	ug/L	11/25/2019 1106
Xylenes (total)	ND		1	1.0	ug/L	11/25/2019 1106

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		102	70-130
Bromofluorobenzene		91	70-130
Toluene-d8		102	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ36932-002
Batch: 36932
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	130		1	126	60-140	11/25/2019 1016
Benzene	50	51		1	103	70-130	11/25/2019 1016
Bromodichloromethane	50	52		1	104	70-130	11/25/2019 1016
Bromoform	50	51		1	102	70-130	11/25/2019 1016
Bromomethane (Methyl bromide)	50	52		1	104	70-130	11/25/2019 1016
2-Butanone (MEK)	100	110		1	105	70-130	11/25/2019 1016
Carbon disulfide	50	48		1	95	70-130	11/25/2019 1016
Carbon tetrachloride	50	52		1	105	70-130	11/25/2019 1016
Chlorobenzene	50	49		1	98	70-130	11/25/2019 1016
Chloroethane	50	58		1	115	70-130	11/25/2019 1016
Chloroform	50	52		1	103	70-130	11/25/2019 1016
Chloromethane (Methyl chloride)	50	45		1	90	60-140	11/25/2019 1016
Cyclohexane	50	51		1	102	70-130	11/25/2019 1016
1,2-Dibromo-3-chloropropane (DBCP)	50	45		1	90	70-130	11/25/2019 1016
Dibromochloromethane	50	50		1	100	70-130	11/25/2019 1016
1,2-Dibromoethane (EDB)	50	50		1	100	70-130	11/25/2019 1016
1,2-Dichlorobenzene	50	49		1	98	70-130	11/25/2019 1016
1,3-Dichlorobenzene	50	49		1	98	70-130	11/25/2019 1016
1,4-Dichlorobenzene	50	48		1	96	70-130	11/25/2019 1016
Dichlorodifluoromethane	50	41		1	81	60-140	11/25/2019 1016
1,1-Dichloroethane	50	50		1	100	70-130	11/25/2019 1016
1,2-Dichloroethane	50	51		1	101	70-130	11/25/2019 1016
1,1-Dichloroethene	50	57		1	114	70-130	11/25/2019 1016
cis-1,2-Dichloroethene	50	51		1	101	70-130	11/25/2019 1016
trans-1,2-Dichloroethene	50	53		1	106	70-130	11/25/2019 1016
1,2-Dichloropropane	50	50		1	101	70-130	11/25/2019 1016
cis-1,3-Dichloropropene	50	53		1	106	70-130	11/25/2019 1016
trans-1,3-Dichloropropene	50	53		1	106	70-130	11/25/2019 1016
Ethylbenzene	50	51		1	102	70-130	11/25/2019 1016
2-Hexanone	100	95		1	95	70-130	11/25/2019 1016
Isopropylbenzene	50	52		1	105	70-130	11/25/2019 1016
Methyl acetate	50	45		1	90	70-130	11/25/2019 1016
Methyl tertiary butyl ether (MTBE)	50	55		1	109	70-130	11/25/2019 1016
4-Methyl-2-pentanone	100	99		1	99	70-130	11/25/2019 1016
Methylcyclohexane	50	56		1	111	70-130	11/25/2019 1016
Methylene chloride	50	50		1	100	70-130	11/25/2019 1016
Styrene	50	52		1	104	70-130	11/25/2019 1016
1,1,2,2-Tetrachloroethane	50	47		1	95	70-130	11/25/2019 1016
Tetrachloroethene	50	53		1	106	70-130	11/25/2019 1016
Toluene	50	50		1	99	70-130	11/25/2019 1016
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	54		1	109	70-130	11/25/2019 1016
1,2,4-Trichlorobenzene	50	44		1	89	70-130	11/25/2019 1016
1,1,1-Trichloroethane	50	52		1	103	70-130	11/25/2019 1016
1,1,2-Trichloroethane	50	50		1	100	70-130	11/25/2019 1016

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ36932-002
Batch: 36932
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	50		1	101	70-130	11/25/2019 1016
Trichlorofluoromethane	50	51		1	103	70-130	11/25/2019 1016
Vinyl chloride	50	50		1	100	70-130	11/25/2019 1016
Xylenes (total)	100	100		1	101	70-130	11/25/2019 1016

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		106	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		107	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ36951-001
Batch: 36951
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	11/25/2019 1014
Benzene	ND		1	1.0	ug/L	11/25/2019 1014
Bromodichloromethane	ND		1	1.0	ug/L	11/25/2019 1014
Bromoform	ND		1	1.0	ug/L	11/25/2019 1014
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	11/25/2019 1014
2-Butanone (MEK)	ND		1	10	ug/L	11/25/2019 1014
Carbon disulfide	ND		1	1.0	ug/L	11/25/2019 1014
Carbon tetrachloride	ND		1	1.0	ug/L	11/25/2019 1014
Chlorobenzene	ND		1	1.0	ug/L	11/25/2019 1014
Chloroethane	ND		1	2.0	ug/L	11/25/2019 1014
Chloroform	ND		1	1.0	ug/L	11/25/2019 1014
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	11/25/2019 1014
Cyclohexane	ND		1	1.0	ug/L	11/25/2019 1014
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	11/25/2019 1014
Dibromochloromethane	ND		1	1.0	ug/L	11/25/2019 1014
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	11/25/2019 1014
1,2-Dichlorobenzene	ND		1	1.0	ug/L	11/25/2019 1014
1,3-Dichlorobenzene	ND		1	1.0	ug/L	11/25/2019 1014
1,4-Dichlorobenzene	ND		1	1.0	ug/L	11/25/2019 1014
Dichlorodifluoromethane	ND		1	2.0	ug/L	11/25/2019 1014
1,1-Dichloroethane	ND		1	1.0	ug/L	11/25/2019 1014
1,2-Dichloroethane	ND		1	1.0	ug/L	11/25/2019 1014
1,1-Dichloroethene	ND		1	1.0	ug/L	11/25/2019 1014
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	11/25/2019 1014
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	11/25/2019 1014
1,2-Dichloropropane	ND		1	1.0	ug/L	11/25/2019 1014
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	11/25/2019 1014
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	11/25/2019 1014
Ethylbenzene	ND		1	1.0	ug/L	11/25/2019 1014
2-Hexanone	ND		1	10	ug/L	11/25/2019 1014
Isopropylbenzene	ND		1	1.0	ug/L	11/25/2019 1014
Methyl acetate	ND		1	1.0	ug/L	11/25/2019 1014
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	11/25/2019 1014
4-Methyl-2-pentanone	ND		1	10	ug/L	11/25/2019 1014
Methylcyclohexane	ND		1	5.0	ug/L	11/25/2019 1014
Methylene chloride	ND		1	1.0	ug/L	11/25/2019 1014
Styrene	ND		1	1.0	ug/L	11/25/2019 1014
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	11/25/2019 1014
Tetrachloroethene	ND		1	1.0	ug/L	11/25/2019 1014
Toluene	ND		1	1.0	ug/L	11/25/2019 1014
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	11/25/2019 1014
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	11/25/2019 1014
1,1,1-Trichloroethane	ND		1	1.0	ug/L	11/25/2019 1014
1,1,2-Trichloroethane	ND		1	1.0	ug/L	11/25/2019 1014

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ36951-001
Batch: 36951
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	11/25/2019 1014
Trichlorofluoromethane	ND		1	1.0	ug/L	11/25/2019 1014
Vinyl chloride	ND		1	1.0	ug/L	11/25/2019 1014
Xylenes (total)	ND		1	1.0	ug/L	11/25/2019 1014

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		95	70-130
Toluene-d8		94	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ36951-002
Batch: 36951
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	71		1	71	60-140	11/25/2019 0926
Benzene	50	45		1	91	70-130	11/25/2019 0926
Bromodichloromethane	50	48		1	97	70-130	11/25/2019 0926
Bromoform	50	44		1	88	70-130	11/25/2019 0926
Bromomethane (Methyl bromide)	50	44		1	87	70-130	11/25/2019 0926
2-Butanone (MEK)	100	94		1	94	70-130	11/25/2019 0926
Carbon disulfide	50	44		1	89	70-130	11/25/2019 0926
Carbon tetrachloride	50	44		1	89	70-130	11/25/2019 0926
Chlorobenzene	50	45		1	91	70-130	11/25/2019 0926
Chloroethane	50	48		1	97	70-130	11/25/2019 0926
Chloroform	50	45		1	90	70-130	11/25/2019 0926
Chloromethane (Methyl chloride)	50	43		1	86	60-140	11/25/2019 0926
Cyclohexane	50	43		1	86	70-130	11/25/2019 0926
1,2-Dibromo-3-chloropropane (DBCP)	50	46		1	93	70-130	11/25/2019 0926
Dibromochloromethane	50	50		1	99	70-130	11/25/2019 0926
1,2-Dibromoethane (EDB)	50	48		1	95	70-130	11/25/2019 0926
1,2-Dichlorobenzene	50	47		1	93	70-130	11/25/2019 0926
1,3-Dichlorobenzene	50	46		1	93	70-130	11/25/2019 0926
1,4-Dichlorobenzene	50	45		1	90	70-130	11/25/2019 0926
Dichlorodifluoromethane	50	47		1	94	60-140	11/25/2019 0926
1,1-Dichloroethane	50	44		1	89	70-130	11/25/2019 0926
1,2-Dichloroethane	50	43		1	85	70-130	11/25/2019 0926
1,1-Dichloroethene	50	50		1	100	70-130	11/25/2019 0926
cis-1,2-Dichloroethene	50	44		1	89	70-130	11/25/2019 0926
trans-1,2-Dichloroethene	50	47		1	94	70-130	11/25/2019 0926
1,2-Dichloropropane	50	46		1	93	70-130	11/25/2019 0926
cis-1,3-Dichloropropene	50	52		1	104	70-130	11/25/2019 0926
trans-1,3-Dichloropropene	50	51		1	103	70-130	11/25/2019 0926
Ethylbenzene	50	47		1	94	70-130	11/25/2019 0926
2-Hexanone	100	100		1	101	70-130	11/25/2019 0926
Isopropylbenzene	50	49		1	97	70-130	11/25/2019 0926
Methyl acetate	50	43		1	87	70-130	11/25/2019 0926
Methyl tertiary butyl ether (MTBE)	50	43		1	85	70-130	11/25/2019 0926
4-Methyl-2-pentanone	100	98		1	98	70-130	11/25/2019 0926
Methylcyclohexane	50	47		1	95	70-130	11/25/2019 0926
Methylene chloride	50	40		1	81	70-130	11/25/2019 0926
Styrene	50	50		1	99	70-130	11/25/2019 0926
1,1,2,2-Tetrachloroethane	50	46		1	92	70-130	11/25/2019 0926
Tetrachloroethene	50	46		1	93	70-130	11/25/2019 0926
Toluene	50	46		1	91	70-130	11/25/2019 0926
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	43		1	85	70-130	11/25/2019 0926
1,2,4-Trichlorobenzene	50	48		1	96	70-130	11/25/2019 0926
1,1,1-Trichloroethane	50	44		1	89	70-130	11/25/2019 0926
1,1,2-Trichloroethane	50	46		1	92	70-130	11/25/2019 0926

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ36951-002
Batch: 36951
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	46		1	92	70-130	11/25/2019 0926
Trichlorofluoromethane	50	44		1	89	70-130	11/25/2019 0926
Vinyl chloride	50	42		1	83	70-130	11/25/2019 0926
Xylenes (total)	100	97		1	97	70-130	11/25/2019 0926

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		87	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		96	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37193-001
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/kg	11/26/2019 1952
Benzene	ND		1	5.0	ug/kg	11/26/2019 1952
Bromodichloromethane	ND		1	5.0	ug/kg	11/26/2019 1952
Bromoform	ND		1	5.0	ug/kg	11/26/2019 1952
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	11/26/2019 1952
2-Butanone (MEK)	ND		1	20	ug/kg	11/26/2019 1952
Carbon disulfide	ND		1	5.0	ug/kg	11/26/2019 1952
Carbon tetrachloride	ND		1	5.0	ug/kg	11/26/2019 1952
Chlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
Chloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
Chloroform	ND		1	5.0	ug/kg	11/26/2019 1952
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	11/26/2019 1952
Cyclohexane	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	11/26/2019 1952
Dibromochloromethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
Dichlorodifluoromethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,1-Dichloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dichloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,1-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dichloropropane	ND		1	5.0	ug/kg	11/26/2019 1952
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	11/26/2019 1952
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	11/26/2019 1952
Ethylbenzene	ND		1	5.0	ug/kg	11/26/2019 1952
2-Hexanone	ND		1	10	ug/kg	11/26/2019 1952
Isopropylbenzene	ND		1	5.0	ug/kg	11/26/2019 1952
Methyl acetate	ND		1	5.0	ug/kg	11/26/2019 1952
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	11/26/2019 1952
4-Methyl-2-pentanone	ND		1	10	ug/kg	11/26/2019 1952
Methylcyclohexane	ND		1	5.0	ug/kg	11/26/2019 1952
Methylene chloride	ND		1	5.0	ug/kg	11/26/2019 1952
Styrene	ND		1	5.0	ug/kg	11/26/2019 1952
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
Tetrachloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
Toluene	ND		1	5.0	ug/kg	11/26/2019 1952
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	11/26/2019 1952

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37193-001
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
Trichlorofluoromethane	ND		1	5.0	ug/kg	11/26/2019 1952
Vinyl chloride	ND		1	5.0	ug/kg	11/26/2019 1952
Xylenes (total)	ND		1	10	ug/kg	11/26/2019 1952

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		109	53-142
Bromofluorobenzene		110	47-138
Toluene-d8		119	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37193-002
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	104	60-140	11/26/2019 1851
Benzene	50	50		1	100	70-130	11/26/2019 1851
Bromodichloromethane	50	51		1	103	70-130	11/26/2019 1851
Bromoform	50	53		1	105	70-130	11/26/2019 1851
Bromomethane (Methyl bromide)	50	48		1	95	70-130	11/26/2019 1851
2-Butanone (MEK)	100	100		1	102	60-140	11/26/2019 1851
Carbon disulfide	50	49		1	97	70-130	11/26/2019 1851
Carbon tetrachloride	50	52		1	103	70-130	11/26/2019 1851
Chlorobenzene	50	50		1	101	70-130	11/26/2019 1851
Chloroethane	50	53		1	107	70-130	11/26/2019 1851
Chloroform	50	50		1	100	70-130	11/26/2019 1851
Chloromethane (Methyl chloride)	50	44		1	88	60-140	11/26/2019 1851
Cyclohexane	50	54		1	108	70-130	11/26/2019 1851
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	97	70-130	11/26/2019 1851
Dibromochloromethane	50	52		1	104	70-130	11/26/2019 1851
1,2-Dibromoethane (EDB)	50	51		1	102	70-130	11/26/2019 1851
1,2-Dichlorobenzene	50	51		1	101	70-130	11/26/2019 1851
1,3-Dichlorobenzene	50	51		1	101	70-130	11/26/2019 1851
1,4-Dichlorobenzene	50	51		1	102	70-130	11/26/2019 1851
Dichlorodifluoromethane	50	49		1	99	60-140	11/26/2019 1851
1,1-Dichloroethane	50	49		1	99	70-130	11/26/2019 1851
1,2-Dichloroethane	50	48		1	95	70-130	11/26/2019 1851
1,1-Dichloroethene	50	59		1	118	70-130	11/26/2019 1851
cis-1,2-Dichloroethene	50	50		1	101	70-130	11/26/2019 1851
trans-1,2-Dichloroethene	50	55		1	110	70-130	11/26/2019 1851
1,2-Dichloropropane	50	51		1	102	70-130	11/26/2019 1851
cis-1,3-Dichloropropene	50	53		1	106	70-130	11/26/2019 1851
trans-1,3-Dichloropropene	50	53		1	106	70-130	11/26/2019 1851
Ethylbenzene	50	52		1	103	70-130	11/26/2019 1851
2-Hexanone	100	100		1	100	70-130	11/26/2019 1851
Isopropylbenzene	50	50		1	101	70-130	11/26/2019 1851
Methyl acetate	50	47		1	94	70-130	11/26/2019 1851
Methyl tertiary butyl ether (MTBE)	50	48		1	97	70-130	11/26/2019 1851
4-Methyl-2-pentanone	100	94		1	94	70-130	11/26/2019 1851
Methylcyclohexane	50	55		1	110	70-130	11/26/2019 1851
Methylene chloride	50	48		1	96	70-130	11/26/2019 1851
Styrene	50	51		1	101	70-130	11/26/2019 1851
1,1,2,2-Tetrachloroethane	50	47		1	94	70-130	11/26/2019 1851
Tetrachloroethene	50	57		1	113	70-130	11/26/2019 1851
Toluene	50	51		1	102	70-130	11/26/2019 1851
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	52		1	104	70-130	11/26/2019 1851
1,2,4-Trichlorobenzene	50	53		1	106	70-130	11/26/2019 1851
1,1,1-Trichloroethane	50	51		1	103	70-130	11/26/2019 1851
1,1,2-Trichloroethane	50	49		1	98	70-130	11/26/2019 1851

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37193-002
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	53		1	106	70-130	11/26/2019 1851
Trichlorofluoromethane	50	54		1	108	70-130	11/26/2019 1851
Vinyl chloride	50	44		1	88	70-130	11/26/2019 1851
Xylenes (total)	100	100		1	102	70-130	11/26/2019 1851

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		103	53-142
Bromofluorobenzene		120	47-138
Toluene-d8		118	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37193-003
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	97		1	97	7.2	60-140	20	11/26/2019 1929
Benzene	50	47		1	94	7.0	70-130	20	11/26/2019 1929
Bromodichloromethane	50	49		1	98	4.6	70-130	20	11/26/2019 1929
Bromoform	50	52		1	103	1.9	70-130	20	11/26/2019 1929
Bromomethane (Methyl bromide)	50	44		1	89	6.7	70-130	20	11/26/2019 1929
2-Butanone (MEK)	100	95		1	95	6.2	60-140	20	11/26/2019 1929
Carbon disulfide	50	43		1	87	11	70-130	20	11/26/2019 1929
Carbon tetrachloride	50	46		1	92	11	70-130	20	11/26/2019 1929
Chlorobenzene	50	48		1	96	4.6	70-130	20	11/26/2019 1929
Chloroethane	50	48		1	96	10	70-130	20	11/26/2019 1929
Chloroform	50	46		1	93	7.7	70-130	20	11/26/2019 1929
Chloromethane (Methyl chloride)	50	40		1	79	11	60-140	20	11/26/2019 1929
Cyclohexane	50	47		1	94	14	70-130	20	11/26/2019 1929
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	96	0.97	70-130	20	11/26/2019 1929
Dibromochloromethane	50	50		1	100	4.0	70-130	20	11/26/2019 1929
1,2-Dibromoethane (EDB)	50	49		1	98	4.2	70-130	20	11/26/2019 1929
1,2-Dichlorobenzene	50	50		1	99	1.7	70-130	20	11/26/2019 1929
1,3-Dichlorobenzene	50	50		1	99	2.2	70-130	20	11/26/2019 1929
1,4-Dichlorobenzene	50	49		1	99	2.9	70-130	20	11/26/2019 1929
Dichlorodifluoromethane	50	44		1	87	13	60-140	20	11/26/2019 1929
1,1-Dichloroethane	50	45		1	90	9.0	70-130	20	11/26/2019 1929
1,2-Dichloroethane	50	45		1	89	6.5	70-130	20	11/26/2019 1929
1,1-Dichloroethene	50	52		1	105	12	70-130	20	11/26/2019 1929
cis-1,2-Dichloroethene	50	46		1	92	9.0	70-130	20	11/26/2019 1929
trans-1,2-Dichloroethene	50	50		1	99	11	70-130	20	11/26/2019 1929
1,2-Dichloropropane	50	48		1	96	5.7	70-130	20	11/26/2019 1929
cis-1,3-Dichloropropene	50	51		1	102	4.4	70-130	20	11/26/2019 1929
trans-1,3-Dichloropropene	50	51		1	102	3.2	70-130	20	11/26/2019 1929
Ethylbenzene	50	48		1	96	7.2	70-130	20	11/26/2019 1929
2-Hexanone	100	98		1	98	1.8	70-130	20	11/26/2019 1929
Isopropylbenzene	50	48		1	96	5.2	70-130	20	11/26/2019 1929
Methyl acetate	50	46		1	91	3.0	70-130	20	11/26/2019 1929
Methyl tertiary butyl ether (MTBE)	50	46		1	92	4.6	70-130	20	11/26/2019 1929
4-Methyl-2-pentanone	100	91		1	91	3.2	70-130	20	11/26/2019 1929
Methylcyclohexane	50	49		1	98	11	70-130	20	11/26/2019 1929
Methylene chloride	50	45		1	89	7.3	70-130	20	11/26/2019 1929
Styrene	50	48		1	96	5.1	70-130	20	11/26/2019 1929
1,1,2,2-Tetrachloroethane	50	47		1	93	1.2	70-130	20	11/26/2019 1929
Tetrachloroethene	50	52		1	105	7.7	70-130	20	11/26/2019 1929
Toluene	50	48		1	96	6.5	70-130	20	11/26/2019 1929
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	46		1	92	13	70-130	20	11/26/2019 1929
1,2,4-Trichlorobenzene	50	52		1	105	1.3	70-130	20	11/26/2019 1929
1,1,1-Trichloroethane	50	46		1	92	11	70-130	20	11/26/2019 1929
1,1,2-Trichloroethane	50	48		1	96	1.6	70-130	20	11/26/2019 1929

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37193-003
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	49		1	97	8.2	70-130	20	11/26/2019 1929
Trichlorofluoromethane	50	48		1	96	12	70-130	20	11/26/2019 1929
Vinyl chloride	50	40		1	80	10	70-130	20	11/26/2019 1929
Xylenes (total)	100	97		1	97	6.0	70-130	20	11/26/2019 1929

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		120	47-138
Toluene-d8		119	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37197-001
Batch: 37197
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/kg	11/26/2019 2053
Benzene	ND		1	5.0	ug/kg	11/26/2019 2053
Bromodichloromethane	ND		1	5.0	ug/kg	11/26/2019 2053
Bromoform	ND		1	5.0	ug/kg	11/26/2019 2053
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	11/26/2019 2053
2-Butanone (MEK)	ND		1	20	ug/kg	11/26/2019 2053
Carbon disulfide	ND		1	5.0	ug/kg	11/26/2019 2053
Carbon tetrachloride	ND		1	5.0	ug/kg	11/26/2019 2053
Chlorobenzene	ND		1	5.0	ug/kg	11/26/2019 2053
Chloroethane	ND		1	5.0	ug/kg	11/26/2019 2053
Chloroform	ND		1	5.0	ug/kg	11/26/2019 2053
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	11/26/2019 2053
Cyclohexane	ND		1	5.0	ug/kg	11/26/2019 2053
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	11/26/2019 2053
Dibromochloromethane	ND		1	5.0	ug/kg	11/26/2019 2053
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	11/26/2019 2053
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 2053
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 2053
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 2053
Dichlorodifluoromethane	ND		1	5.0	ug/kg	11/26/2019 2053
1,1-Dichloroethane	ND		1	5.0	ug/kg	11/26/2019 2053
1,2-Dichloroethane	ND		1	5.0	ug/kg	11/26/2019 2053
1,1-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 2053
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 2053
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 2053
1,2-Dichloropropane	ND		1	5.0	ug/kg	11/26/2019 2053
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	11/26/2019 2053
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	11/26/2019 2053
Ethylbenzene	ND		1	5.0	ug/kg	11/26/2019 2053
2-Hexanone	ND		1	10	ug/kg	11/26/2019 2053
Isopropylbenzene	ND		1	5.0	ug/kg	11/26/2019 2053
Methyl acetate	ND		1	5.0	ug/kg	11/26/2019 2053
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	11/26/2019 2053
4-Methyl-2-pentanone	ND		1	10	ug/kg	11/26/2019 2053
Methylcyclohexane	ND		1	5.0	ug/kg	11/26/2019 2053
Methylene chloride	ND		1	5.0	ug/kg	11/26/2019 2053
Styrene	ND		1	5.0	ug/kg	11/26/2019 2053
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	11/26/2019 2053
Tetrachloroethene	ND		1	5.0	ug/kg	11/26/2019 2053
Toluene	ND		1	5.0	ug/kg	11/26/2019 2053
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	11/26/2019 2053
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 2053
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	11/26/2019 2053
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	11/26/2019 2053

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37197-001
Batch: 37197
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	11/26/2019 2053
Trichlorofluoromethane	ND		1	5.0	ug/kg	11/26/2019 2053
Vinyl chloride	ND		1	5.0	ug/kg	11/26/2019 2053
Xylenes (total)	ND		1	10	ug/kg	11/26/2019 2053

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		94	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		98	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37197-002
Batch: 37197
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	88		1	88	60-140	11/26/2019 2018
Benzene	50	46		1	92	70-130	11/26/2019 2018
Bromodichloromethane	50	49		1	99	70-130	11/26/2019 2018
Bromoform	50	52		1	104	70-130	11/26/2019 2018
Bromomethane (Methyl bromide)	50	45		1	91	70-130	11/26/2019 2018
2-Butanone (MEK)	100	87		1	87	60-140	11/26/2019 2018
Carbon disulfide	50	43		1	86	70-130	11/26/2019 2018
Carbon tetrachloride	50	46		1	93	70-130	11/26/2019 2018
Chlorobenzene	50	47		1	94	70-130	11/26/2019 2018
Chloroethane	50	47		1	95	70-130	11/26/2019 2018
Chloroform	50	48		1	95	70-130	11/26/2019 2018
Chloromethane (Methyl chloride)	50	43		1	86	60-140	11/26/2019 2018
Cyclohexane	50	48		1	96	70-130	11/26/2019 2018
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	97	70-130	11/26/2019 2018
Dibromochloromethane	50	51		1	102	70-130	11/26/2019 2018
1,2-Dibromoethane (EDB)	50	50		1	101	70-130	11/26/2019 2018
1,2-Dichlorobenzene	50	46		1	93	70-130	11/26/2019 2018
1,3-Dichlorobenzene	50	45		1	91	70-130	11/26/2019 2018
1,4-Dichlorobenzene	50	46		1	91	70-130	11/26/2019 2018
Dichlorodifluoromethane	50	42		1	84	60-140	11/26/2019 2018
1,1-Dichloroethane	50	46		1	93	70-130	11/26/2019 2018
1,2-Dichloroethane	50	47		1	95	70-130	11/26/2019 2018
1,1-Dichloroethene	50	51		1	102	70-130	11/26/2019 2018
cis-1,2-Dichloroethene	50	47		1	94	70-130	11/26/2019 2018
trans-1,2-Dichloroethene	50	49		1	98	70-130	11/26/2019 2018
1,2-Dichloropropane	50	48		1	97	70-130	11/26/2019 2018
cis-1,3-Dichloropropene	50	52		1	104	70-130	11/26/2019 2018
trans-1,3-Dichloropropene	50	52		1	104	70-130	11/26/2019 2018
Ethylbenzene	50	45		1	91	70-130	11/26/2019 2018
2-Hexanone	100	95		1	95	70-130	11/26/2019 2018
Isopropylbenzene	50	44		1	87	70-130	11/26/2019 2018
Methyl acetate	50	50		1	101	70-130	11/26/2019 2018
Methyl tertiary butyl ether (MTBE)	50	50		1	100	70-130	11/26/2019 2018
4-Methyl-2-pentanone	100	99		1	99	70-130	11/26/2019 2018
Methylcyclohexane	50	47		1	94	70-130	11/26/2019 2018
Methylene chloride	50	46		1	92	70-130	11/26/2019 2018
Styrene	50	48		1	96	70-130	11/26/2019 2018
1,1,2,2-Tetrachloroethane	50	49		1	98	70-130	11/26/2019 2018
Tetrachloroethene	50	44		1	88	70-130	11/26/2019 2018
Toluene	50	44		1	88	70-130	11/26/2019 2018
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	46		1	93	70-130	11/26/2019 2018
1,2,4-Trichlorobenzene	50	44		1	89	70-130	11/26/2019 2018
1,1,1-Trichloroethane	50	45		1	90	70-130	11/26/2019 2018
1,1,2-Trichloroethane	50	50		1	99	70-130	11/26/2019 2018

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37197-002
Batch: 37197
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	45		1	90	70-130	11/26/2019 2018
Trichlorofluoromethane	50	46		1	91	70-130	11/26/2019 2018
Vinyl chloride	50	41		1	82	70-130	11/26/2019 2018
Xylenes (total)	100	93		1	93	70-130	11/26/2019 2018

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		95	53-142
Bromofluorobenzene		101	47-138
Toluene-d8		102	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: UK22073-008MS
Batch: 37197
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	260	120	710	N	1	380	70-130	11/27/2019 0336
Benzene	ND	58	47		1	80	70-130	11/27/2019 0336
Bromodichloromethane	ND	58	44		1	75	70-130	11/27/2019 0336
Bromoform	ND	58	38	N	1	66	70-130	11/27/2019 0336
Bromomethane (Methyl bromide)	ND	58	42		1	72	70-130	11/27/2019 0336
2-Butanone (MEK)	ND	120	58	N	1	50	70-130	11/27/2019 0336
Carbon disulfide	ND	58	42		1	71	70-130	11/27/2019 0336
Carbon tetrachloride	ND	58	45		1	78	70-130	11/27/2019 0336
Chlorobenzene	ND	58	44		1	76	70-130	11/27/2019 0336
Chloroethane	ND	58	48		1	82	70-130	11/27/2019 0336
Chloroform	ND	58	48		1	82	70-130	11/27/2019 0336
Chloromethane (Methyl chloride)	ND	58	42		1	73	60-140	11/27/2019 0336
Cyclohexane	ND	58	46		1	79	70-130	11/27/2019 0336
1,2-Dibromo-3-chloropropane (DBCP)	ND	58	48		1	83	70-130	11/27/2019 0336
Dibromochloromethane	ND	58	47		1	81	70-130	11/27/2019 0336
1,2-Dibromoethane (EDB)	ND	58	49		1	84	70-130	11/27/2019 0336
1,2-Dichlorobenzene	ND	58	39	N	1	66	70-130	11/27/2019 0336
1,3-Dichlorobenzene	ND	58	42		1	72	70-130	11/27/2019 0336
1,4-Dichlorobenzene	ND	58	40	N	1	69	70-130	11/27/2019 0336
Dichlorodifluoromethane	ND	58	43		1	74	60-140	11/27/2019 0336
1,1-Dichloroethane	ND	58	48		1	83	70-130	11/27/2019 0336
1,2-Dichloroethane	ND	58	45		1	77	70-130	11/27/2019 0336
1,1-Dichloroethene	ND	58	55		1	93	70-130	11/27/2019 0336
cis-1,2-Dichloroethene	ND	58	48		1	81	70-130	11/27/2019 0336
trans-1,2-Dichloroethene	ND	58	51		1	87	70-130	11/27/2019 0336
1,2-Dichloropropane	ND	58	47		1	80	70-130	11/27/2019 0336
cis-1,3-Dichloropropene	ND	58	40	N	1	69	70-130	11/27/2019 0336
trans-1,3-Dichloropropene	ND	58	50		1	85	70-130	11/27/2019 0336
Ethylbenzene	ND	58	45		1	76	70-130	11/27/2019 0336
2-Hexanone	ND	120	75	N	1	65	70-130	11/27/2019 0336
Isopropylbenzene	ND	58	38	N	1	64	70-130	11/27/2019 0336
Methyl acetate	ND	58	70		1	120	70-130	11/27/2019 0336
Methyl tertiary butyl ether (MTBE)	ND	58	49		1	84	70-130	11/27/2019 0336
4-Methyl-2-pentanone	ND	120	80	N	1	69	70-130	11/27/2019 0336
Methylcyclohexane	ND	58	41	N	1	69	70-130	11/27/2019 0336
Methylene chloride	ND	58	50		1	85	70-130	11/27/2019 0336
Styrene	ND	58	34	N	1	58	70-130	11/27/2019 0336
1,1,2,2-Tetrachloroethane	ND	58	62		1	106	70-130	11/27/2019 0336
Tetrachloroethene	ND	58	48		1	81	70-130	11/27/2019 0336
Toluene	ND	58	50		1	86	70-130	11/27/2019 0336
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	58	49		1	84	70-130	11/27/2019 0336
1,2,4-Trichlorobenzene	ND	58	22	N	1	38	70-130	11/27/2019 0336
1,1,1-Trichloroethane	ND	58	46		1	78	70-130	11/27/2019 0336
1,1,2-Trichloroethane	ND	58	51		1	88	70-130	11/27/2019 0336

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: UK22073-008MS
Batch: 37197
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	58	44		1	75	70-130	11/27/2019 0336
Trichlorofluoromethane	ND	58	45		1	78	70-130	11/27/2019 0336
Vinyl chloride	ND	58	43		1	73	70-130	11/27/2019 0336
Xylenes (total)	ND	120	86		1	74	70-130	11/27/2019 0336

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		88	53-142
Bromofluorobenzene		77	47-138
Toluene-d8		119	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MSD

Sample ID: UK22073-008MD
Batch: 37197
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	260	94	420	N,+	1	165	51	70-130	20	11/27/2019 0359
Benzene	ND	47	37	+	1	78	23	70-130	20	11/27/2019 0359
Bromodichloromethane	ND	47	37		1	79	16	70-130	20	11/27/2019 0359
Bromoform	ND	47	35		1	74	9.7	70-130	20	11/27/2019 0359
Bromomethane (Methyl bromide)	ND	47	35		1	75	19	70-130	20	11/27/2019 0359
2-Butanone (MEK)	ND	94	44	N,+	1	47	27	70-130	20	11/27/2019 0359
Carbon disulfide	ND	47	34		1	73	19	70-130	20	11/27/2019 0359
Carbon tetrachloride	ND	47	37	+	1	79	21	70-130	20	11/27/2019 0359
Chlorobenzene	ND	47	35	+	1	75	22	70-130	20	11/27/2019 0359
Chloroethane	ND	47	39	+	1	83	22	70-130	20	11/27/2019 0359
Chloroform	ND	47	38	+	1	80	25	70-130	20	11/27/2019 0359
Chloromethane (Methyl chloride)	ND	47	34	+	1	73	21	60-140	20	11/27/2019 0359
Cyclohexane	ND	47	40		1	86	14	70-130	20	11/27/2019 0359
1,2-Dibromo-3-chloropropane (DBCP)	ND	47	34	+	1	74	33	70-130	20	11/27/2019 0359
Dibromochloromethane	ND	47	37	+	1	79	24	70-130	20	11/27/2019 0359
1,2-Dibromoethane (EDB)	ND	47	36	+	1	77	30	70-130	20	11/27/2019 0359
1,2-Dichlorobenzene	ND	47	33		1	71	15	70-130	20	11/27/2019 0359
1,3-Dichlorobenzene	ND	47	35		1	74	19	70-130	20	11/27/2019 0359
1,4-Dichlorobenzene	ND	47	34		1	72	18	70-130	20	11/27/2019 0359
Dichlorodifluoromethane	ND	47	34	+	1	72	24	60-140	20	11/27/2019 0359
1,1-Dichloroethane	ND	47	37	+	1	80	25	70-130	20	11/27/2019 0359
1,2-Dichloroethane	ND	47	36	+	1	76	23	70-130	20	11/27/2019 0359
1,1-Dichloroethene	ND	47	44	+	1	93	23	70-130	20	11/27/2019 0359
cis-1,2-Dichloroethene	ND	47	38	+	1	80	24	70-130	20	11/27/2019 0359
trans-1,2-Dichloroethene	ND	47	40	+	1	86	23	70-130	20	11/27/2019 0359
1,2-Dichloropropane	ND	47	38	+	1	80	22	70-130	20	11/27/2019 0359
cis-1,3-Dichloropropene	ND	47	38		1	80	6.7	70-130	20	11/27/2019 0359
trans-1,3-Dichloropropene	ND	47	38	+	1	82	25	70-130	20	11/27/2019 0359
Ethylbenzene	ND	47	37		1	78	19	70-130	20	11/27/2019 0359
2-Hexanone	ND	94	53	N,+	1	57	34	70-130	20	11/27/2019 0359
Isopropylbenzene	ND	47	35		1	75	7.1	70-130	20	11/27/2019 0359
Methyl acetate	ND	47	64	N	1	137	8.5	70-130	20	11/27/2019 0359
Methyl tertiary butyl ether (MTBE)	ND	47	38	+	1	80	26	70-130	20	11/27/2019 0359
4-Methyl-2-pentanone	ND	94	67		1	72	18	70-130	20	11/27/2019 0359
Methylcyclohexane	ND	47	40		1	85	2.0	70-130	20	11/27/2019 0359
Methylene chloride	ND	47	38	+	1	80	28	70-130	20	11/27/2019 0359
Styrene	ND	47	32	N	1	68	6.7	70-130	20	11/27/2019 0359
1,1,2,2-Tetrachloroethane	ND	47	40	+	1	84	44	70-130	20	11/27/2019 0359
Tetrachloroethene	ND	47	37	+	1	79	25	70-130	20	11/27/2019 0359
Toluene	ND	47	36	+	1	77	33	70-130	20	11/27/2019 0359
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	47	40		1	86	20	70-130	20	11/27/2019 0359
1,2,4-Trichlorobenzene	ND	47	22	N	1	47	0.70	70-130	20	11/27/2019 0359
1,1,1-Trichloroethane	ND	47	37	+	1	79	21	70-130	20	11/27/2019 0359
1,1,2-Trichloroethane	ND	47	37	+	1	80	31	70-130	20	11/27/2019 0359

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MSD

Sample ID: UK22073-008MD
Batch: 37197
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	ND	47	36		1	77	19	70-130	20	11/27/2019 0359
Trichlorofluoromethane	ND	47	37		1	79	20	70-130	20	11/27/2019 0359
Vinyl chloride	ND	47	34	+	1	72	23	70-130	20	11/27/2019 0359
Xylenes (total)	ND	94	72		1	77	18	70-130	20	11/27/2019 0359

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		89	53-142
Bromofluorobenzene		92	47-138
Toluene-d8		104	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37558-001
Batch: 37558
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/kg	12/02/2019 0938
Benzene	ND		1	5.0	ug/kg	12/02/2019 0938
Bromodichloromethane	ND		1	5.0	ug/kg	12/02/2019 0938
Bromoform	ND		1	5.0	ug/kg	12/02/2019 0938
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	12/02/2019 0938
2-Butanone (MEK)	ND		1	20	ug/kg	12/02/2019 0938
Carbon disulfide	ND		1	5.0	ug/kg	12/02/2019 0938
Carbon tetrachloride	ND		1	5.0	ug/kg	12/02/2019 0938
Chlorobenzene	ND		1	5.0	ug/kg	12/02/2019 0938
Chloroethane	ND		1	5.0	ug/kg	12/02/2019 0938
Chloroform	ND		1	5.0	ug/kg	12/02/2019 0938
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	12/02/2019 0938
Cyclohexane	ND		1	5.0	ug/kg	12/02/2019 0938
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	12/02/2019 0938
Dibromochloromethane	ND		1	5.0	ug/kg	12/02/2019 0938
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	12/02/2019 0938
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	12/02/2019 0938
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	12/02/2019 0938
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	12/02/2019 0938
Dichlorodifluoromethane	ND		1	5.0	ug/kg	12/02/2019 0938
1,1-Dichloroethane	ND		1	5.0	ug/kg	12/02/2019 0938
1,2-Dichloroethane	ND		1	5.0	ug/kg	12/02/2019 0938
1,1-Dichloroethene	ND		1	5.0	ug/kg	12/02/2019 0938
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/02/2019 0938
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/02/2019 0938
1,2-Dichloropropane	ND		1	5.0	ug/kg	12/02/2019 0938
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/02/2019 0938
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/02/2019 0938
Ethylbenzene	ND		1	5.0	ug/kg	12/02/2019 0938
2-Hexanone	ND		1	10	ug/kg	12/02/2019 0938
Isopropylbenzene	ND		1	5.0	ug/kg	12/02/2019 0938
Methyl acetate	ND		1	5.0	ug/kg	12/02/2019 0938
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	12/02/2019 0938
4-Methyl-2-pentanone	ND		1	10	ug/kg	12/02/2019 0938
Methylcyclohexane	ND		1	5.0	ug/kg	12/02/2019 0938
Methylene chloride	ND		1	5.0	ug/kg	12/02/2019 0938
Styrene	ND		1	5.0	ug/kg	12/02/2019 0938
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	12/02/2019 0938
Tetrachloroethene	ND		1	5.0	ug/kg	12/02/2019 0938
Toluene	ND		1	5.0	ug/kg	12/02/2019 0938
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	12/02/2019 0938
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	12/02/2019 0938
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	12/02/2019 0938
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	12/02/2019 0938

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37558-001
Batch: 37558
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	12/02/2019 0938
Trichlorofluoromethane	ND		1	5.0	ug/kg	12/02/2019 0938
Vinyl chloride	ND		1	5.0	ug/kg	12/02/2019 0938
Xylenes (total)	ND		1	10	ug/kg	12/02/2019 0938

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		91	53-142
Bromofluorobenzene		102	47-138
Toluene-d8		104	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37558-002
Batch: 37558
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	112	60-140	12/02/2019 0915
Benzene	50	49		1	99	70-130	12/02/2019 0915
Bromodichloromethane	50	50		1	100	70-130	12/02/2019 0915
Bromoform	50	50		1	100	70-130	12/02/2019 0915
Bromomethane (Methyl bromide)	50	47		1	93	70-130	12/02/2019 0915
2-Butanone (MEK)	100	100		1	103	60-140	12/02/2019 0915
Carbon disulfide	50	49		1	99	70-130	12/02/2019 0915
Carbon tetrachloride	50	50		1	101	70-130	12/02/2019 0915
Chlorobenzene	50	49		1	98	70-130	12/02/2019 0915
Chloroethane	50	53		1	106	70-130	12/02/2019 0915
Chloroform	50	50		1	99	70-130	12/02/2019 0915
Chloromethane (Methyl chloride)	50	48		1	95	60-140	12/02/2019 0915
Cyclohexane	50	47		1	95	70-130	12/02/2019 0915
1,2-Dibromo-3-chloropropane (DBCP)	50	46		1	91	70-130	12/02/2019 0915
Dibromochloromethane	50	50		1	100	70-130	12/02/2019 0915
1,2-Dibromoethane (EDB)	50	48		1	97	70-130	12/02/2019 0915
1,2-Dichlorobenzene	50	48		1	97	70-130	12/02/2019 0915
1,3-Dichlorobenzene	50	49		1	98	70-130	12/02/2019 0915
1,4-Dichlorobenzene	50	48		1	97	70-130	12/02/2019 0915
Dichlorodifluoromethane	50	41		1	83	60-140	12/02/2019 0915
1,1-Dichloroethane	50	50		1	100	70-130	12/02/2019 0915
1,2-Dichloroethane	50	48		1	96	70-130	12/02/2019 0915
1,1-Dichloroethene	50	57		1	114	70-130	12/02/2019 0915
cis-1,2-Dichloroethene	50	50		1	100	70-130	12/02/2019 0915
trans-1,2-Dichloroethene	50	54		1	107	70-130	12/02/2019 0915
1,2-Dichloropropane	50	50		1	99	70-130	12/02/2019 0915
cis-1,3-Dichloropropene	50	53		1	106	70-130	12/02/2019 0915
trans-1,3-Dichloropropene	50	53		1	106	70-130	12/02/2019 0915
Ethylbenzene	50	50		1	101	70-130	12/02/2019 0915
2-Hexanone	100	110		1	110	70-130	12/02/2019 0915
Isopropylbenzene	50	49		1	98	70-130	12/02/2019 0915
Methyl acetate	50	48		1	96	70-130	12/02/2019 0915
Methyl tertiary butyl ether (MTBE)	50	48		1	97	70-130	12/02/2019 0915
4-Methyl-2-pentanone	100	95		1	95	70-130	12/02/2019 0915
Methylcyclohexane	50	48		1	96	70-130	12/02/2019 0915
Methylene chloride	50	47		1	93	70-130	12/02/2019 0915
Styrene	50	51		1	101	70-130	12/02/2019 0915
1,1,2,2-Tetrachloroethane	50	47		1	93	70-130	12/02/2019 0915
Tetrachloroethene	50	51		1	101	70-130	12/02/2019 0915
Toluene	50	48		1	96	70-130	12/02/2019 0915
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	46		1	92	70-130	12/02/2019 0915
1,2,4-Trichlorobenzene	50	48		1	95	70-130	12/02/2019 0915
1,1,1-Trichloroethane	50	50		1	100	70-130	12/02/2019 0915
1,1,2-Trichloroethane	50	49		1	97	70-130	12/02/2019 0915

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37558-002
Batch: 37558
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	50		1	101	70-130	12/02/2019 0915
Trichlorofluoromethane	50	48		1	96	70-130	12/02/2019 0915
Vinyl chloride	50	46		1	91	70-130	12/02/2019 0915
Xylenes (total)	100	100		1	101	70-130	12/02/2019 0915

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		89	53-142
Bromofluorobenzene		101	47-138
Toluene-d8		102	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37558-003
Batch: 37558
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	110		1	109	3.1	60-140	20	12/02/2019 1709
Benzene	50	50		1	99	0.11	70-130	20	12/02/2019 1709
Bromodichloromethane	50	50		1	101	0.64	70-130	20	12/02/2019 1709
Bromoform	50	51		1	102	1.5	70-130	20	12/02/2019 1709
Bromomethane (Methyl bromide)	50	53		1	107	14	70-130	20	12/02/2019 1709
2-Butanone (MEK)	100	100		1	103	0.11	60-140	20	12/02/2019 1709
Carbon disulfide	50	50		1	101	2.3	70-130	20	12/02/2019 1709
Carbon tetrachloride	50	52		1	104	3.0	70-130	20	12/02/2019 1709
Chlorobenzene	50	50		1	99	0.88	70-130	20	12/02/2019 1709
Chloroethane	50	56		1	112	5.6	70-130	20	12/02/2019 1709
Chloroform	50	52		1	103	3.9	70-130	20	12/02/2019 1709
Chloromethane (Methyl chloride)	50	50		1	100	4.6	60-140	20	12/02/2019 1709
Cyclohexane	50	46		1	92	2.7	70-130	20	12/02/2019 1709
1,2-Dibromo-3-chloropropane (DBCP)	50	45		1	91	0.57	70-130	20	12/02/2019 1709
Dibromochloromethane	50	50		1	100	0.056	70-130	20	12/02/2019 1709
1,2-Dibromoethane (EDB)	50	49		1	97	0.96	70-130	20	12/02/2019 1709
1,2-Dichlorobenzene	50	50		1	100	3.3	70-130	20	12/02/2019 1709
1,3-Dichlorobenzene	50	51		1	101	2.9	70-130	20	12/02/2019 1709
1,4-Dichlorobenzene	50	50		1	101	4.2	70-130	20	12/02/2019 1709
Dichlorodifluoromethane	50	43		1	86	3.9	60-140	20	12/02/2019 1709
1,1-Dichloroethane	50	51		1	103	2.6	70-130	20	12/02/2019 1709
1,2-Dichloroethane	50	47		1	93	2.3	70-130	20	12/02/2019 1709
1,1-Dichloroethene	50	58		1	117	2.4	70-130	20	12/02/2019 1709
cis-1,2-Dichloroethene	50	51		1	103	2.9	70-130	20	12/02/2019 1709
trans-1,2-Dichloroethene	50	56		1	113	5.0	70-130	20	12/02/2019 1709
1,2-Dichloropropane	50	51		1	101	1.9	70-130	20	12/02/2019 1709
cis-1,3-Dichloropropene	50	53		1	107	0.48	70-130	20	12/02/2019 1709
trans-1,3-Dichloropropene	50	52		1	104	1.4	70-130	20	12/02/2019 1709
Ethylbenzene	50	51		1	103	2.1	70-130	20	12/02/2019 1709
2-Hexanone	100	100		1	104	5.4	70-130	20	12/02/2019 1709
Isopropylbenzene	50	50		1	100	1.9	70-130	20	12/02/2019 1709
Methyl acetate	50	50		1	100	4.4	70-130	20	12/02/2019 1709
Methyl tertiary butyl ether (MTBE)	50	51		1	103	5.9	70-130	20	12/02/2019 1709
4-Methyl-2-pentanone	100	98		1	98	2.2	70-130	20	12/02/2019 1709
Methylcyclohexane	50	45		1	91	5.2	70-130	20	12/02/2019 1709
Methylene chloride	50	48		1	96	3.2	70-130	20	12/02/2019 1709
Styrene	50	51		1	102	0.42	70-130	20	12/02/2019 1709
1,1,2,2-Tetrachloroethane	50	48		1	96	3.3	70-130	20	12/02/2019 1709
Tetrachloroethene	50	51		1	103	1.2	70-130	20	12/02/2019 1709
Toluene	50	48		1	95	1.2	70-130	20	12/02/2019 1709
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	45		1	89	3.4	70-130	20	12/02/2019 1709
1,2,4-Trichlorobenzene	50	51		1	102	6.3	70-130	20	12/02/2019 1709
1,1,1-Trichloroethane	50	52		1	103	3.1	70-130	20	12/02/2019 1709
1,1,2-Trichloroethane	50	49		1	97	0.12	70-130	20	12/02/2019 1709

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37558-003
Batch: 37558
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	50		1	100	0.41	70-130	20	12/02/2019 1709
Trichlorofluoromethane	50	49		1	99	3.3	70-130	20	12/02/2019 1709
Vinyl chloride	50	47		1	94	3.5	70-130	20	12/02/2019 1709
Xylenes (total)	100	100		1	102	0.55	70-130	20	12/02/2019 1709

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		88	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		98	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ36920-001
Batch: 36920
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/25/2019 1328

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acenaphthene	ND		1	13	ug/kg	11/29/2019 1059
Acenaphthylene	ND		1	13	ug/kg	11/29/2019 1059
Acetophenone	ND		1	67	ug/kg	11/29/2019 1059
Anthracene	ND		1	13	ug/kg	11/29/2019 1059
Atrazine	ND		1	67	ug/kg	11/29/2019 1059
Benzaldehyde	ND		1	67	ug/kg	11/29/2019 1059
Benzo(a)anthracene	ND		1	13	ug/kg	11/29/2019 1059
Benzo(a)pyrene	ND		1	13	ug/kg	11/29/2019 1059
Benzo(b)fluoranthene	ND		1	13	ug/kg	11/29/2019 1059
Benzo(g,h,i)perylene	ND		1	13	ug/kg	11/29/2019 1059
Benzo(k)fluoranthene	ND		1	13	ug/kg	11/29/2019 1059
1,1'-Biphenyl	ND		1	67	ug/kg	11/29/2019 1059
4-Bromophenyl phenyl ether	ND		1	67	ug/kg	11/29/2019 1059
Butyl benzyl phthalate	ND		1	67	ug/kg	11/29/2019 1059
Caprolactam	ND		1	67	ug/kg	11/29/2019 1059
Carbazole	ND		1	67	ug/kg	11/29/2019 1059
bis (2-Chloro-1-methylethyl) ether	ND		1	67	ug/kg	11/29/2019 1059
4-Chloro-3-methyl phenol	ND		1	67	ug/kg	11/29/2019 1059
4-Chloroaniline	ND		1	67	ug/kg	11/29/2019 1059
bis(2-Chloroethoxy)methane	ND		1	67	ug/kg	11/29/2019 1059
bis(2-Chloroethyl)ether	ND		1	67	ug/kg	11/29/2019 1059
2-Chloronaphthalene	ND		1	67	ug/kg	11/29/2019 1059
2-Chlorophenol	ND		1	67	ug/kg	11/29/2019 1059
4-Chlorophenyl phenyl ether	ND		1	67	ug/kg	11/29/2019 1059
Chrysene	ND		1	13	ug/kg	11/29/2019 1059
Dibenzo(a,h)anthracene	ND		1	13	ug/kg	11/29/2019 1059
Dibenzofuran	ND		1	67	ug/kg	11/29/2019 1059
3,3'-Dichlorobenzidine	ND		1	67	ug/kg	11/29/2019 1059
2,4-Dichlorophenol	ND		1	67	ug/kg	11/29/2019 1059
Diethylphthalate	ND		1	67	ug/kg	11/29/2019 1059
Dimethyl phthalate	ND		1	67	ug/kg	11/29/2019 1059
2,4-Dimethylphenol	ND		1	67	ug/kg	11/29/2019 1059
Di-n-butyl phthalate	ND		1	67	ug/kg	11/29/2019 1059
4,6-Dinitro-2-methylphenol	ND		1	330	ug/kg	11/29/2019 1059
2,4-Dinitrophenol	ND		1	330	ug/kg	11/29/2019 1059
2,4-Dinitrotoluene	ND		1	130	ug/kg	11/29/2019 1059
2,6-Dinitrotoluene	ND		1	130	ug/kg	11/29/2019 1059
Di-n-octylphthalate	ND		1	67	ug/kg	11/29/2019 1059
bis(2-Ethylhexyl)phthalate	ND		1	67	ug/kg	11/29/2019 1059
Fluoranthene	ND		1	13	ug/kg	11/29/2019 1059
Fluorene	ND		1	13	ug/kg	11/29/2019 1059
Hexachlorobenzene	ND		1	67	ug/kg	11/29/2019 1059
Hexachlorobutadiene	ND		1	67	ug/kg	11/29/2019 1059
Hexachlorocyclopentadiene	ND		1	330	ug/kg	11/29/2019 1059

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ36920-001
Batch: 36920
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/25/2019 1328

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Hexachloroethane	ND		1	67	ug/kg	11/29/2019 1059
Indeno(1,2,3-c,d)pyrene	ND		1	13	ug/kg	11/29/2019 1059
Isophorone	ND		1	67	ug/kg	11/29/2019 1059
2-Methylnaphthalene	ND		1	13	ug/kg	11/29/2019 1059
2-Methylphenol	ND		1	67	ug/kg	11/29/2019 1059
3+4-Methylphenol	ND		1	130	ug/kg	11/29/2019 1059
Naphthalene	ND		1	13	ug/kg	11/29/2019 1059
2-Nitroaniline	ND		1	130	ug/kg	11/29/2019 1059
3-Nitroaniline	ND		1	130	ug/kg	11/29/2019 1059
4-Nitroaniline	ND		1	130	ug/kg	11/29/2019 1059
Nitrobenzene	ND		1	67	ug/kg	11/29/2019 1059
2-Nitrophenol	ND		1	130	ug/kg	11/29/2019 1059
4-Nitrophenol	ND		1	330	ug/kg	11/29/2019 1059
N-Nitrosodi-n-propylamine	ND		1	67	ug/kg	11/29/2019 1059
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	67	ug/kg	11/29/2019 1059
Pentachlorophenol	ND		1	330	ug/kg	11/29/2019 1059
Phenanthrene	ND		1	13	ug/kg	11/29/2019 1059
Phenol	ND		1	67	ug/kg	11/29/2019 1059
Pyrene	ND		1	13	ug/kg	11/29/2019 1059
2,4,5-Trichlorophenol	ND		1	67	ug/kg	11/29/2019 1059
2,4,6-Trichlorophenol	ND		1	67	ug/kg	11/29/2019 1059

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		76	24-137
2-Fluorophenol		82	16-136
Nitrobenzene-d5		72	12-144
Phenol-d5		82	26-148
Terphenyl-d14		92	20-127
2,4,6-Tribromophenol		57	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ36920-002
Batch: 36920
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/25/2019 1328

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	670	560		1	84	46-114	11/29/2019 1124
Acenaphthylene	670	560		1	84	44-122	11/29/2019 1124
Acetophenone	670	510		1	76	48-111	11/29/2019 1124
Anthracene	670	580		1	86	50-119	11/29/2019 1124
Atrazine	670	570		1	86	48-116	11/29/2019 1124
Benzaldehyde	670	490		1	74	10-110	11/29/2019 1124
Benzo(a)anthracene	670	560		1	85	47-121	11/29/2019 1124
Benzo(a)pyrene	670	580		1	87	55-134	11/29/2019 1124
Benzo(b)fluoranthene	670	550		1	83	28-139	11/29/2019 1124
Benzo(g,h,i)perylene	670	590		1	89	36-125	11/29/2019 1124
Benzo(k)fluoranthene	670	550		1	83	47-130	11/29/2019 1124
1,1'-Biphenyl	670	540		1	81	49-110	11/29/2019 1124
4-Bromophenyl phenyl ether	670	510		1	77	46-118	11/29/2019 1124
Butyl benzyl phthalate	670	720		1	108	46-128	11/29/2019 1124
Caprolactam	670	640		1	96	43-121	11/29/2019 1124
Carbazole	670	580		1	87	47-128	11/29/2019 1124
bis (2-Chloro-1-methylethyl) ether	670	450		1	67	31-102	11/29/2019 1124
4-Chloro-3-methyl phenol	670	620		1	93	49-118	11/29/2019 1124
4-Chloroaniline	670	430		1	65	17-106	11/29/2019 1124
bis(2-Chloroethoxy)methane	670	520		1	78	39-108	11/29/2019 1124
bis(2-Chloroethyl)ether	670	560		1	84	32-105	11/29/2019 1124
2-Chloronaphthalene	670	540		1	81	31-127	11/29/2019 1124
2-Chlorophenol	670	580		1	88	37-106	11/29/2019 1124
4-Chlorophenyl phenyl ether	670	560		1	83	47-116	11/29/2019 1124
Chrysene	670	560		1	84	45-126	11/29/2019 1124
Dibenzo(a,h)anthracene	670	570		1	85	45-122	11/29/2019 1124
Dibenzofuran	670	550		1	83	45-112	11/29/2019 1124
3,3'-Dichlorobenzidine	670	490		1	73	10-119	11/29/2019 1124
2,4-Dichlorophenol	670	550		1	83	41-113	11/29/2019 1124
Diethylphthalate	670	600		1	90	49-123	11/29/2019 1124
Dimethyl phthalate	670	570		1	85	48-120	11/29/2019 1124
2,4-Dimethylphenol	670	730		1	110	33-123	11/29/2019 1124
Di-n-butyl phthalate	670	610		1	92	51-129	11/29/2019 1124
4,6-Dinitro-2-methylphenol	670	560		1	83	40-130	11/29/2019 1124
2,4-Dinitrophenol	1300	1000		1	76	10-113	11/29/2019 1124
2,4-Dinitrotoluene	670	610		1	92	48-124	11/29/2019 1124
2,6-Dinitrotoluene	670	570		1	85	47-125	11/29/2019 1124
Di-n-octylphthalate	670	600		1	91	49-142	11/29/2019 1124
bis(2-Ethylhexyl)phthalate	670	620		1	93	45-128	11/29/2019 1124
Fluoranthene	670	540		1	82	50-123	11/29/2019 1124
Fluorene	670	570		1	85	48-117	11/29/2019 1124
Hexachlorobenzene	670	490		1	73	44-122	11/29/2019 1124
Hexachlorobutadiene	670	520		1	78	33-103	11/29/2019 1124
Hexachlorocyclopentadiene	3300	2600		1	77	18-121	11/29/2019 1124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ36920-002
Batch: 36920
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/25/2019 1328

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexachloroethane	670	520		1	77	30-96	11/29/2019 1124
Indeno(1,2,3-c,d)pyrene	670	580		1	87	45-123	11/29/2019 1124
Isophorone	670	580		1	86	41-113	11/29/2019 1124
2-Methylnaphthalene	670	540		1	80	40-106	11/29/2019 1124
2-Methylphenol	670	590		1	89	32-107	11/29/2019 1124
3+4-Methylphenol	670	610		1	91	39-108	11/29/2019 1124
Naphthalene	670	530		1	80	36-110	11/29/2019 1124
2-Nitroaniline	670	610		1	92	45-123	11/29/2019 1124
3-Nitroaniline	670	510		1	76	24-127	11/29/2019 1124
4-Nitroaniline	670	640		1	97	48-127	11/29/2019 1124
Nitrobenzene	670	540		1	81	33-114	11/29/2019 1124
2-Nitrophenol	670	530		1	80	35-108	11/29/2019 1124
4-Nitrophenol	1300	1100		1	82	18-154	11/29/2019 1124
N-Nitrosodi-n-propylamine	670	610		1	92	32-115	11/29/2019 1124
N-Nitrosodiphenylamine (Diphenylamine)	670	550		1	83	53-150	11/29/2019 1124
Pentachlorophenol	1300	1000		1	75	27-138	11/29/2019 1124
Phenanthrene	670	540		1	82	49-117	11/29/2019 1124
Phenol	670	590		1	88	36-108	11/29/2019 1124
Pyrene	670	580		1	87	47-119	11/29/2019 1124
2,4,5-Trichlorophenol	670	530		1	80	46-122	11/29/2019 1124
2,4,6-Trichlorophenol	670	550		1	83	38-115	11/29/2019 1124

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		78	24-137
2-Fluorophenol		82	16-136
Nitrobenzene-d5		79	12-144
Phenol-d5		86	26-148
Terphenyl-d14		90	20-127
2,4,6-Tribromophenol		65	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ37330-001
Batch: 37330
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 11/27/2019 1752

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
1,1'-Biphenyl	ND		1	4.0	ug/L	12/01/2019 1516
2,4,5-Trichlorophenol	ND		1	4.0	ug/L	12/01/2019 1516
2,4,6-Trichlorophenol	ND		1	4.0	ug/L	12/01/2019 1516
2,4-Dichlorophenol	ND		1	8.0	ug/L	12/01/2019 1516
2,4-Dimethylphenol	ND		1	4.0	ug/L	12/01/2019 1516
2,4-Dinitrophenol	ND		1	20	ug/L	12/01/2019 1516
2,4-Dinitrotoluene	ND		1	8.0	ug/L	12/01/2019 1516
2,6-Dinitrotoluene	ND		1	8.0	ug/L	12/01/2019 1516
2-Chloronaphthalene	ND		1	4.0	ug/L	12/01/2019 1516
2-Chlorophenol	ND		1	4.0	ug/L	12/01/2019 1516
2-Methylnaphthalene	ND		1	0.80	ug/L	12/01/2019 1516
2-Methylphenol	ND		1	4.0	ug/L	12/01/2019 1516
2-Nitroaniline	ND		1	8.0	ug/L	12/01/2019 1516
2-Nitrophenol	ND		1	4.0	ug/L	12/01/2019 1516
3,3'-Dichlorobenzidine	ND		1	4.0	ug/L	12/01/2019 1516
3+4-Methylphenol	ND		1	4.0	ug/L	12/01/2019 1516
3-Nitroaniline	ND		1	8.0	ug/L	12/01/2019 1516
4,6-Dinitro-2-methylphenol	ND		1	20	ug/L	12/01/2019 1516
4-Bromophenyl phenyl ether	ND		1	4.0	ug/L	12/01/2019 1516
4-Chloro-3-methyl phenol	ND		1	4.0	ug/L	12/01/2019 1516
4-Chloroaniline	ND		1	8.0	ug/L	12/01/2019 1516
4-Chlorophenyl phenyl ether	ND		1	4.0	ug/L	12/01/2019 1516
4-Nitroaniline	ND		1	8.0	ug/L	12/01/2019 1516
4-Nitrophenol	ND		1	20	ug/L	12/01/2019 1516
Acenaphthene	ND		1	0.80	ug/L	12/01/2019 1516
Acenaphthylene	ND		1	0.80	ug/L	12/01/2019 1516
Acetophenone	ND		1	4.0	ug/L	12/01/2019 1516
Anthracene	ND		1	0.80	ug/L	12/01/2019 1516
Atrazine	ND		1	4.0	ug/L	12/01/2019 1516
Benzaldehyde	ND		1	8.0	ug/L	12/01/2019 1516
Benzo(a)anthracene	ND		1	0.80	ug/L	12/01/2019 1516
Benzo(a)pyrene	ND		1	0.80	ug/L	12/01/2019 1516
Benzo(b)fluoranthene	ND		1	0.80	ug/L	12/01/2019 1516
Benzo(g,h,i)perylene	ND		1	0.80	ug/L	12/01/2019 1516
Benzo(k)fluoranthene	ND		1	0.80	ug/L	12/01/2019 1516
bis (2-Chloro-1-methylethyl) ether	ND		1	4.0	ug/L	12/01/2019 1516
bis(2-Chloroethoxy)methane	ND		1	4.0	ug/L	12/01/2019 1516
bis(2-Chloroethyl)ether	ND		1	4.0	ug/L	12/01/2019 1516
bis(2-Ethylhexyl)phthalate	ND		1	4.0	ug/L	12/01/2019 1516
Butyl benzyl phthalate	ND		1	4.0	ug/L	12/01/2019 1516
Caprolactam	ND		1	8.0	ug/L	12/01/2019 1516
Carbazole	ND		1	4.0	ug/L	12/01/2019 1516
Chrysene	ND		1	0.80	ug/L	12/01/2019 1516
Dibenzo(a,h)anthracene	ND		1	0.80	ug/L	12/01/2019 1516

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ37330-001
Batch: 37330
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 11/27/2019 1752

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Dibenzofuran	ND		1	4.0	ug/L	12/01/2019 1516
Diethylphthalate	ND		1	4.0	ug/L	12/01/2019 1516
Dimethyl phthalate	ND		1	4.0	ug/L	12/01/2019 1516
Di-n-butyl phthalate	ND		1	4.0	ug/L	12/01/2019 1516
Di-n-octylphthalate	ND		1	4.0	ug/L	12/01/2019 1516
Fluoranthene	ND		1	0.80	ug/L	12/01/2019 1516
Fluorene	ND		1	0.80	ug/L	12/01/2019 1516
Hexachlorobenzene	ND		1	4.0	ug/L	12/01/2019 1516
Hexachlorobutadiene	ND		1	4.0	ug/L	12/01/2019 1516
Hexachlorocyclopentadiene	ND		1	20	ug/L	12/01/2019 1516
Hexachloroethane	ND		1	4.0	ug/L	12/01/2019 1516
Indeno(1,2,3-c,d)pyrene	ND		1	0.80	ug/L	12/01/2019 1516
Isophorone	ND		1	4.0	ug/L	12/01/2019 1516
Naphthalene	ND		1	0.80	ug/L	12/01/2019 1516
Nitrobenzene	ND		1	4.0	ug/L	12/01/2019 1516
N-Nitrosodi-n-propylamine	ND		1	4.0	ug/L	12/01/2019 1516
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	4.0	ug/L	12/01/2019 1516
Pentachlorophenol	ND		1	20	ug/L	12/01/2019 1516
Phenanthrene	ND		1	0.80	ug/L	12/01/2019 1516
Phenol	ND		1	4.0	ug/L	12/01/2019 1516
Pyrene	ND		1	0.80	ug/L	12/01/2019 1516

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		66	37-129
2-Fluorophenol		39	24-127
Nitrobenzene-d5		62	38-127
Phenol-d5		54	28-128
Terphenyl-d14		84	10-148
2,4,6-Tribromophenol		65	35-144

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37330-002
Batch: 37330
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 11/27/2019 1752

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	40	30		1	75	30-130	12/01/2019 1540
2,4,5-Trichlorophenol	40	29		1	73	30-123	12/01/2019 1540
2,4,6-Trichlorophenol	40	31		1	76	30-130	12/01/2019 1540
2,4-Dichlorophenol	40	29		1	73	30-121	12/01/2019 1540
2,4-Dimethylphenol	40	29		1	73	20-125	12/01/2019 1540
2,4-Dinitrophenol	80	59		1	74	11-126	12/01/2019 1540
2,4-Dinitrotoluene	40	30		1	74	30-130	12/01/2019 1540
2,6-Dinitrotoluene	40	30		1	74	30-130	12/01/2019 1540
2-Chloronaphthalene	40	30		1	74	30-130	12/01/2019 1540
2-Chlorophenol	40	29		1	74	30-130	12/01/2019 1540
2-Methylnaphthalene	40	29		1	73	40-132	12/01/2019 1540
2-Methylphenol	40	32		1	80	30-130	12/01/2019 1540
2-Nitroaniline	40	29		1	74	30-130	12/01/2019 1540
2-Nitrophenol	40	31		1	78	30-130	12/01/2019 1540
3,3'-Dichlorobenzidine	40	26		1	66	10-126	12/01/2019 1540
3+4-Methylphenol	40	30		1	76	30-130	12/01/2019 1540
3-Nitroaniline	40	22		1	56	30-130	12/01/2019 1540
4,6-Dinitro-2-methylphenol	40	34		1	86	30-130	12/01/2019 1540
4-Bromophenyl phenyl ether	40	32		1	80	30-124	12/01/2019 1540
4-Chloro-3-methyl phenol	40	29		1	71	30-123	12/01/2019 1540
4-Chloroaniline	40	31		1	78	12-157	12/01/2019 1540
4-Chlorophenyl phenyl ether	40	31		1	77	30-121	12/01/2019 1540
4-Nitroaniline	40	27		1	68	30-135	12/01/2019 1540
4-Nitrophenol	80	47		1	59	30-130	12/01/2019 1540
Acenaphthene	40	29		1	72	30-122	12/01/2019 1540
Acenaphthylene	40	29		1	72	30-130	12/01/2019 1540
Acetophenone	40	30		1	75	30-130	12/01/2019 1540
Anthracene	40	29		1	72	30-123	12/01/2019 1540
Atrazine	40	30		1	75	30-130	12/01/2019 1540
Benzaldehyde	40	18		1	44	20-115	12/01/2019 1540
Benzo(a)anthracene	40	29		1	73	40-125	12/01/2019 1540
Benzo(a)pyrene	40	28		1	69	40-128	12/01/2019 1540
Benzo(b)fluoranthene	40	29		1	72	30-130	12/01/2019 1540
Benzo(g,h,i)perylene	40	32		1	79	30-130	12/01/2019 1540
Benzo(k)fluoranthene	40	29		1	73	30-130	12/01/2019 1540
bis (2-Chloro-1-methylethyl) ether	40	32		1	80	30-130	12/01/2019 1540
bis(2-Chloroethoxy)methane	40	31		1	77	30-130	12/01/2019 1540
bis(2-Chloroethyl)ether	40	31		1	78	30-130	12/01/2019 1540
bis(2-Ethylhexyl)phthalate	40	26		1	64	30-130	12/01/2019 1540
Butyl benzyl phthalate	40	26		1	66	30-130	12/01/2019 1540
Caprolactam	40	31		1	77	30-130	12/01/2019 1540
Carbazole	40	29		1	73	30-130	12/01/2019 1540
Chrysene	40	29		1	73	30-130	12/01/2019 1540
Dibenzo(a,h)anthracene	40	31		1	77	30-130	12/01/2019 1540

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37330-002
Batch: 37330
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 11/27/2019 1752

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Dibenzofuran	40	28		1	71	30-118	12/01/2019 1540
Diethylphthalate	40	29		1	72	40-125	12/01/2019 1540
Dimethyl phthalate	40	29		1	73	40-127	12/01/2019 1540
Di-n-butyl phthalate	40	29		1	72	40-127	12/01/2019 1540
Di-n-octylphthalate	40	24		1	59	30-130	12/01/2019 1540
Fluoranthene	40	31		1	77	40-128	12/01/2019 1540
Fluorene	40	29		1	72	30-124	12/01/2019 1540
Hexachlorobenzene	40	31		1	77	30-125	12/01/2019 1540
Hexachlorobutadiene	40	30		1	75	24-110	12/01/2019 1540
Hexachlorocyclopentadiene	200	130		1	66	22-122	12/01/2019 1540
Hexachloroethane	40	28		1	70	30-130	12/01/2019 1540
Indeno(1,2,3-c,d)pyrene	40	30		1	75	30-130	12/01/2019 1540
Isophorone	40	31		1	77	30-130	12/01/2019 1540
Naphthalene	40	30		1	74	30-130	12/01/2019 1540
Nitrobenzene	40	30		1	75	30-130	12/01/2019 1540
N-Nitrosodi-n-propylamine	40	30		1	76	30-130	12/01/2019 1540
N-Nitrosodiphenylamine (Diphenylamine)	40	30		1	74	30-123	12/01/2019 1540
Pentachlorophenol	80	61		1	76	30-130	12/01/2019 1540
Phenanthrene	40	29		1	73	40-123	12/01/2019 1540
Phenol	40	30		1	76	30-130	12/01/2019 1540
Pyrene	40	30		1	75	40-126	12/01/2019 1540

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		73	37-129
2-Fluorophenol		67	24-127
Nitrobenzene-d5		71	38-127
Phenol-d5		72	28-128
Terphenyl-d14		85	10-148
2,4,6-Tribromophenol		73	35-144

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ37405-001
Batch: 37405
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1156

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acenaphthene	ND		1	13	ug/kg	11/30/2019 1642
Acenaphthylene	ND		1	13	ug/kg	11/30/2019 1642
Acetophenone	ND		1	67	ug/kg	11/30/2019 1642
Anthracene	ND		1	13	ug/kg	11/30/2019 1642
Atrazine	ND		1	67	ug/kg	11/30/2019 1642
Benzaldehyde	ND		1	67	ug/kg	11/30/2019 1642
Benzo(a)anthracene	ND		1	13	ug/kg	11/30/2019 1642
Benzo(a)pyrene	ND		1	13	ug/kg	11/30/2019 1642
Benzo(b)fluoranthene	ND		1	13	ug/kg	11/30/2019 1642
Benzo(g,h,i)perylene	ND		1	13	ug/kg	11/30/2019 1642
Benzo(k)fluoranthene	ND		1	13	ug/kg	11/30/2019 1642
1,1'-Biphenyl	ND		1	67	ug/kg	11/30/2019 1642
4-Bromophenyl phenyl ether	ND		1	67	ug/kg	11/30/2019 1642
Butyl benzyl phthalate	ND		1	67	ug/kg	11/30/2019 1642
Caprolactam	ND		1	67	ug/kg	11/30/2019 1642
Carbazole	ND		1	67	ug/kg	11/30/2019 1642
bis (2-Chloro-1-methylethyl) ether	ND		1	67	ug/kg	11/30/2019 1642
4-Chloro-3-methyl phenol	ND		1	67	ug/kg	11/30/2019 1642
4-Chloroaniline	ND		1	67	ug/kg	11/30/2019 1642
bis(2-Chloroethoxy)methane	ND		1	67	ug/kg	11/30/2019 1642
bis(2-Chloroethyl)ether	ND		1	67	ug/kg	11/30/2019 1642
2-Chloronaphthalene	ND		1	67	ug/kg	11/30/2019 1642
2-Chlorophenol	ND		1	67	ug/kg	11/30/2019 1642
4-Chlorophenyl phenyl ether	ND		1	67	ug/kg	11/30/2019 1642
Chrysene	ND		1	13	ug/kg	11/30/2019 1642
Dibenzo(a,h)anthracene	ND		1	13	ug/kg	11/30/2019 1642
Dibenzofuran	ND		1	67	ug/kg	11/30/2019 1642
3,3'-Dichlorobenzidine	ND		1	67	ug/kg	11/30/2019 1642
2,4-Dichlorophenol	ND		1	67	ug/kg	11/30/2019 1642
Diethylphthalate	ND		1	67	ug/kg	11/30/2019 1642
Dimethyl phthalate	ND		1	67	ug/kg	11/30/2019 1642
2,4-Dimethylphenol	ND		1	67	ug/kg	11/30/2019 1642
Di-n-butyl phthalate	ND		1	67	ug/kg	11/30/2019 1642
4,6-Dinitro-2-methylphenol	ND		1	330	ug/kg	11/30/2019 1642
2,4-Dinitrophenol	ND		1	330	ug/kg	11/30/2019 1642
2,4-Dinitrotoluene	ND		1	130	ug/kg	11/30/2019 1642
2,6-Dinitrotoluene	ND		1	130	ug/kg	11/30/2019 1642
Di-n-octylphthalate	ND		1	67	ug/kg	11/30/2019 1642
bis(2-Ethylhexyl)phthalate	ND		1	67	ug/kg	11/30/2019 1642
Fluoranthene	ND		1	13	ug/kg	11/30/2019 1642
Fluorene	ND		1	13	ug/kg	11/30/2019 1642
Hexachlorobenzene	ND		1	67	ug/kg	11/30/2019 1642
Hexachlorobutadiene	ND		1	67	ug/kg	11/30/2019 1642
Hexachlorocyclopentadiene	ND		1	330	ug/kg	11/30/2019 1642

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ37405-001
Batch: 37405
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1156

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Hexachloroethane	ND		1	67	ug/kg	11/30/2019 1642
Indeno(1,2,3-c,d)pyrene	ND		1	13	ug/kg	11/30/2019 1642
Isophorone	ND		1	67	ug/kg	11/30/2019 1642
2-Methylnaphthalene	ND		1	13	ug/kg	11/30/2019 1642
2-Methylphenol	ND		1	67	ug/kg	11/30/2019 1642
3+4-Methylphenol	ND		1	130	ug/kg	11/30/2019 1642
Naphthalene	ND		1	13	ug/kg	11/30/2019 1642
2-Nitroaniline	ND		1	130	ug/kg	11/30/2019 1642
3-Nitroaniline	ND		1	130	ug/kg	11/30/2019 1642
4-Nitroaniline	ND		1	130	ug/kg	11/30/2019 1642
Nitrobenzene	ND		1	67	ug/kg	11/30/2019 1642
2-Nitrophenol	ND		1	130	ug/kg	11/30/2019 1642
4-Nitrophenol	ND		1	330	ug/kg	11/30/2019 1642
N-Nitrosodi-n-propylamine	ND		1	67	ug/kg	11/30/2019 1642
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	67	ug/kg	11/30/2019 1642
Pentachlorophenol	ND		1	330	ug/kg	11/30/2019 1642
Phenanthrene	ND		1	13	ug/kg	11/30/2019 1642
Phenol	ND		1	67	ug/kg	11/30/2019 1642
Pyrene	ND		1	13	ug/kg	11/30/2019 1642
2,4,5-Trichlorophenol	ND		1	67	ug/kg	11/30/2019 1642
2,4,6-Trichlorophenol	ND		1	67	ug/kg	11/30/2019 1642

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		69	24-137
2-Fluorophenol		68	16-136
Nitrobenzene-d5		68	12-144
Phenol-d5		76	26-148
Terphenyl-d14		84	20-127
2,4,6-Tribromophenol		52	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37405-002
Batch: 37405
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1156

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	670	490		1	73	46-114	11/30/2019 1707
Acenaphthylene	670	490		1	74	44-122	11/30/2019 1707
Acetophenone	670	450		1	67	48-111	11/30/2019 1707
Anthracene	670	500		1	75	50-119	11/30/2019 1707
Atrazine	670	490		1	73	48-116	11/30/2019 1707
Benzaldehyde	670	400		1	60	10-110	11/30/2019 1707
Benzo(a)anthracene	670	490		1	73	47-121	11/30/2019 1707
Benzo(a)pyrene	670	520		1	79	55-134	11/30/2019 1707
Benzo(b)fluoranthene	670	490		1	74	28-139	11/30/2019 1707
Benzo(g,h,i)perylene	670	520		1	77	36-125	11/30/2019 1707
Benzo(k)fluoranthene	670	500		1	75	47-130	11/30/2019 1707
1,1'-Biphenyl	670	470		1	71	49-110	11/30/2019 1707
4-Bromophenyl phenyl ether	670	420		1	63	46-118	11/30/2019 1707
Butyl benzyl phthalate	670	650		1	98	46-128	11/30/2019 1707
Caprolactam	670	560		1	85	43-121	11/30/2019 1707
Carbazole	670	500		1	75	47-128	11/30/2019 1707
bis (2-Chloro-1-methylethyl) ether	670	350		1	52	31-102	11/30/2019 1707
4-Chloro-3-methyl phenol	670	570		1	85	49-118	11/30/2019 1707
4-Chloroaniline	670	390		1	58	17-106	11/30/2019 1707
bis(2-Chloroethoxy)methane	670	460		1	68	39-108	11/30/2019 1707
bis(2-Chloroethyl)ether	670	490		1	74	32-105	11/30/2019 1707
2-Chloronaphthalene	670	470		1	70	31-127	11/30/2019 1707
2-Chlorophenol	670	500		1	75	37-106	11/30/2019 1707
4-Chlorophenyl phenyl ether	670	470		1	71	47-116	11/30/2019 1707
Chrysene	670	490		1	73	45-126	11/30/2019 1707
Dibenzo(a,h)anthracene	670	520		1	78	45-122	11/30/2019 1707
Dibenzofuran	670	480		1	73	45-112	11/30/2019 1707
3,3'-Dichlorobenzidine	670	430		1	64	10-119	11/30/2019 1707
2,4-Dichlorophenol	670	490		1	73	41-113	11/30/2019 1707
Diethylphthalate	670	550		1	82	49-123	11/30/2019 1707
Dimethyl phthalate	670	510		1	76	48-120	11/30/2019 1707
2,4-Dimethylphenol	670	650		1	98	33-123	11/30/2019 1707
Di-n-butyl phthalate	670	540		1	81	51-129	11/30/2019 1707
4,6-Dinitro-2-methylphenol	670	470		1	71	40-130	11/30/2019 1707
2,4-Dinitrophenol	1300	890		1	67	10-113	11/30/2019 1707
2,4-Dinitrotoluene	670	540		1	81	48-124	11/30/2019 1707
2,6-Dinitrotoluene	670	510		1	76	47-125	11/30/2019 1707
Di-n-octylphthalate	670	580		1	87	49-142	11/30/2019 1707
bis(2-Ethylhexyl)phthalate	670	550		1	83	45-128	11/30/2019 1707
Fluoranthene	670	470		1	70	50-123	11/30/2019 1707
Fluorene	670	500		1	76	48-117	11/30/2019 1707
Hexachlorobenzene	670	400		1	60	44-122	11/30/2019 1707
Hexachlorobutadiene	670	440		1	65	33-103	11/30/2019 1707
Hexachlorocyclopentadiene	3300	2300		1	69	18-121	11/30/2019 1707

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37405-002
Batch: 37405
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1156

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexachloroethane	670	460		1	69	30-96	11/30/2019 1707
Indeno(1,2,3-c,d)pyrene	670	520		1	78	45-123	11/30/2019 1707
Isophorone	670	500		1	75	41-113	11/30/2019 1707
2-Methylnaphthalene	670	470		1	70	40-106	11/30/2019 1707
2-Methylphenol	670	500		1	75	32-107	11/30/2019 1707
3+4-Methylphenol	670	530		1	80	39-108	11/30/2019 1707
Naphthalene	670	480		1	73	36-110	11/30/2019 1707
2-Nitroaniline	670	540		1	81	45-123	11/30/2019 1707
3-Nitroaniline	670	480		1	71	24-127	11/30/2019 1707
4-Nitroaniline	670	580		1	87	48-127	11/30/2019 1707
Nitrobenzene	670	480		1	72	33-114	11/30/2019 1707
2-Nitrophenol	670	460		1	70	35-108	11/30/2019 1707
4-Nitrophenol	1300	1500		1	109	18-154	11/30/2019 1707
N-Nitrosodi-n-propylamine	670	540		1	81	32-115	11/30/2019 1707
N-Nitrosodiphenylamine (Diphenylamine)	670	490		1	73	53-150	11/30/2019 1707
Pentachlorophenol	1300	820		1	61	27-138	11/30/2019 1707
Phenanthrene	670	480		1	73	49-117	11/30/2019 1707
Phenol	670	520		1	78	36-108	11/30/2019 1707
Pyrene	670	520		1	77	47-119	11/30/2019 1707
2,4,5-Trichlorophenol	670	470		1	71	46-122	11/30/2019 1707
2,4,6-Trichlorophenol	670	470		1	70	38-115	11/30/2019 1707

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		68	24-137
2-Fluorophenol		72	16-136
Nitrobenzene-d5		66	12-144
Phenol-d5		75	26-148
Terphenyl-d14		80	20-127
2,4,6-Tribromophenol		55	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: UK22073-008MS
Batch: 37405
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1156

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	650	340		5	52	46-114	12/01/2019 0340
Acenaphthylene	ND	650	350		5	54	44-122	12/01/2019 0340
Acetophenone	ND	650	380		5	58	48-111	12/01/2019 0340
Anthracene	ND	650	330		5	51	50-119	12/01/2019 0340
Atrazine	ND	650	350		5	54	48-116	12/01/2019 0340
Benzaldehyde	ND	650	390		5	61	10-110	12/01/2019 0340
Benzo(a)anthracene	ND	650	360		5	56	47-121	12/01/2019 0340
Benzo(a)pyrene	ND	650	400		5	62	55-134	12/01/2019 0340
Benzo(b)fluoranthene	ND	650	490		5	76	28-139	12/01/2019 0340
Benzo(g,h,i)perylene	ND	650	140	N	5	21	36-125	12/01/2019 0340
Benzo(k)fluoranthene	ND	650	450		5	69	47-130	12/01/2019 0340
1,1'-Biphenyl	ND	650	340		5	53	49-110	12/01/2019 0340
4-Bromophenyl phenyl ether	ND	650	310		5	48	46-118	12/01/2019 0340
Butyl benzyl phthalate	ND	650	520		5	81	46-128	12/01/2019 0340
Caprolactam	ND	650	340		5	52	43-121	12/01/2019 0340
Carbazole	ND	650	360		5	55	47-128	12/01/2019 0340
bis (2-Chloro-1-methylethyl) ether	ND	650	250		5	38	31-102	12/01/2019 0340
4-Chloro-3-methyl phenol	ND	650	390		5	61	49-118	12/01/2019 0340
4-Chloroaniline	ND	650	150		5	23	17-106	12/01/2019 0340
bis(2-Chloroethoxy)methane	ND	650	360		5	56	39-108	12/01/2019 0340
bis(2-Chloroethyl)ether	ND	650	300		5	46	32-105	12/01/2019 0340
2-Chloronaphthalene	ND	650	340		5	53	31-127	12/01/2019 0340
2-Chlorophenol	ND	650	350		5	54	37-106	12/01/2019 0340
4-Chlorophenyl phenyl ether	ND	650	320		5	50	47-116	12/01/2019 0340
Chrysene	ND	650	330		5	51	45-126	12/01/2019 0340
Dibenzo(a,h)anthracene	ND	650	180	N	5	27	45-122	12/01/2019 0340
Dibenzofuran	ND	650	360		5	56	45-112	12/01/2019 0340
3,3'-Dichlorobenzidine	ND	650	ND	N	5	0.00	10-119	12/01/2019 0340
2,4-Dichlorophenol	ND	650	340		5	52	41-113	12/01/2019 0340
Diethylphthalate	ND	650	370		5	58	49-123	12/01/2019 0340
Dimethyl phthalate	ND	650	380		5	59	48-120	12/01/2019 0340
2,4-Dimethylphenol	ND	650	470		5	73	33-123	12/01/2019 0340
Di-n-butyl phthalate	ND	650	400		5	62	51-129	12/01/2019 0340
4,6-Dinitro-2-methylphenol	ND	650	430		5	66	40-130	12/01/2019 0340
2,4-Dinitrophenol	ND	1300	970		5	75	45-127	12/01/2019 0340
2,4-Dinitrotoluene	ND	650	290	N	5	46	48-124	12/01/2019 0340
2,6-Dinitrotoluene	ND	650	330		5	51	47-125	12/01/2019 0340
Di-n-octylphthalate	ND	650	970	N	5	151	49-142	12/01/2019 0340
bis(2-Ethylhexyl)phthalate	ND	650	560		5	86	45-128	12/01/2019 0340
Fluoranthene	ND	650	330		5	52	50-123	12/01/2019 0340
Fluorene	ND	650	340		5	53	48-117	12/01/2019 0340
Hexachlorobenzene	ND	650	270	N	5	42	44-122	12/01/2019 0340
Hexachlorobutadiene	ND	650	320		5	49	33-103	12/01/2019 0340
Hexachlorocyclopentadiene	ND	3200	77	N	5	2.4	18-121	12/01/2019 0340

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: UK22073-008MS
Batch: 37405
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1156

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexachloroethane	ND	650	200		5	30	30-96	12/01/2019 0340
Indeno(1,2,3-c,d)pyrene	ND	650	170	N	5	26	45-123	12/01/2019 0340
Isophorone	ND	650	380		5	58	41-113	12/01/2019 0340
2-Methylnaphthalene	ND	650	350		5	54	40-106	12/01/2019 0340
2-Methylphenol	ND	650	390		5	60	32-107	12/01/2019 0340
3+4-Methylphenol	ND	650	370		5	58	39-108	12/01/2019 0340
Naphthalene	ND	650	340		5	53	36-110	12/01/2019 0340
2-Nitroaniline	ND	650	300		5	46	45-123	12/01/2019 0340
3-Nitroaniline	ND	650	ND	N	5	0.00	24-127	12/01/2019 0340
4-Nitroaniline	ND	650	56	N	5	8.7	48-127	12/01/2019 0340
Nitrobenzene	ND	650	360		5	56	33-114	12/01/2019 0340
2-Nitrophenol	ND	650	310		5	47	35-108	12/01/2019 0340
4-Nitrophenol	ND	1300	800		5	62	18-154	12/01/2019 0340
N-Nitrosodi-n-propylamine	ND	650	390		5	61	32-115	12/01/2019 0340
N-Nitrosodiphenylamine (Diphenylamine)	ND	650	300	N	5	46	53-150	12/01/2019 0340
Pentachlorophenol	ND	1300	1200		5	92	27-138	12/01/2019 0340
Phenanthrene	ND	650	330		5	52	49-117	12/01/2019 0340
Phenol	ND	650	350		5	54	36-108	12/01/2019 0340
Pyrene	ND	650	370		5	57	47-119	12/01/2019 0340
2,4,5-Trichlorophenol	ND	650	300		5	46	46-122	12/01/2019 0340
2,4,6-Trichlorophenol	ND	650	330		5	52	38-115	12/01/2019 0340

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		51	24-137
2-Fluorophenol		48	16-136
Nitrobenzene-d5		50	12-144
Phenol-d5		52	26-148
Terphenyl-d14		57	20-127
2,4,6-Tribromophenol		87	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: UK22073-008MD
Batch: 37405
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1156

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	650	370		5	57	9.9	46-114	30	12/01/2019 0405
Acenaphthylene	ND	650	390		5	60	13	44-122	30	12/01/2019 0405
Acetophenone	ND	650	420		5	64	11	48-111	40	12/01/2019 0405
Anthracene	ND	650	360		5	56	10	50-119	30	12/01/2019 0405
Atrazine	ND	650	380		5	58	8.1	48-116	40	12/01/2019 0405
Benzaldehyde	ND	650	420		5	64	6.4	10-110	40	12/01/2019 0405
Benzo(a)anthracene	ND	650	400		5	61	11	47-121	30	12/01/2019 0405
Benzo(a)pyrene	ND	650	430		5	66	7.9	55-134	30	12/01/2019 0405
Benzo(b)fluoranthene	ND	650	520		5	79	5.4	28-139	30	12/01/2019 0405
Benzo(g,h,i)perylene	ND	650	150	N	5	23	8.5	36-125	30	12/01/2019 0405
Benzo(k)fluoranthene	ND	650	490		5	76	9.9	47-130	30	12/01/2019 0405
1,1'-Biphenyl	ND	650	380		5	58	9.5	49-110	40	12/01/2019 0405
4-Bromophenyl phenyl ether	ND	650	330		5	50	5.4	46-118	40	12/01/2019 0405
Butyl benzyl phthalate	ND	650	590		5	90	11	46-128	40	12/01/2019 0405
Caprolactam	ND	650	390		5	59	14	43-121	40	12/01/2019 0405
Carbazole	ND	650	390		5	59	8.5	47-128	40	12/01/2019 0405
bis (2-Chloro-1-methylethyl) ether	ND	650	290		5	44	14	31-102	40	12/01/2019 0405
4-Chloro-3-methyl phenol	ND	650	430		5	67	9.6	49-118	40	12/01/2019 0405
4-Chloroaniline	ND	650	170		5	26	14	17-106	40	12/01/2019 0405
bis(2-Chloroethoxy)methane	ND	650	380		5	58	4.8	39-108	40	12/01/2019 0405
bis(2-Chloroethyl)ether	ND	650	340		5	51	11	32-105	40	12/01/2019 0405
2-Chloronaphthalene	ND	650	380		5	59	12	31-127	40	12/01/2019 0405
2-Chlorophenol	ND	650	390		5	60	11	37-106	40	12/01/2019 0405
4-Chlorophenyl phenyl ether	ND	650	370		5	57	15	47-116	40	12/01/2019 0405
Chrysene	ND	650	370		5	56	10	45-126	30	12/01/2019 0405
Dibenzo(a,h)anthracene	ND	650	190	N	5	30	9.4	45-122	30	12/01/2019 0405
Dibenzofuran	ND	650	410		5	63	13	45-112	40	12/01/2019 0405
3,3'-Dichlorobenzidine	ND	650	ND	N	5	0.00	0.00	10-119	40	12/01/2019 0405
2,4-Dichlorophenol	ND	650	370		5	57	9.4	41-113	40	12/01/2019 0405
Diethylphthalate	ND	650	420		5	65	13	49-123	40	12/01/2019 0405
Dimethyl phthalate	ND	650	410		5	63	7.9	48-120	40	12/01/2019 0405
2,4-Dimethylphenol	ND	650	530		5	81	11	33-123	40	12/01/2019 0405
Di-n-butyl phthalate	ND	650	440		5	68	10	51-129	40	12/01/2019 0405
4,6-Dinitro-2-methylphenol	ND	650	440		5	68	3.5	40-130	40	12/01/2019 0405
2,4-Dinitrophenol	ND	1300	1000		5	78	5.0	45-127	40	12/01/2019 0405
2,4-Dinitrotoluene	ND	650	330		5	51	12	48-124	40	12/01/2019 0405
2,6-Dinitrotoluene	ND	650	410		5	63	22	47-125	40	12/01/2019 0405
Di-n-octylphthalate	ND	650	1100	N	5	164	9.3	49-142	40	12/01/2019 0405
bis(2-Ethylhexyl)phthalate	ND	650	610		5	93	9.1	45-128	40	12/01/2019 0405
Fluoranthene	ND	650	370		5	56	8.9	50-123	30	12/01/2019 0405
Fluorene	ND	650	380		5	59	13	48-117	30	12/01/2019 0405
Hexachlorobenzene	ND	650	300		5	45	9.4	44-122	40	12/01/2019 0405
Hexachlorobutadiene	ND	650	350		5	54	10	33-103	40	12/01/2019 0405
Hexachlorocyclopentadiene	ND	3300	51	N,+	5	1.6	41	18-121	40	12/01/2019 0405

LOQ = Limit of Quantitation
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P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: UK22073-008MD
Batch: 37405
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1156

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexachloroethane	ND	650	230		5	35	16	30-96	40	12/01/2019 0405
Indeno(1,2,3-c,d)pyrene	ND	650	180	N	5	28	8.8	45-123	30	12/01/2019 0405
Isophorone	ND	650	410		5	63	8.5	41-113	40	12/01/2019 0405
2-Methylnaphthalene	ND	650	380		5	58	8.8	40-106	30	12/01/2019 0405
2-Methylphenol	ND	650	480		5	73	20	32-107	40	12/01/2019 0405
3+4-Methylphenol	ND	650	440		5	68	17	39-108	40	12/01/2019 0405
Naphthalene	ND	650	380		5	59	11	36-110	30	12/01/2019 0405
2-Nitroaniline	ND	650	320		5	49	8.4	45-123	40	12/01/2019 0405
3-Nitroaniline	ND	650	ND	N	5	0.00	0.00	24-127	40	12/01/2019 0405
4-Nitroaniline	ND	650	67	N	5	10	17	48-127	40	12/01/2019 0405
Nitrobenzene	ND	650	400		5	61	11	33-114	40	12/01/2019 0405
2-Nitrophenol	ND	650	330		5	51	7.9	35-108	40	12/01/2019 0405
4-Nitrophenol	ND	1300	1100		5	80	26	18-154	40	12/01/2019 0405
N-Nitrosodi-n-propylamine	ND	650	450		5	68	13	32-115	40	12/01/2019 0405
N-Nitrosodiphenylamine (Diphenylamine)	ND	650	330	N	5	50	9.6	53-150	40	12/01/2019 0405
Pentachlorophenol	ND	1300	1300		5	99	8.9	27-138	40	12/01/2019 0405
Phenanthrene	ND	650	370		5	57	12	49-117	30	12/01/2019 0405
Phenol	ND	650	390		5	60	12	36-108	40	12/01/2019 0405
Pyrene	ND	650	390		5	59	4.2	47-119	30	12/01/2019 0405
2,4,5-Trichlorophenol	ND	650	330		5	51	11	46-122	40	12/01/2019 0405
2,4,6-Trichlorophenol	ND	650	370		5	57	12	38-115	40	12/01/2019 0405

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		54	24-137
2-Fluorophenol		52	16-136
Nitrobenzene-d5		60	12-144
Phenol-d5		59	26-148
Terphenyl-d14		64	20-127
2,4,6-Tribromophenol		93	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody
and
Miscellaneous Documents

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 101669

Client: WESTINGHOUSE	Report to Contact: DIANA JOYNER	Telephone No. / E-mail: 803 6471920 JOYNERDP@WESTINGHOUSE.COM
Address: 5801 BLUFF RD	Sampler's Signature: X [signature]	Quote No.
City: HOPKINS State: SC Zip Code:	Printed Name: JAMES LEAPHART	Analysis (Attach list if more space is needed) Page 1 of 2
Project Name: RP IMPLEMENTATION		UK22073
Project No.: 60595649	P.O. No.	

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	Grab / Composite	Aqueous	Solid	Non-Aqueous	Unpres.	H_2SO_4	HNO_3	HCl	NaOH	[illegible]	VOCs 8260	SVOCs 8270	NITRATE	Remarks / Cooler I.D.
SED-35 0"-6"	11-22-19	0840	G		X		1					1	X	X	X	
SED-35 6"-12"		0845	G		X		1					1	X	X	X	
SED-36 0"-6"		1000	G		X		1					1	X	X	X	
SED-36 6"-12"		1005	G		X		1					1	X	X	X	
SED-37 0"-6"		1120	G		X		1					1	X	X	X	
SED-37 6"-12"		1125	G		X		1					1	X	X	X	
SED-37 6"-12" DUP		1125	G		X		1					1	X	X	X	
SED-40 0-6"		1220	G		X		1					1	X	X	X	
SED-40.MS 0-6"		1220	G		X		1					1	X	X	X	
SED-40.MSD 0-6"		1220	G		X		1					1	X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☑ Standard ☐ Rush (Specify)

Sample Disposal ☐ Return to Client ☑ Disposal by Lab

Possible Hazard Identification ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

Relinquished by	Date	Time	Received by	Date	Time
1. Relinquished by [signature]	11-22-19	1647	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory received by Darby Nugent	11/22/19	1647

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

LAB USE ONLY
Received on Ice (Circle) (Yes) No Ice Pack Receipt Temp. 3.8 °C t6 ✓

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

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

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 101668

Client: WESTINGHOUSE
Report to Contact: DIANA JOYNER
Telephone No. / E-mail: 803 647 1920 JOYNERDP@WESTINGHOUSE.COM
Quote No.:
Address: 5801 BLUFF RD
Sampler's Signature: x
Analysis (Attach list if more space is needed)
Page 2 of 2
City: HOPKINS State: SC Zip Code:
Printed Name: JAMES LEDBETTER
Project Name: RI IMPLEMENTATION
Project No. 60595649
P.O. No.

UK22073

SRW

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Matrix: Aqueous	Matrix: Solid	Matrix: Non-Aqueous	Unpres	H2SO4	HNO3	HCl	NaOH	5035 Kit	VOCs 8260	SVOCs 8270	Nitrates	Remarks / Cooler I.D.
SED-38 0-6"	11-22-19	1450	G		X		1					1	X	X	X	
SED-39 0-6"	↓	1520	G		X		1					1	X	X	X	
EB-01-112219	↓	1320	G	X			3			3			X	X	X	
TB-01-112219	↓	—		X						2			X			

Turn Around Time Required (Prior lab approval required for expedited TAT.) ☒ Standard ☐ Rush (Specify)
Sample Disposal ☐ Return to Client ☒ Disposal by Lab
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown
QC Requirements (Specify)

Relinquished by	Date	Time	Received by	Date	Time
1. Relinquished by	11-22-19	1647	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory received by Darby Nugent	11/22/19	1647

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

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack Receipt Temp. 3.8 °C tb:

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

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

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

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

Sample Receipt Checklist (SRC)

Client: Westinghouse Cooler Inspected by/date: BMS / 11/22/19 Lot #: UK22073

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: 19-2044

3.8 / 3.8 °C NA / NA °C NA / NA °C NA / NA °C

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

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☐ Yes	☐ No	☑ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☐ Yes	☐ No	☑ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC?
☑ Yes	☐ No		7. Were sample IDs listed on all sample containers?
☑ Yes	☐ No		8. Was collection date & time listed on the COC?
☑ Yes	☐ No		9. Was collection date & time listed on all sample containers?
☑ Yes	☐ No		10. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☑ Yes	☐ No		13. Was adequate sample volume available?
☑ Yes	☐ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☐ Yes	☐ No	☑ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	19. Were all applicable NH_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?
☑ Yes	☐ No		21. Was the quote number listed on the container label? If yes, Quote # 22261

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 ($Na_2S_2O_3$) with Shealy ID: NA.

SR barcode labels applied by: BMG Date: 11/22/19

Comments:

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

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

Project Name: RI Implementation

Project Number: 60595649

Lot Number:**UK25040**

Date Completed:12/05/2019

12/06/2019 11:12 AM
Approved and released by:
Project Manager: Grant Wilton

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

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

Case Narrative
Westinghouse Electric Company
Lot Number: UK25040

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.

Sample Summary

Westinghouse Electric Company

Lot Number: UK25040

Project Name: RI Implementation

Project Number: 60595649

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SED-41 0"-6"	Solid	11/25/2019 0830	11/25/2019
002	SED-42 0"-6"	Solid	11/25/2019 0835	11/25/2019
003	SED-44 0"-6"	Solid	11/25/2019 1150	11/25/2019
004	SED-43 0"-6"	Solid	11/25/2019 1220	11/25/2019
005	SED-46 0"-6"	Solid	11/25/2019 1450	11/25/2019
006	SED-45 0"-6"	Solid	11/25/2019 1525	11/25/2019
007	TB-01-112519	Aqueous	11/25/2019	11/25/2019

(7 samples)

Detection Summary

Westinghouse Electric Company

Lot Number: UK25040

Project Name: RI Implementation

Project Number: 60595649

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	SED-41 0"-6"	Solid	Nitrate - N (soluble)	9056A	0.63		mg/kg	6
001	SED-41 0"-6"	Solid	Acetone	8260B	96		ug/kg	7
001	SED-41 0"-6"	Solid	Benzo(a)anthracene	8270D	19		ug/kg	9
001	SED-41 0"-6"	Solid	Benzo(a)pyrene	8270D	21		ug/kg	9
001	SED-41 0"-6"	Solid	Benzo(b)fluoranthene	8270D	28		ug/kg	9
001	SED-41 0"-6"	Solid	Chrysene	8270D	17		ug/kg	9
001	SED-41 0"-6"	Solid	Fluoranthene	8270D	28		ug/kg	9
001	SED-41 0"-6"	Solid	Pyrene	8270D	27		ug/kg	10
002	SED-42 0"-6"	Solid	Nitrate - N (soluble)	9056A	0.83		mg/kg	11
002	SED-42 0"-6"	Solid	Acetone	8260B	59		ug/kg	12
003	SED-44 0"-6"	Solid	Acetone	8260B	57		ug/kg	17
004	SED-43 0"-6"	Solid	Nitrate - N (soluble)	9056A	0.50		mg/kg	21
004	SED-43 0"-6"	Solid	Acetone	8260B	79		ug/kg	22
005	SED-46 0"-6"	Solid	Nitrate - N (soluble)	9056A	0.62		mg/kg	26
005	SED-46 0"-6"	Solid	Acetone	8260B	110		ug/kg	27
006	SED-45 0"-6"	Solid	Nitrate - N (soluble)	9056A	0.82		mg/kg	31
006	SED-45 0"-6"	Solid	Acetone	8260B	130		ug/kg	32
006	SED-45 0"-6"	Solid	2-Butanone (MEK)	8260B	29		ug/kg	32
006	SED-45 0"-6"	Solid	Benzaldehyde	8270D	76		ug/kg	34

(19 detections)

Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UK25040-001	
Description: SED-41 0"-6"		Matrix: Solid	
Date Sampled: 11/25/2019 0830	Project Name: RI Implementation	% Solids: 32.6	11/26/2019 0114
Date Received: 11/25/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 1917	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.63		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-001
Description: SED-41 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 0830 | Project Name: RI Implementation | % Solids: 32.6 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	12/02/2019 1144	JM1		37558	3.84

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	96		26	ug/kg	2
Benzene	71-43-2	8260B	ND		6.5	ug/kg	2
Bromodichloromethane	75-27-4	8260B	ND		6.5	ug/kg	2
Bromoform	75-25-2	8260B	ND		6.5	ug/kg	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.5	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	ND		26	ug/kg	2
Carbon disulfide	75-15-0	8260B	ND		6.5	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		6.5	ug/kg	2
Chlorobenzene	108-90-7	8260B	ND		6.5	ug/kg	2
Chloroethane	75-00-3	8260B	ND		6.5	ug/kg	2
Chloroform	67-66-3	8260B	ND		6.5	ug/kg	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.5	ug/kg	2
Cyclohexane	110-82-7	8260B	ND		6.5	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.5	ug/kg	2
Dibromochloromethane	124-48-1	8260B	ND		6.5	ug/kg	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.5	ug/kg	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.5	ug/kg	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.5	ug/kg	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.5	ug/kg	2
Dichlorodifluoromethane	75-71-8	8260B	ND		6.5	ug/kg	2
1,1-Dichloroethane	75-34-3	8260B	ND		6.5	ug/kg	2
1,2-Dichloroethane	107-06-2	8260B	ND		6.5	ug/kg	2
1,1-Dichloroethene	75-35-4	8260B	ND		6.5	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.5	ug/kg	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.5	ug/kg	2
1,2-Dichloropropane	78-87-5	8260B	ND		6.5	ug/kg	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.5	ug/kg	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.5	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		6.5	ug/kg	2
2-Hexanone	591-78-6	8260B	ND		13	ug/kg	2
Isopropylbenzene	98-82-8	8260B	ND		6.5	ug/kg	2
Methyl acetate	79-20-9	8260B	ND		6.5	ug/kg	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.5	ug/kg	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	ug/kg	2
Methylcyclohexane	108-87-2	8260B	ND		6.5	ug/kg	2
Methylene chloride	75-09-2	8260B	ND		6.5	ug/kg	2
Styrene	100-42-5	8260B	ND		6.5	ug/kg	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.5	ug/kg	2
Tetrachloroethene	127-18-4	8260B	ND		6.5	ug/kg	2
Toluene	108-88-3	8260B	ND		6.5	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.5	ug/kg	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.5	ug/kg	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.5	ug/kg	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.5	ug/kg	2

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK25040-001	
Description: SED-41 0"-6"		Matrix: Solid	
Date Sampled: 11/25/2019 0830	Project Name: RI Implementation	% Solids: 32.6	11/26/2019 0114
Date Received: 11/25/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	12/02/2019 1144	JM1		37558	3.84

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.5	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		6.5	ug/kg	2
Vinyl chloride	75-01-4	8260B	ND		6.5	ug/kg	2
Xylenes (total)	1330-20-7	8260B	ND		13	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	53-142
Bromofluorobenzene		84	47-138
Toluene-d8		114	68-124

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-001
Description: SED-41 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 0830 | Project Name: RI Implementation | % Solids: 32.6 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/02/2019 1518	JCG	11/29/2019 1329	37407

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	19		13	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	21		13	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	28		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	17		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	28		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

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-001
Description: SED-41 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 0830 | Project Name: RI Implementation | % Solids: 32.6 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/02/2019 1518	JCG	11/29/2019 1329	37407

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	27		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		61	24-137
2-Fluorophenol		63	16-136
Nitrobenzene-d5		59	12-144
Phenol-d5		67	26-148
Terphenyl-d14		68	20-127
2,4,6-Tribromophenol		66	27-128

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P = The RPD between two GC columns exceeds 40%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UK25040-002
Description: SED-42 0"-6"
Matrix: Solid
Date Sampled: 11/25/2019 0835
Project Name: RI Implementation
% Solids: 18.4 11/26/2019 0114
Date Received: 11/25/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 1938	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.83		0.50	mg/kg	1

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK25040-002	
Description: SED-42 0"-6"		Matrix: Solid	
Date Sampled: 11/25/2019 0835	Project Name: RI Implementation	% Solids: 18.4	11/26/2019 0114
Date Received: 11/25/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/27/2019 0032	ALR1		37193	3.67

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	59		27	ug/kg	1
Benzene	71-43-2	8260B	ND		6.8	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.8	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.8	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.8	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		27	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.8	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.8	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.8	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.8	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.8	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.8	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.8	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.8	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.8	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.8	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.8	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.8	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.8	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.8	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.8	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.8	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.8	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		14	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.8	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.8	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.8	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		14	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.8	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.8	ug/kg	1
Styrene	100-42-5	8260B	ND		6.8	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.8	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.8	ug/kg	1
Toluene	108-88-3	8260B	ND		6.8	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.8	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.8	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.8	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.8	ug/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK25040-002	
Description: SED-42 0"-6"		Matrix: Solid	
Date Sampled: 11/25/2019 0835	Project Name: RI Implementation	% Solids: 18.4	11/26/2019 0114
Date Received: 11/25/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/27/2019 0032	ALR1		37193	3.67

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.8	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		14	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		108	53-142
Bromofluorobenzene		88	47-138
Toluene-d8		117	68-124

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-002
Description: SED-42 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 0835 | Project Name: RI Implementation | % Solids: 18.4 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/02/2019 1542	JCG	11/29/2019 1329	37407

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		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		320	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-002
Description: SED-42 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 0835 | Project Name: RI Implementation | % Solids: 18.4 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/02/2019 1542	JCG	11/29/2019 1329	37407

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		320	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		320	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		64	24-137
2-Fluorophenol		67	16-136
Nitrobenzene-d5		59	12-144
Phenol-d5		70	26-148
Terphenyl-d14		68	20-127
2,4,6-Tribromophenol		69	27-128

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Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UK25040-003	
Description: SED-44 0"-6"		Matrix: Solid	
Date Sampled: 11/25/2019 1150	Project Name: RI Implementation	% Solids: 26.9	11/26/2019 0114
Date Received: 11/25/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 1959	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-003
Description: SED-44 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 1150 | Project Name: RI Implementation | % Solids: 26.9 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/27/2019 0055	ALR1		37193	3.49

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	57		29	ug/kg	1
Benzene	71-43-2	8260B	ND		7.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		7.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		7.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		7.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		29	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		7.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		7.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		7.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		7.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		7.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		7.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		7.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		7.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		7.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		7.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		7.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		7.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		7.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		7.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		7.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		7.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		7.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		7.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		7.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		7.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		7.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		7.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		7.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		14	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		7.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		7.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		7.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		14	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		7.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		7.2	ug/kg	1
Styrene	100-42-5	8260B	ND		7.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		7.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		7.2	ug/kg	1
Toluene	108-88-3	8260B	ND		7.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		7.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		7.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		7.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		7.2	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK25040-003	
Description: SED-44 0"-6"		Matrix: Solid	
Date Sampled: 11/25/2019 1150	Project Name: RI Implementation	% Solids: 26.9	11/26/2019 0114
Date Received: 11/25/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/27/2019 0055	ALR1		37193	3.49

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		7.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		7.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		7.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		14	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		107	53-142
Bromofluorobenzene		92	47-138
Toluene-d8		117	68-124

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
B = Detected in the method blank
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-003
Description: SED-44 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 1150 | Project Name: RI Implementation | % Solids: 26.9 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/02/2019 1607	JCG	11/29/2019 1329	37407

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		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		320	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-003
Description: SED-44 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 1150 | Project Name: RI Implementation | % Solids: 26.9 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/02/2019 1607	JCG	11/29/2019 1329	37407

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		320	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		320	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		56	24-137
2-Fluorophenol		56	16-136
Nitrobenzene-d5		57	12-144
Phenol-d5		56	26-148
Terphenyl-d14		60	20-127
2,4,6-Tribromophenol		62	27-128

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

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Inorganic non-metals

Client: Westinghouse Electric Company			Laboratory ID: UK25040-004
Description: SED-43 0"-6"			Matrix: Solid
Date Sampled: 11/25/2019 1220	Project Name: RI Implementation		% Solids: 17.5 11/26/2019 0114
Date Received: 11/25/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 2020	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.50		0.50	mg/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	

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-004
Description: SED-43 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 1220 | Project Name: RI Implementation | % Solids: 17.5 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	12/02/2019 1251	JM1		37558	3.46

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	79		29	ug/kg	2
Benzene	71-43-2	8260B	ND		7.2	ug/kg	2
Bromodichloromethane	75-27-4	8260B	ND		7.2	ug/kg	2
Bromoform	75-25-2	8260B	ND		7.2	ug/kg	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		7.2	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	ND		29	ug/kg	2
Carbon disulfide	75-15-0	8260B	ND		7.2	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		7.2	ug/kg	2
Chlorobenzene	108-90-7	8260B	ND		7.2	ug/kg	2
Chloroethane	75-00-3	8260B	ND		7.2	ug/kg	2
Chloroform	67-66-3	8260B	ND		7.2	ug/kg	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		7.2	ug/kg	2
Cyclohexane	110-82-7	8260B	ND		7.2	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		7.2	ug/kg	2
Dibromochloromethane	124-48-1	8260B	ND		7.2	ug/kg	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		7.2	ug/kg	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		7.2	ug/kg	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		7.2	ug/kg	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		7.2	ug/kg	2
Dichlorodifluoromethane	75-71-8	8260B	ND		7.2	ug/kg	2
1,1-Dichloroethane	75-34-3	8260B	ND		7.2	ug/kg	2
1,2-Dichloroethane	107-06-2	8260B	ND		7.2	ug/kg	2
1,1-Dichloroethene	75-35-4	8260B	ND		7.2	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		7.2	ug/kg	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		7.2	ug/kg	2
1,2-Dichloropropane	78-87-5	8260B	ND		7.2	ug/kg	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		7.2	ug/kg	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		7.2	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		7.2	ug/kg	2
2-Hexanone	591-78-6	8260B	ND		14	ug/kg	2
Isopropylbenzene	98-82-8	8260B	ND		7.2	ug/kg	2
Methyl acetate	79-20-9	8260B	ND		7.2	ug/kg	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		7.2	ug/kg	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		14	ug/kg	2
Methylcyclohexane	108-87-2	8260B	ND		7.2	ug/kg	2
Methylene chloride	75-09-2	8260B	ND		7.2	ug/kg	2
Styrene	100-42-5	8260B	ND		7.2	ug/kg	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		7.2	ug/kg	2
Tetrachloroethene	127-18-4	8260B	ND		7.2	ug/kg	2
Toluene	108-88-3	8260B	ND		7.2	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		7.2	ug/kg	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		7.2	ug/kg	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		7.2	ug/kg	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		7.2	ug/kg	2

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK25040-004	
Description: SED-43 0"-6"		Matrix: Solid	
Date Sampled: 11/25/2019 1220	Project Name: RI Implementation	% Solids: 17.5	11/26/2019 0114
Date Received: 11/25/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	12/02/2019 1251	JM1		37558	3.46

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		7.2	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		7.2	ug/kg	2
Vinyl chloride	75-01-4	8260B	ND		7.2	ug/kg	2
Xylenes (total)	1330-20-7	8260B	ND		14	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	53-142
Bromofluorobenzene		80	47-138
Toluene-d8		115	68-124

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E = Quantitation of compound exceeded the calibration range
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-004
Description: SED-43 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 1220 | Project Name: RI Implementation | % Solids: 17.5 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/02/2019 1631	JCG	11/29/2019 1329	37407

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		63	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		63	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		63	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		63	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		63	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		63	ug/kg	1
Caprolactam	105-60-2	8270D	ND		63	ug/kg	1
Carbazole	86-74-8	8270D	ND		63	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		63	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		63	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		63	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		63	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		63	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		63	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		63	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		63	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		63	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		63	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		63	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		63	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		63	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		63	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		63	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		310	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		310	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		120	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		120	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		63	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		63	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		63	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		63	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		310	ug/kg	1

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-004
Description: SED-43 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 1220 | Project Name: RI Implementation | % Solids: 17.5 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/02/2019 1631	JCG	11/29/2019 1329	37407

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		63	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		63	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		63	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		120	ug/kg	1
Naphthalene	91-20-3	8270D	ND		13	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		120	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		120	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		120	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		63	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		120	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		310	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		63	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		63	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		310	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		63	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		63	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		63	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		62	24-137
2-Fluorophenol		65	16-136
Nitrobenzene-d5		63	12-144
Phenol-d5		67	26-148
Terphenyl-d14		69	20-127
2,4,6-Tribromophenol		71	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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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%

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Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UK25040-005	
Description: SED-46 0"-6"		Matrix: Solid	
Date Sampled: 11/25/2019 1450	Project Name: RI Implementation	% Solids: 34.5	11/26/2019 0114
Date Received: 11/25/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/03/2019 2041	GMH		37869

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.62		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-005
Description: SED-46 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 1450 | Project Name: RI Implementation | % Solids: 34.5 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	12/02/2019 1314	JM1		37558	3.87

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	110		26	ug/kg	2
Benzene	71-43-2	8260B	ND		6.5	ug/kg	2
Bromodichloromethane	75-27-4	8260B	ND		6.5	ug/kg	2
Bromoform	75-25-2	8260B	ND		6.5	ug/kg	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.5	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	ND		26	ug/kg	2
Carbon disulfide	75-15-0	8260B	ND		6.5	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		6.5	ug/kg	2
Chlorobenzene	108-90-7	8260B	ND		6.5	ug/kg	2
Chloroethane	75-00-3	8260B	ND		6.5	ug/kg	2
Chloroform	67-66-3	8260B	ND		6.5	ug/kg	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.5	ug/kg	2
Cyclohexane	110-82-7	8260B	ND		6.5	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.5	ug/kg	2
Dibromochloromethane	124-48-1	8260B	ND		6.5	ug/kg	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.5	ug/kg	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.5	ug/kg	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.5	ug/kg	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.5	ug/kg	2
Dichlorodifluoromethane	75-71-8	8260B	ND		6.5	ug/kg	2
1,1-Dichloroethane	75-34-3	8260B	ND		6.5	ug/kg	2
1,2-Dichloroethane	107-06-2	8260B	ND		6.5	ug/kg	2
1,1-Dichloroethene	75-35-4	8260B	ND		6.5	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.5	ug/kg	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.5	ug/kg	2
1,2-Dichloropropane	78-87-5	8260B	ND		6.5	ug/kg	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.5	ug/kg	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.5	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		6.5	ug/kg	2
2-Hexanone	591-78-6	8260B	ND		13	ug/kg	2
Isopropylbenzene	98-82-8	8260B	ND		6.5	ug/kg	2
Methyl acetate	79-20-9	8260B	ND		6.5	ug/kg	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.5	ug/kg	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	ug/kg	2
Methylcyclohexane	108-87-2	8260B	ND		6.5	ug/kg	2
Methylene chloride	75-09-2	8260B	ND		6.5	ug/kg	2
Styrene	100-42-5	8260B	ND		6.5	ug/kg	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.5	ug/kg	2
Tetrachloroethene	127-18-4	8260B	ND		6.5	ug/kg	2
Toluene	108-88-3	8260B	ND		6.5	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.5	ug/kg	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.5	ug/kg	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.5	ug/kg	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.5	ug/kg	2

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company			Laboratory ID: UK25040-005
Description: SED-46 0"-6"			Matrix: Solid
Date Sampled: 11/25/2019 1450	Project Name: RI Implementation		% Solids: 34.5 11/26/2019 0114
Date Received: 11/25/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	12/02/2019 1314	JM1		37558	3.87

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.5	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		6.5	ug/kg	2
Vinyl chloride	75-01-4	8260B	ND		6.5	ug/kg	2
Xylenes (total)	1330-20-7	8260B	ND		13	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	53-142
Bromofluorobenzene		83	47-138
Toluene-d8		113	68-124

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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-005
Description: SED-46 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 1450 | Project Name: RI Implementation | % Solids: 34.5 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/02/2019 1656	JCG	11/29/2019 1329	37407

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		64	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		64	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		64	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		64	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		64	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		64	ug/kg	1
Caprolactam	105-60-2	8270D	ND		64	ug/kg	1
Carbazole	86-74-8	8270D	ND		64	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		64	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		64	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		64	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		64	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		64	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		64	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		64	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		64	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		64	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		64	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		64	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		64	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		64	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		64	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		64	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		64	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		64	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		64	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		64	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-005
Description: SED-46 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 1450 | Project Name: RI Implementation | % Solids: 34.5 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/02/2019 1656	JCG	11/29/2019 1329	37407

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		64	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		64	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		64	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		64	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		64	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		64	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		64	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		64	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		64	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		54	24-137
2-Fluorophenol		47	16-136
Nitrobenzene-d5		54	12-144
Phenol-d5		46	26-148
Terphenyl-d14		61	20-127
2,4,6-Tribromophenol		61	27-128

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Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UK25040-006	
Description: SED-45 0"-6"		Matrix: Solid	
Date Sampled: 11/25/2019 1525	Project Name: RI Implementation	% Solids: 34.7	11/26/2019 0114
Date Received: 11/25/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/04/2019 1601	GMH		38070

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.82		0.50	mg/kg	1

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-006
Description: SED-45 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 1525 | Project Name: RI Implementation | % Solids: 34.7 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/27/2019 0206	ALR1		37193	4.08

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	130		25	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	29		25	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
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UK25040-006	
Description: SED-45 0"-6"		Matrix: Solid	
Date Sampled: 11/25/2019 1525	Project Name: RI Implementation	% Solids: 34.7	11/26/2019 0114
Date Received: 11/25/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	11/27/2019 0206	ALR1		37193	4.08

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		110	53-142
Bromofluorobenzene		93	47-138
Toluene-d8		117	68-124

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-006
Description: SED-45 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 1525 | Project Name: RI Implementation | % Solids: 34.7 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/02/2019 1720	JCG	11/29/2019 1329	37407

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		65	ug/kg	1
Anthracene	120-12-7	8270D	ND		13	ug/kg	1
Atrazine	1912-24-9	8270D	ND		65	ug/kg	1
Benzaldehyde	100-52-7	8270D	76		65	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		65	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		65	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		65	ug/kg	1
Caprolactam	105-60-2	8270D	ND		65	ug/kg	1
Carbazole	86-74-8	8270D	ND		65	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		65	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		65	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		65	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		65	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		65	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		65	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		65	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		65	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		65	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		65	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		65	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		65	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		65	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		65	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		65	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		320	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		320	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		65	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		65	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		65	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		65	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		320	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-006
Description: SED-45 0"-6" | Matrix: Solid
Date Sampled: 11/25/2019 1525 | Project Name: RI Implementation | % Solids: 34.7 | 11/26/2019 0114
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	1	12/02/2019 1720	JCG	11/29/2019 1329	37407

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		65	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		65	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		13	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		65	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		65	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		130	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		320	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		65	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		65	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		320	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		13	ug/kg	1
Phenol	108-95-2	8270D	ND		65	ug/kg	1
Pyrene	129-00-0	8270D	ND		13	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		65	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		65	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		60	24-137
2-Fluorophenol		56	16-136
Nitrobenzene-d5		58	12-144
Phenol-d5		46	26-148
Terphenyl-d14		67	20-127
2,4,6-Tribromophenol		65	27-128

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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UK25040-007
Description: TB-01-112519 | Matrix: Aqueous
Date Sampled: 11/25/2019 | Project Name: RI Implementation
Date Received: 11/25/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/26/2019 1200	TML		37119

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
1,1,2,2-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
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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UK25040-007
Description: TB-01-112519
Matrix: Aqueous
Date Sampled: 11/25/2019
Project Name: RI Implementation
Date Received: 11/25/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	11/26/2019 1200	TML		37119

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		92	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		96	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%

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QC Summary

Inorganic non-metals - MB

Sample ID: UQ37869-001
Batch: 37869
Analytical Method: 9056A

Matrix: Solid

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N (soluble)	ND		1	0.50	mg/kg	12/03/2019 1028

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - LCS

Sample ID: UQ37869-002
Batch: 37869
Analytical Method: 9056A

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.80	0.78		1	98	80-120	12/03/2019 1051

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - MB

Sample ID: UQ38070-001
Batch: 38070
Analytical Method: 9056A

Matrix: Solid

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N (soluble)	ND		1	0.50	mg/kg	12/04/2019 1516

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - LCS

Sample ID: UQ38070-002
Batch: 38070
Analytical Method: 9056A
Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.80	0.82		1	102	80-120	12/04/2019 1540

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37119-001
Batch: 37119
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	11/26/2019 1055
Benzene	ND		1	1.0	ug/L	11/26/2019 1055
Bromodichloromethane	ND		1	1.0	ug/L	11/26/2019 1055
Bromoform	ND		1	1.0	ug/L	11/26/2019 1055
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	11/26/2019 1055
2-Butanone (MEK)	ND		1	10	ug/L	11/26/2019 1055
Carbon disulfide	ND		1	1.0	ug/L	11/26/2019 1055
Carbon tetrachloride	ND		1	1.0	ug/L	11/26/2019 1055
Chlorobenzene	ND		1	1.0	ug/L	11/26/2019 1055
Chloroethane	ND		1	2.0	ug/L	11/26/2019 1055
Chloroform	ND		1	1.0	ug/L	11/26/2019 1055
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	11/26/2019 1055
Cyclohexane	ND		1	1.0	ug/L	11/26/2019 1055
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	11/26/2019 1055
Dibromochloromethane	ND		1	1.0	ug/L	11/26/2019 1055
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	11/26/2019 1055
1,2-Dichlorobenzene	ND		1	1.0	ug/L	11/26/2019 1055
1,3-Dichlorobenzene	ND		1	1.0	ug/L	11/26/2019 1055
1,4-Dichlorobenzene	ND		1	1.0	ug/L	11/26/2019 1055
Dichlorodifluoromethane	ND		1	2.0	ug/L	11/26/2019 1055
1,1-Dichloroethane	ND		1	1.0	ug/L	11/26/2019 1055
1,2-Dichloroethane	ND		1	1.0	ug/L	11/26/2019 1055
1,1-Dichloroethene	ND		1	1.0	ug/L	11/26/2019 1055
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	11/26/2019 1055
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	11/26/2019 1055
1,2-Dichloropropane	ND		1	1.0	ug/L	11/26/2019 1055
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	11/26/2019 1055
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	11/26/2019 1055
Ethylbenzene	ND		1	1.0	ug/L	11/26/2019 1055
2-Hexanone	ND		1	10	ug/L	11/26/2019 1055
Isopropylbenzene	ND		1	1.0	ug/L	11/26/2019 1055
Methyl acetate	ND		1	1.0	ug/L	11/26/2019 1055
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	11/26/2019 1055
4-Methyl-2-pentanone	ND		1	10	ug/L	11/26/2019 1055
Methylcyclohexane	ND		1	5.0	ug/L	11/26/2019 1055
Methylene chloride	ND		1	1.0	ug/L	11/26/2019 1055
Styrene	ND		1	1.0	ug/L	11/26/2019 1055
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	11/26/2019 1055
Tetrachloroethene	ND		1	1.0	ug/L	11/26/2019 1055
Toluene	ND		1	1.0	ug/L	11/26/2019 1055
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	11/26/2019 1055
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	11/26/2019 1055
1,1,1-Trichloroethane	ND		1	1.0	ug/L	11/26/2019 1055
1,1,2-Trichloroethane	ND		1	1.0	ug/L	11/26/2019 1055

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37119-001
Batch: 37119
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	11/26/2019 1055
Trichlorofluoromethane	ND		1	1.0	ug/L	11/26/2019 1055
Vinyl chloride	ND		1	1.0	ug/L	11/26/2019 1055
Xylenes (total)	ND		1	1.0	ug/L	11/26/2019 1055

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		92	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		97	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37119-002
Batch: 37119
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	78		1	78	60-140	11/26/2019 1007
Benzene	50	45		1	89	70-130	11/26/2019 1007
Bromodichloromethane	50	48		1	95	70-130	11/26/2019 1007
Bromoform	50	42		1	85	70-130	11/26/2019 1007
Bromomethane (Methyl bromide)	50	44		1	88	70-130	11/26/2019 1007
2-Butanone (MEK)	100	93		1	93	70-130	11/26/2019 1007
Carbon disulfide	50	43		1	86	70-130	11/26/2019 1007
Carbon tetrachloride	50	44		1	89	70-130	11/26/2019 1007
Chlorobenzene	50	44		1	89	70-130	11/26/2019 1007
Chloroethane	50	47		1	94	70-130	11/26/2019 1007
Chloroform	50	44		1	88	70-130	11/26/2019 1007
Chloromethane (Methyl chloride)	50	43		1	86	60-140	11/26/2019 1007
Cyclohexane	50	45		1	90	70-130	11/26/2019 1007
1,2-Dibromo-3-chloropropane (DBCP)	50	44		1	89	70-130	11/26/2019 1007
Dibromochloromethane	50	49		1	98	70-130	11/26/2019 1007
1,2-Dibromoethane (EDB)	50	46		1	93	70-130	11/26/2019 1007
1,2-Dichlorobenzene	50	45		1	90	70-130	11/26/2019 1007
1,3-Dichlorobenzene	50	45		1	90	70-130	11/26/2019 1007
1,4-Dichlorobenzene	50	43		1	87	70-130	11/26/2019 1007
Dichlorodifluoromethane	50	50		1	99	60-140	11/26/2019 1007
1,1-Dichloroethane	50	44		1	88	70-130	11/26/2019 1007
1,2-Dichloroethane	50	42		1	85	70-130	11/26/2019 1007
1,1-Dichloroethene	50	50		1	99	70-130	11/26/2019 1007
cis-1,2-Dichloroethene	50	43		1	87	70-130	11/26/2019 1007
trans-1,2-Dichloroethene	50	46		1	92	70-130	11/26/2019 1007
1,2-Dichloropropane	50	47		1	93	70-130	11/26/2019 1007
cis-1,3-Dichloropropene	50	51		1	102	70-130	11/26/2019 1007
trans-1,3-Dichloropropene	50	50		1	100	70-130	11/26/2019 1007
Ethylbenzene	50	46		1	93	70-130	11/26/2019 1007
2-Hexanone	100	97		1	97	70-130	11/26/2019 1007
Isopropylbenzene	50	48		1	95	70-130	11/26/2019 1007
Methyl acetate	50	44		1	88	70-130	11/26/2019 1007
Methyl tertiary butyl ether (MTBE)	50	42		1	83	70-130	11/26/2019 1007
4-Methyl-2-pentanone	100	96		1	96	70-130	11/26/2019 1007
Methylcyclohexane	50	50		1	100	70-130	11/26/2019 1007
Methylene chloride	50	39		1	78	70-130	11/26/2019 1007
Styrene	50	48		1	96	70-130	11/26/2019 1007
1,1,2,2-Tetrachloroethane	50	45		1	89	70-130	11/26/2019 1007
Tetrachloroethene	50	46		1	92	70-130	11/26/2019 1007
Toluene	50	45		1	90	70-130	11/26/2019 1007
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	43		1	87	70-130	11/26/2019 1007
1,2,4-Trichlorobenzene	50	46		1	93	70-130	11/26/2019 1007
1,1,1-Trichloroethane	50	43		1	86	70-130	11/26/2019 1007
1,1,2-Trichloroethane	50	44		1	88	70-130	11/26/2019 1007

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37119-002
Batch: 37119
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	45		1	89	70-130	11/26/2019 1007
Trichlorofluoromethane	50	48		1	95	70-130	11/26/2019 1007
Vinyl chloride	50	41		1	83	70-130	11/26/2019 1007
Xylenes (total)	100	95		1	95	70-130	11/26/2019 1007

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		89	70-130
Bromofluorobenzene		98	70-130
Toluene-d8		96	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37193-001
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/kg	11/26/2019 1952
Benzene	ND		1	5.0	ug/kg	11/26/2019 1952
Bromodichloromethane	ND		1	5.0	ug/kg	11/26/2019 1952
Bromoform	ND		1	5.0	ug/kg	11/26/2019 1952
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	11/26/2019 1952
2-Butanone (MEK)	ND		1	20	ug/kg	11/26/2019 1952
Carbon disulfide	ND		1	5.0	ug/kg	11/26/2019 1952
Carbon tetrachloride	ND		1	5.0	ug/kg	11/26/2019 1952
Chlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
Chloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
Chloroform	ND		1	5.0	ug/kg	11/26/2019 1952
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	11/26/2019 1952
Cyclohexane	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	11/26/2019 1952
Dibromochloromethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
Dichlorodifluoromethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,1-Dichloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dichloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,1-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
1,2-Dichloropropane	ND		1	5.0	ug/kg	11/26/2019 1952
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	11/26/2019 1952
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	11/26/2019 1952
Ethylbenzene	ND		1	5.0	ug/kg	11/26/2019 1952
2-Hexanone	ND		1	10	ug/kg	11/26/2019 1952
Isopropylbenzene	ND		1	5.0	ug/kg	11/26/2019 1952
Methyl acetate	ND		1	5.0	ug/kg	11/26/2019 1952
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	11/26/2019 1952
4-Methyl-2-pentanone	ND		1	10	ug/kg	11/26/2019 1952
Methylcyclohexane	ND		1	5.0	ug/kg	11/26/2019 1952
Methylene chloride	ND		1	5.0	ug/kg	11/26/2019 1952
Styrene	ND		1	5.0	ug/kg	11/26/2019 1952
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
Tetrachloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
Toluene	ND		1	5.0	ug/kg	11/26/2019 1952
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	11/26/2019 1952
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	11/26/2019 1952
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	11/26/2019 1952

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37193-001
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	11/26/2019 1952
Trichlorofluoromethane	ND		1	5.0	ug/kg	11/26/2019 1952
Vinyl chloride	ND		1	5.0	ug/kg	11/26/2019 1952
Xylenes (total)	ND		1	10	ug/kg	11/26/2019 1952

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		109	53-142
Bromofluorobenzene		110	47-138
Toluene-d8		119	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37193-002
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	104	60-140	11/26/2019 1851
Benzene	50	50		1	100	70-130	11/26/2019 1851
Bromodichloromethane	50	51		1	103	70-130	11/26/2019 1851
Bromoform	50	53		1	105	70-130	11/26/2019 1851
Bromomethane (Methyl bromide)	50	48		1	95	70-130	11/26/2019 1851
2-Butanone (MEK)	100	100		1	102	60-140	11/26/2019 1851
Carbon disulfide	50	49		1	97	70-130	11/26/2019 1851
Carbon tetrachloride	50	52		1	103	70-130	11/26/2019 1851
Chlorobenzene	50	50		1	101	70-130	11/26/2019 1851
Chloroethane	50	53		1	107	70-130	11/26/2019 1851
Chloroform	50	50		1	100	70-130	11/26/2019 1851
Chloromethane (Methyl chloride)	50	44		1	88	60-140	11/26/2019 1851
Cyclohexane	50	54		1	108	70-130	11/26/2019 1851
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	97	70-130	11/26/2019 1851
Dibromochloromethane	50	52		1	104	70-130	11/26/2019 1851
1,2-Dibromoethane (EDB)	50	51		1	102	70-130	11/26/2019 1851
1,2-Dichlorobenzene	50	51		1	101	70-130	11/26/2019 1851
1,3-Dichlorobenzene	50	51		1	101	70-130	11/26/2019 1851
1,4-Dichlorobenzene	50	51		1	102	70-130	11/26/2019 1851
Dichlorodifluoromethane	50	49		1	99	60-140	11/26/2019 1851
1,1-Dichloroethane	50	49		1	99	70-130	11/26/2019 1851
1,2-Dichloroethane	50	48		1	95	70-130	11/26/2019 1851
1,1-Dichloroethene	50	59		1	118	70-130	11/26/2019 1851
cis-1,2-Dichloroethene	50	50		1	101	70-130	11/26/2019 1851
trans-1,2-Dichloroethene	50	55		1	110	70-130	11/26/2019 1851
1,2-Dichloropropane	50	51		1	102	70-130	11/26/2019 1851
cis-1,3-Dichloropropene	50	53		1	106	70-130	11/26/2019 1851
trans-1,3-Dichloropropene	50	53		1	106	70-130	11/26/2019 1851
Ethylbenzene	50	52		1	103	70-130	11/26/2019 1851
2-Hexanone	100	100		1	100	70-130	11/26/2019 1851
Isopropylbenzene	50	50		1	101	70-130	11/26/2019 1851
Methyl acetate	50	47		1	94	70-130	11/26/2019 1851
Methyl tertiary butyl ether (MTBE)	50	48		1	97	70-130	11/26/2019 1851
4-Methyl-2-pentanone	100	94		1	94	70-130	11/26/2019 1851
Methylcyclohexane	50	55		1	110	70-130	11/26/2019 1851
Methylene chloride	50	48		1	96	70-130	11/26/2019 1851
Styrene	50	51		1	101	70-130	11/26/2019 1851
1,1,2,2-Tetrachloroethane	50	47		1	94	70-130	11/26/2019 1851
Tetrachloroethene	50	57		1	113	70-130	11/26/2019 1851
Toluene	50	51		1	102	70-130	11/26/2019 1851
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	52		1	104	70-130	11/26/2019 1851
1,2,4-Trichlorobenzene	50	53		1	106	70-130	11/26/2019 1851
1,1,1-Trichloroethane	50	51		1	103	70-130	11/26/2019 1851
1,1,2-Trichloroethane	50	49		1	98	70-130	11/26/2019 1851

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37193-002
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	53		1	106	70-130	11/26/2019 1851
Trichlorofluoromethane	50	54		1	108	70-130	11/26/2019 1851
Vinyl chloride	50	44		1	88	70-130	11/26/2019 1851
Xylenes (total)	100	100		1	102	70-130	11/26/2019 1851

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		103	53-142
Bromofluorobenzene		120	47-138
Toluene-d8		118	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37193-003
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	97		1	97	7.2	60-140	20	11/26/2019 1929
Benzene	50	47		1	94	7.0	70-130	20	11/26/2019 1929
Bromodichloromethane	50	49		1	98	4.6	70-130	20	11/26/2019 1929
Bromoform	50	52		1	103	1.9	70-130	20	11/26/2019 1929
Bromomethane (Methyl bromide)	50	44		1	89	6.7	70-130	20	11/26/2019 1929
2-Butanone (MEK)	100	95		1	95	6.2	60-140	20	11/26/2019 1929
Carbon disulfide	50	43		1	87	11	70-130	20	11/26/2019 1929
Carbon tetrachloride	50	46		1	92	11	70-130	20	11/26/2019 1929
Chlorobenzene	50	48		1	96	4.6	70-130	20	11/26/2019 1929
Chloroethane	50	48		1	96	10	70-130	20	11/26/2019 1929
Chloroform	50	46		1	93	7.7	70-130	20	11/26/2019 1929
Chloromethane (Methyl chloride)	50	40		1	79	11	60-140	20	11/26/2019 1929
Cyclohexane	50	47		1	94	14	70-130	20	11/26/2019 1929
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	96	0.97	70-130	20	11/26/2019 1929
Dibromochloromethane	50	50		1	100	4.0	70-130	20	11/26/2019 1929
1,2-Dibromoethane (EDB)	50	49		1	98	4.2	70-130	20	11/26/2019 1929
1,2-Dichlorobenzene	50	50		1	99	1.7	70-130	20	11/26/2019 1929
1,3-Dichlorobenzene	50	50		1	99	2.2	70-130	20	11/26/2019 1929
1,4-Dichlorobenzene	50	49		1	99	2.9	70-130	20	11/26/2019 1929
Dichlorodifluoromethane	50	44		1	87	13	60-140	20	11/26/2019 1929
1,1-Dichloroethane	50	45		1	90	9.0	70-130	20	11/26/2019 1929
1,2-Dichloroethane	50	45		1	89	6.5	70-130	20	11/26/2019 1929
1,1-Dichloroethene	50	52		1	105	12	70-130	20	11/26/2019 1929
cis-1,2-Dichloroethene	50	46		1	92	9.0	70-130	20	11/26/2019 1929
trans-1,2-Dichloroethene	50	50		1	99	11	70-130	20	11/26/2019 1929
1,2-Dichloropropane	50	48		1	96	5.7	70-130	20	11/26/2019 1929
cis-1,3-Dichloropropene	50	51		1	102	4.4	70-130	20	11/26/2019 1929
trans-1,3-Dichloropropene	50	51		1	102	3.2	70-130	20	11/26/2019 1929
Ethylbenzene	50	48		1	96	7.2	70-130	20	11/26/2019 1929
2-Hexanone	100	98		1	98	1.8	70-130	20	11/26/2019 1929
Isopropylbenzene	50	48		1	96	5.2	70-130	20	11/26/2019 1929
Methyl acetate	50	46		1	91	3.0	70-130	20	11/26/2019 1929
Methyl tertiary butyl ether (MTBE)	50	46		1	92	4.6	70-130	20	11/26/2019 1929
4-Methyl-2-pentanone	100	91		1	91	3.2	70-130	20	11/26/2019 1929
Methylcyclohexane	50	49		1	98	11	70-130	20	11/26/2019 1929
Methylene chloride	50	45		1	89	7.3	70-130	20	11/26/2019 1929
Styrene	50	48		1	96	5.1	70-130	20	11/26/2019 1929
1,1,2,2-Tetrachloroethane	50	47		1	93	1.2	70-130	20	11/26/2019 1929
Tetrachloroethene	50	52		1	105	7.7	70-130	20	11/26/2019 1929
Toluene	50	48		1	96	6.5	70-130	20	11/26/2019 1929
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	46		1	92	13	70-130	20	11/26/2019 1929
1,2,4-Trichlorobenzene	50	52		1	105	1.3	70-130	20	11/26/2019 1929
1,1,1-Trichloroethane	50	46		1	92	11	70-130	20	11/26/2019 1929
1,1,2-Trichloroethane	50	48		1	96	1.6	70-130	20	11/26/2019 1929

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37193-003
Batch: 37193
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	49		1	97	8.2	70-130	20	11/26/2019 1929
Trichlorofluoromethane	50	48		1	96	12	70-130	20	11/26/2019 1929
Vinyl chloride	50	40		1	80	10	70-130	20	11/26/2019 1929
Xylenes (total)	100	97		1	97	6.0	70-130	20	11/26/2019 1929

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		100	53-142
Bromofluorobenzene		120	47-138
Toluene-d8		119	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37558-001
Batch: 37558
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/kg	12/02/2019 0938
Benzene	ND		1	5.0	ug/kg	12/02/2019 0938
Bromodichloromethane	ND		1	5.0	ug/kg	12/02/2019 0938
Bromoform	ND		1	5.0	ug/kg	12/02/2019 0938
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	12/02/2019 0938
2-Butanone (MEK)	ND		1	20	ug/kg	12/02/2019 0938
Carbon disulfide	ND		1	5.0	ug/kg	12/02/2019 0938
Carbon tetrachloride	ND		1	5.0	ug/kg	12/02/2019 0938
Chlorobenzene	ND		1	5.0	ug/kg	12/02/2019 0938
Chloroethane	ND		1	5.0	ug/kg	12/02/2019 0938
Chloroform	ND		1	5.0	ug/kg	12/02/2019 0938
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	12/02/2019 0938
Cyclohexane	ND		1	5.0	ug/kg	12/02/2019 0938
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	12/02/2019 0938
Dibromochloromethane	ND		1	5.0	ug/kg	12/02/2019 0938
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	12/02/2019 0938
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	12/02/2019 0938
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	12/02/2019 0938
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	12/02/2019 0938
Dichlorodifluoromethane	ND		1	5.0	ug/kg	12/02/2019 0938
1,1-Dichloroethane	ND		1	5.0	ug/kg	12/02/2019 0938
1,2-Dichloroethane	ND		1	5.0	ug/kg	12/02/2019 0938
1,1-Dichloroethene	ND		1	5.0	ug/kg	12/02/2019 0938
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/02/2019 0938
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/02/2019 0938
1,2-Dichloropropane	ND		1	5.0	ug/kg	12/02/2019 0938
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/02/2019 0938
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/02/2019 0938
Ethylbenzene	ND		1	5.0	ug/kg	12/02/2019 0938
2-Hexanone	ND		1	10	ug/kg	12/02/2019 0938
Isopropylbenzene	ND		1	5.0	ug/kg	12/02/2019 0938
Methyl acetate	ND		1	5.0	ug/kg	12/02/2019 0938
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	12/02/2019 0938
4-Methyl-2-pentanone	ND		1	10	ug/kg	12/02/2019 0938
Methylcyclohexane	ND		1	5.0	ug/kg	12/02/2019 0938
Methylene chloride	ND		1	5.0	ug/kg	12/02/2019 0938
Styrene	ND		1	5.0	ug/kg	12/02/2019 0938
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	12/02/2019 0938
Tetrachloroethene	ND		1	5.0	ug/kg	12/02/2019 0938
Toluene	ND		1	5.0	ug/kg	12/02/2019 0938
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	12/02/2019 0938
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	12/02/2019 0938
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	12/02/2019 0938
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	12/02/2019 0938

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37558-001
Batch: 37558
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	12/02/2019 0938
Trichlorofluoromethane	ND		1	5.0	ug/kg	12/02/2019 0938
Vinyl chloride	ND		1	5.0	ug/kg	12/02/2019 0938
Xylenes (total)	ND		1	10	ug/kg	12/02/2019 0938

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		91	53-142
Bromofluorobenzene		102	47-138
Toluene-d8		104	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37558-002
Batch: 37558
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	112	60-140	12/02/2019 0915
Benzene	50	49		1	99	70-130	12/02/2019 0915
Bromodichloromethane	50	50		1	100	70-130	12/02/2019 0915
Bromoform	50	50		1	100	70-130	12/02/2019 0915
Bromomethane (Methyl bromide)	50	47		1	93	70-130	12/02/2019 0915
2-Butanone (MEK)	100	100		1	103	60-140	12/02/2019 0915
Carbon disulfide	50	49		1	99	70-130	12/02/2019 0915
Carbon tetrachloride	50	50		1	101	70-130	12/02/2019 0915
Chlorobenzene	50	49		1	98	70-130	12/02/2019 0915
Chloroethane	50	53		1	106	70-130	12/02/2019 0915
Chloroform	50	50		1	99	70-130	12/02/2019 0915
Chloromethane (Methyl chloride)	50	48		1	95	60-140	12/02/2019 0915
Cyclohexane	50	47		1	95	70-130	12/02/2019 0915
1,2-Dibromo-3-chloropropane (DBCP)	50	46		1	91	70-130	12/02/2019 0915
Dibromochloromethane	50	50		1	100	70-130	12/02/2019 0915
1,2-Dibromoethane (EDB)	50	48		1	97	70-130	12/02/2019 0915
1,2-Dichlorobenzene	50	48		1	97	70-130	12/02/2019 0915
1,3-Dichlorobenzene	50	49		1	98	70-130	12/02/2019 0915
1,4-Dichlorobenzene	50	48		1	97	70-130	12/02/2019 0915
Dichlorodifluoromethane	50	41		1	83	60-140	12/02/2019 0915
1,1-Dichloroethane	50	50		1	100	70-130	12/02/2019 0915
1,2-Dichloroethane	50	48		1	96	70-130	12/02/2019 0915
1,1-Dichloroethene	50	57		1	114	70-130	12/02/2019 0915
cis-1,2-Dichloroethene	50	50		1	100	70-130	12/02/2019 0915
trans-1,2-Dichloroethene	50	54		1	107	70-130	12/02/2019 0915
1,2-Dichloropropane	50	50		1	99	70-130	12/02/2019 0915
cis-1,3-Dichloropropene	50	53		1	106	70-130	12/02/2019 0915
trans-1,3-Dichloropropene	50	53		1	106	70-130	12/02/2019 0915
Ethylbenzene	50	50		1	101	70-130	12/02/2019 0915
2-Hexanone	100	110		1	110	70-130	12/02/2019 0915
Isopropylbenzene	50	49		1	98	70-130	12/02/2019 0915
Methyl acetate	50	48		1	96	70-130	12/02/2019 0915
Methyl tertiary butyl ether (MTBE)	50	48		1	97	70-130	12/02/2019 0915
4-Methyl-2-pentanone	100	95		1	95	70-130	12/02/2019 0915
Methylcyclohexane	50	48		1	96	70-130	12/02/2019 0915
Methylene chloride	50	47		1	93	70-130	12/02/2019 0915
Styrene	50	51		1	101	70-130	12/02/2019 0915
1,1,2,2-Tetrachloroethane	50	47		1	93	70-130	12/02/2019 0915
Tetrachloroethene	50	51		1	101	70-130	12/02/2019 0915
Toluene	50	48		1	96	70-130	12/02/2019 0915
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	46		1	92	70-130	12/02/2019 0915
1,2,4-Trichlorobenzene	50	48		1	95	70-130	12/02/2019 0915
1,1,1-Trichloroethane	50	50		1	100	70-130	12/02/2019 0915
1,1,2-Trichloroethane	50	49		1	97	70-130	12/02/2019 0915

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37558-002
Batch: 37558
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	50		1	101	70-130	12/02/2019 0915
Trichlorofluoromethane	50	48		1	96	70-130	12/02/2019 0915
Vinyl chloride	50	46		1	91	70-130	12/02/2019 0915
Xylenes (total)	100	100		1	101	70-130	12/02/2019 0915

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		89	53-142
Bromofluorobenzene		101	47-138
Toluene-d8		102	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37558-003
Batch: 37558
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	110		1	109	3.1	60-140	20	12/02/2019 1709
Benzene	50	50		1	99	0.11	70-130	20	12/02/2019 1709
Bromodichloromethane	50	50		1	101	0.64	70-130	20	12/02/2019 1709
Bromoform	50	51		1	102	1.5	70-130	20	12/02/2019 1709
Bromomethane (Methyl bromide)	50	53		1	107	14	70-130	20	12/02/2019 1709
2-Butanone (MEK)	100	100		1	103	0.11	60-140	20	12/02/2019 1709
Carbon disulfide	50	50		1	101	2.3	70-130	20	12/02/2019 1709
Carbon tetrachloride	50	52		1	104	3.0	70-130	20	12/02/2019 1709
Chlorobenzene	50	50		1	99	0.88	70-130	20	12/02/2019 1709
Chloroethane	50	56		1	112	5.6	70-130	20	12/02/2019 1709
Chloroform	50	52		1	103	3.9	70-130	20	12/02/2019 1709
Chloromethane (Methyl chloride)	50	50		1	100	4.6	60-140	20	12/02/2019 1709
Cyclohexane	50	46		1	92	2.7	70-130	20	12/02/2019 1709
1,2-Dibromo-3-chloropropane (DBCP)	50	45		1	91	0.57	70-130	20	12/02/2019 1709
Dibromochloromethane	50	50		1	100	0.056	70-130	20	12/02/2019 1709
1,2-Dibromoethane (EDB)	50	49		1	97	0.96	70-130	20	12/02/2019 1709
1,2-Dichlorobenzene	50	50		1	100	3.3	70-130	20	12/02/2019 1709
1,3-Dichlorobenzene	50	51		1	101	2.9	70-130	20	12/02/2019 1709
1,4-Dichlorobenzene	50	50		1	101	4.2	70-130	20	12/02/2019 1709
Dichlorodifluoromethane	50	43		1	86	3.9	60-140	20	12/02/2019 1709
1,1-Dichloroethane	50	51		1	103	2.6	70-130	20	12/02/2019 1709
1,2-Dichloroethane	50	47		1	93	2.3	70-130	20	12/02/2019 1709
1,1-Dichloroethene	50	58		1	117	2.4	70-130	20	12/02/2019 1709
cis-1,2-Dichloroethene	50	51		1	103	2.9	70-130	20	12/02/2019 1709
trans-1,2-Dichloroethene	50	56		1	113	5.0	70-130	20	12/02/2019 1709
1,2-Dichloropropane	50	51		1	101	1.9	70-130	20	12/02/2019 1709
cis-1,3-Dichloropropene	50	53		1	107	0.48	70-130	20	12/02/2019 1709
trans-1,3-Dichloropropene	50	52		1	104	1.4	70-130	20	12/02/2019 1709
Ethylbenzene	50	51		1	103	2.1	70-130	20	12/02/2019 1709
2-Hexanone	100	100		1	104	5.4	70-130	20	12/02/2019 1709
Isopropylbenzene	50	50		1	100	1.9	70-130	20	12/02/2019 1709
Methyl acetate	50	50		1	100	4.4	70-130	20	12/02/2019 1709
Methyl tertiary butyl ether (MTBE)	50	51		1	103	5.9	70-130	20	12/02/2019 1709
4-Methyl-2-pentanone	100	98		1	98	2.2	70-130	20	12/02/2019 1709
Methylcyclohexane	50	45		1	91	5.2	70-130	20	12/02/2019 1709
Methylene chloride	50	48		1	96	3.2	70-130	20	12/02/2019 1709
Styrene	50	51		1	102	0.42	70-130	20	12/02/2019 1709
1,1,2,2-Tetrachloroethane	50	48		1	96	3.3	70-130	20	12/02/2019 1709
Tetrachloroethene	50	51		1	103	1.2	70-130	20	12/02/2019 1709
Toluene	50	48		1	95	1.2	70-130	20	12/02/2019 1709
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	45		1	89	3.4	70-130	20	12/02/2019 1709
1,2,4-Trichlorobenzene	50	51		1	102	6.3	70-130	20	12/02/2019 1709
1,1,1-Trichloroethane	50	52		1	103	3.1	70-130	20	12/02/2019 1709
1,1,2-Trichloroethane	50	49		1	97	0.12	70-130	20	12/02/2019 1709

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ37558-003
Batch: 37558
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	50		1	100	0.41	70-130	20	12/02/2019 1709
Trichlorofluoromethane	50	49		1	99	3.3	70-130	20	12/02/2019 1709
Vinyl chloride	50	47		1	94	3.5	70-130	20	12/02/2019 1709
Xylenes (total)	100	100		1	102	0.55	70-130	20	12/02/2019 1709

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		88	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		98	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ37407-001
Batch: 37407
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1329

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acenaphthene	ND		1	13	ug/kg	12/02/2019 1137
Acenaphthylene	ND		1	13	ug/kg	12/02/2019 1137
Acetophenone	ND		1	67	ug/kg	12/02/2019 1137
Anthracene	ND		1	13	ug/kg	12/02/2019 1137
Atrazine	ND		1	67	ug/kg	12/02/2019 1137
Benzaldehyde	ND		1	67	ug/kg	12/02/2019 1137
Benzo(a)anthracene	ND		1	13	ug/kg	12/02/2019 1137
Benzo(a)pyrene	ND		1	13	ug/kg	12/02/2019 1137
Benzo(b)fluoranthene	ND		1	13	ug/kg	12/02/2019 1137
Benzo(g,h,i)perylene	ND		1	13	ug/kg	12/02/2019 1137
Benzo(k)fluoranthene	ND		1	13	ug/kg	12/02/2019 1137
1,1'-Biphenyl	ND		1	67	ug/kg	12/02/2019 1137
4-Bromophenyl phenyl ether	ND		1	67	ug/kg	12/02/2019 1137
Butyl benzyl phthalate	ND		1	67	ug/kg	12/02/2019 1137
Caprolactam	ND		1	67	ug/kg	12/02/2019 1137
Carbazole	ND		1	67	ug/kg	12/02/2019 1137
bis (2-Chloro-1-methylethyl) ether	ND		1	67	ug/kg	12/02/2019 1137
4-Chloro-3-methyl phenol	ND		1	67	ug/kg	12/02/2019 1137
4-Chloroaniline	ND		1	67	ug/kg	12/02/2019 1137
bis(2-Chloroethoxy)methane	ND		1	67	ug/kg	12/02/2019 1137
bis(2-Chloroethyl)ether	ND		1	67	ug/kg	12/02/2019 1137
2-Chloronaphthalene	ND		1	67	ug/kg	12/02/2019 1137
2-Chlorophenol	ND		1	67	ug/kg	12/02/2019 1137
4-Chlorophenyl phenyl ether	ND		1	67	ug/kg	12/02/2019 1137
Chrysene	ND		1	13	ug/kg	12/02/2019 1137
Dibenzo(a,h)anthracene	ND		1	13	ug/kg	12/02/2019 1137
Dibenzofuran	ND		1	67	ug/kg	12/02/2019 1137
3,3'-Dichlorobenzidine	ND		1	67	ug/kg	12/02/2019 1137
2,4-Dichlorophenol	ND		1	67	ug/kg	12/02/2019 1137
Diethylphthalate	ND		1	67	ug/kg	12/02/2019 1137
Dimethyl phthalate	ND		1	67	ug/kg	12/02/2019 1137
2,4-Dimethylphenol	ND		1	67	ug/kg	12/02/2019 1137
Di-n-butyl phthalate	ND		1	67	ug/kg	12/02/2019 1137
4,6-Dinitro-2-methylphenol	ND		1	330	ug/kg	12/02/2019 1137
2,4-Dinitrophenol	ND		1	330	ug/kg	12/02/2019 1137
2,4-Dinitrotoluene	ND		1	130	ug/kg	12/02/2019 1137
2,6-Dinitrotoluene	ND		1	130	ug/kg	12/02/2019 1137
Di-n-octylphthalate	ND		1	67	ug/kg	12/02/2019 1137
bis(2-Ethylhexyl)phthalate	ND		1	67	ug/kg	12/02/2019 1137
Fluoranthene	ND		1	13	ug/kg	12/02/2019 1137
Fluorene	ND		1	13	ug/kg	12/02/2019 1137
Hexachlorobenzene	ND		1	67	ug/kg	12/02/2019 1137
Hexachlorobutadiene	ND		1	67	ug/kg	12/02/2019 1137
Hexachlorocyclopentadiene	ND		1	330	ug/kg	12/02/2019 1137

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ37407-001
Batch: 37407
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1329

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Hexachloroethane	ND		1	67	ug/kg	12/02/2019 1137
Indeno(1,2,3-c,d)pyrene	ND		1	13	ug/kg	12/02/2019 1137
Isophorone	ND		1	67	ug/kg	12/02/2019 1137
2-Methylnaphthalene	ND		1	13	ug/kg	12/02/2019 1137
2-Methylphenol	ND		1	67	ug/kg	12/02/2019 1137
3+4-Methylphenol	ND		1	130	ug/kg	12/02/2019 1137
Naphthalene	ND		1	13	ug/kg	12/02/2019 1137
2-Nitroaniline	ND		1	130	ug/kg	12/02/2019 1137
3-Nitroaniline	ND		1	130	ug/kg	12/02/2019 1137
4-Nitroaniline	ND		1	130	ug/kg	12/02/2019 1137
Nitrobenzene	ND		1	67	ug/kg	12/02/2019 1137
2-Nitrophenol	ND		1	130	ug/kg	12/02/2019 1137
4-Nitrophenol	ND		1	330	ug/kg	12/02/2019 1137
N-Nitrosodi-n-propylamine	ND		1	67	ug/kg	12/02/2019 1137
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	67	ug/kg	12/02/2019 1137
Pentachlorophenol	ND		1	330	ug/kg	12/02/2019 1137
Phenanthrene	ND		1	13	ug/kg	12/02/2019 1137
Phenol	ND		1	67	ug/kg	12/02/2019 1137
Pyrene	ND		1	13	ug/kg	12/02/2019 1137
2,4,5-Trichlorophenol	ND		1	67	ug/kg	12/02/2019 1137
2,4,6-Trichlorophenol	ND		1	67	ug/kg	12/02/2019 1137

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		62	24-137
2-Fluorophenol		66	16-136
Nitrobenzene-d5		59	12-144
Phenol-d5		71	26-148
Terphenyl-d14		79	20-127
2,4,6-Tribromophenol		62	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37407-002
Batch: 37407
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1329

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	670	440		1	66	46-114	12/02/2019 1202
Acenaphthylene	670	450		1	67	44-122	12/02/2019 1202
Acetophenone	670	450		1	67	48-111	12/02/2019 1202
Anthracene	670	460		1	69	50-119	12/02/2019 1202
Atrazine	670	460		1	69	48-116	12/02/2019 1202
Benzaldehyde	670	390		1	58	10-110	12/02/2019 1202
Benzo(a)anthracene	670	460		1	68	47-121	12/02/2019 1202
Benzo(a)pyrene	670	470		1	70	55-134	12/02/2019 1202
Benzo(b)fluoranthene	670	470		1	71	28-139	12/02/2019 1202
Benzo(g,h,i)perylene	670	490		1	74	36-125	12/02/2019 1202
Benzo(k)fluoranthene	670	450		1	68	47-130	12/02/2019 1202
1,1'-Biphenyl	670	450		1	68	49-110	12/02/2019 1202
4-Bromophenyl phenyl ether	670	500		1	75	46-118	12/02/2019 1202
Butyl benzyl phthalate	670	400		1	60	46-128	12/02/2019 1202
Caprolactam	670	510		1	77	43-121	12/02/2019 1202
Carbazole	670	480		1	73	47-128	12/02/2019 1202
bis (2-Chloro-1-methylethyl) ether	670	530		1	80	31-102	12/02/2019 1202
4-Chloro-3-methyl phenol	670	470		1	71	49-118	12/02/2019 1202
4-Chloroaniline	670	490		1	73	17-106	12/02/2019 1202
bis(2-Chloroethoxy)methane	670	470		1	71	39-108	12/02/2019 1202
bis(2-Chloroethyl)ether	670	510		1	76	32-105	12/02/2019 1202
2-Chloronaphthalene	670	450		1	67	31-127	12/02/2019 1202
2-Chlorophenol	670	500		1	75	37-106	12/02/2019 1202
4-Chlorophenyl phenyl ether	670	470		1	70	47-116	12/02/2019 1202
Chrysene	670	450		1	67	45-126	12/02/2019 1202
Dibenzo(a,h)anthracene	670	500		1	74	45-122	12/02/2019 1202
Dibenzofuran	670	440		1	66	45-112	12/02/2019 1202
3,3'-Dichlorobenzidine	670	420		1	64	10-119	12/02/2019 1202
2,4-Dichlorophenol	670	470		1	71	41-113	12/02/2019 1202
Diethylphthalate	670	440		1	66	49-123	12/02/2019 1202
Dimethyl phthalate	670	450		1	67	48-120	12/02/2019 1202
2,4-Dimethylphenol	670	560		1	83	33-123	12/02/2019 1202
Di-n-butyl phthalate	670	450		1	68	51-129	12/02/2019 1202
4,6-Dinitro-2-methylphenol	670	530		1	80	40-130	12/02/2019 1202
2,4-Dinitrophenol	1300	910		1	68	10-113	12/02/2019 1202
2,4-Dinitrotoluene	670	460		1	69	48-124	12/02/2019 1202
2,6-Dinitrotoluene	670	460		1	69	47-125	12/02/2019 1202
Di-n-octylphthalate	670	420		1	63	49-142	12/02/2019 1202
bis(2-Ethylhexyl)phthalate	670	430		1	64	45-128	12/02/2019 1202
Fluoranthene	670	470		1	70	50-123	12/02/2019 1202
Fluorene	670	440		1	66	48-117	12/02/2019 1202
Hexachlorobenzene	670	470		1	71	44-122	12/02/2019 1202
Hexachlorobutadiene	670	480		1	71	33-103	12/02/2019 1202
Hexachlorocyclopentadiene	3300	2400		1	72	18-121	12/02/2019 1202

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37407-002
Batch: 37407
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 11/29/2019 1329

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexachloroethane	670	450		1	68	30-96	12/02/2019 1202
Indeno(1,2,3-c,d)pyrene	670	500		1	75	45-123	12/02/2019 1202
Isophorone	670	490		1	73	41-113	12/02/2019 1202
2-Methylnaphthalene	670	460		1	69	40-106	12/02/2019 1202
2-Methylphenol	670	550		1	82	32-107	12/02/2019 1202
3+4-Methylphenol	670	520		1	77	39-108	12/02/2019 1202
Naphthalene	670	460		1	69	36-110	12/02/2019 1202
2-Nitroaniline	670	470		1	70	45-123	12/02/2019 1202
3-Nitroaniline	670	400		1	60	24-127	12/02/2019 1202
4-Nitroaniline	670	470		1	70	48-127	12/02/2019 1202
Nitrobenzene	670	450		1	68	33-114	12/02/2019 1202
2-Nitrophenol	670	460		1	70	35-108	12/02/2019 1202
4-Nitrophenol	1300	600		1	45	18-154	12/02/2019 1202
N-Nitrosodi-n-propylamine	670	540		1	81	32-115	12/02/2019 1202
N-Nitrosodiphenylamine (Diphenylamine)	670	490		1	73	53-150	12/02/2019 1202
Pentachlorophenol	1300	960		1	72	27-138	12/02/2019 1202
Phenanthrene	670	460		1	69	49-117	12/02/2019 1202
Phenol	670	520		1	79	36-108	12/02/2019 1202
Pyrene	670	450		1	67	47-119	12/02/2019 1202
2,4,5-Trichlorophenol	670	450		1	68	46-122	12/02/2019 1202
2,4,6-Trichlorophenol	670	450		1	68	38-115	12/02/2019 1202

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		65	24-137
2-Fluorophenol		68	16-136
Nitrobenzene-d5		63	12-144
Phenol-d5		73	26-148
Terphenyl-d14		76	20-127
2,4,6-Tribromophenol		70	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody
and
Miscellaneous Documents

Chain of Custody Record

SHEALY ENVIRONMENTAL SERVICES, INC.
106 Vantage Point Drive • West Columbia, SC 29172
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Address: 5801 BLUFF RD
City: HOPKINS State: SC Zip Code:
Project Name: RI IMPLEMENTATION
Project No. 60595649
P.O. No.

Report to Contact: DIANA JOYNER
Sampler's Signature: x [signature]
Printed Name: JAMES LEAPHART

Telephone No. / E-mail: 803 647 1920 JOYNERDP@WESTINGHOUSE.COM
Quote No.
Page 1 of 1
UK25040
GRW

Analysis (Attach list if more space is needed): VOC's 8260, SVOC's 8270, NITRATE

Sample ID / Description (Containers for each sample may be combined on one line.)	Date	Time	G=Grab C=Composite	Matrix: Aqueous	Solid	Non-Aqueous	Unpres.	H_2SO_4	HNO_3	HCl	NaOH	Other	VOC's 8260	SVOC's 8270	NITRATE	Remarks / Cooler I.D.
SED-41 0-6"	11-25-19	0830	G		X		1					1	X	X	X	
SED-42 0-6"	↓	0835	G		X		1					1	X	X	X	
SED-44 0-6"	↓	1150	G		X		1					1	X	X	X	
SED-43 0-6"	↓	1220	G		X		1					1	X	X	X	
SED-46 0-6"	↓	1450	G		X		1					1	X	X	X	
SED-45 0-6"	↓	1525	G		X		1					1	X	X	X	
TB-01-112519	↓	—		X						2			X			

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☒ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab

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

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by [signature]	11-25-19	1702	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory received by [signature]	11/25/19	1702

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

LAB USE ONLY
Received on ice (Circle) (Yes) No Ice Pack
Receipt Temp. 5.6 °C

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

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

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

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

Sample Receipt Checklist (SRC)

Client: Westinghouse Cooler Inspected by/date: BMG / 11/25/19 Lot #: UK25040

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: 19-2044

5.6 / 5.6 °C NA / NA °C NA / NA °C NA / NA °C

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

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☐ Yes	☐ No	☑ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☐ Yes	☐ No	☑ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC?
☑ Yes	☐ No		7. Were sample IDs listed on all sample containers?
☑ Yes	☐ No		8. Was collection date & time listed on the COC?
☑ Yes	☐ No		9. Was collection date & time listed on all sample containers?
☑ Yes	☐ No		10. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☑ Yes	☐ No		13. Was adequate sample volume available?
☑ Yes	☐ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☐ Yes	☑ No	☐ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	19. Were all applicable NH_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?
☐ Yes	☑ No		21. Was the quote number listed on the container label? If yes, Quote # NA

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

Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: 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 ($Na_2S_2O_3$) with Shealy ID: NA.

SR barcode labels applied by: BMG Date: 11/25/19

Comments:

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

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

Project Name: RI Implementation

Project Number: 60595649

Lot Number:**UL02023**

Date Completed:12/12/2019

12/12/2019 1:56 PM
Approved and released by:
Project Manager: Grant Wilton

Shealy Environmental Services, Inc.
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Case Narrative
Westinghouse Electric Company
Lot Number: UL02023

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.

Semivolatile Organic Analysis – Method 8270D
Sample -001 thru -007: The samples were analyzed at a 5X dilution due to the high concentration of non-target analytes present. The reporting limits were raised accordingly.

Sample -002: The surrogate, 2,4,6-Tribromophenol, was recovered below control limits due to matrix interference.

Sample Summary

Westinghouse Electric Company

Lot Number: UL02023

Project Name: RI Implementation

Project Number: 60595649

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	SED-54 0"-6"	Solid	12/02/2019 1105	12/02/2019
002	SED-54 6"-12"	Solid	12/02/2019 1110	12/02/2019
003	SED-55 0"-6"	Solid	12/02/2019 1115	12/02/2019
004	SED-55 6"-12"	Solid	12/02/2019 1120	12/02/2019
005	SED-56 0"-6"	Solid	12/02/2019 1125	12/02/2019
006	SED-56 0"-6" DUP	Solid	12/02/2019 1125	12/02/2019
007	SED-56 6"-12"	Solid	12/02/2019 1130	12/02/2019
008	EB-01-120219	Aqueous	12/02/2019 1235	12/02/2019
009	TB-01-120219	Aqueous	12/02/2019	12/02/2019

(9 samples)

Detection Summary

Westinghouse Electric Company

Lot Number: UL02023

Project Name: RI Implementation

Project Number: 60595649

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	SED-54 0"-6"	Solid	Nitrate - N (soluble)	9056A	0.63		mg/kg	6
001	SED-54 0"-6"	Solid	Acetone	8260B	330		ug/kg	7
001	SED-54 0"-6"	Solid	2-Butanone (MEK)	8260B	42		ug/kg	7
001	SED-54 0"-6"	Solid	Methyl acetate	8260B	12		ug/kg	7
002	SED-54 6"-12"	Solid	Nitrate - N (soluble)	9056A	0.68		mg/kg	11
002	SED-54 6"-12"	Solid	Acetone	8260B	39		ug/kg	12
004	SED-55 6"-12"	Solid	Acetone	8260B	200		ug/kg	22
005	SED-56 0"-6"	Solid	Nitrate - N (soluble)	9056A	0.52		mg/kg	26
005	SED-56 0"-6"	Solid	Acetone	8260B	220		ug/kg	27
006	SED-56 0"-6" DUP	Solid	Nitrate - N (soluble)	9056A	0.74		mg/kg	31
006	SED-56 0"-6" DUP	Solid	Acetone	8260B	23		ug/kg	32

(11 detections)

Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UL02023-001
Description: SED-54 0"-6"
Matrix: Solid
Date Sampled: 12/02/2019 1105
Project Name: RI Implementation
% Solids: 23.1 12/02/2019 2318
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/10/2019 1522	GMH		38611

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.63		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-001
Description: SED-54 0"-6" | Matrix: Solid
Date Sampled: 12/02/2019 1105 | Project Name: RI Implementation | % Solids: 23.1 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/04/2019 0430	ALR1		37799	3.78

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	330		26	ug/kg	1
Benzene	71-43-2	8260B	ND		6.6	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.6	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.6	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.6	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	42		26	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.6	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.6	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.6	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.6	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.6	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.6	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.6	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.6	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.6	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.6	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.6	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.6	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.6	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.6	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.6	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.6	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.6	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.6	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.6	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.6	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.6	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.6	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.6	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.6	ug/kg	1
Methyl acetate	79-20-9	8260B	12		6.6	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.6	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.6	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.6	ug/kg	1
Styrene	100-42-5	8260B	ND		6.6	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.6	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.6	ug/kg	1
Toluene	108-88-3	8260B	ND		6.6	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.6	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.6	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.6	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.6	ug/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-001
Description: SED-54 0"-6" | Matrix: Solid
Date Sampled: 12/02/2019 1105 | Project Name: RI Implementation | % Solids: 23.1 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/04/2019 0430	ALR1		37799	3.78

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.6	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.6	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.6	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	53-142
Bromofluorobenzene		79	47-138
Toluene-d8		117	68-124

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-001
Description: SED-54 0"-6" | Matrix: Solid
Date Sampled: 12/02/2019 1105 | Project Name: RI Implementation | % Solids: 23.1 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 1927	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		65	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		65	ug/kg	1
Acetophenone	98-86-2	8270D	ND		330	ug/kg	1
Anthracene	120-12-7	8270D	ND		65	ug/kg	1
Atrazine	1912-24-9	8270D	ND		330	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		330	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		65	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		65	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		65	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		65	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		65	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		330	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		330	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		330	ug/kg	1
Caprolactam	105-60-2	8270D	ND		330	ug/kg	1
Carbazole	86-74-8	8270D	ND		330	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		330	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		330	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		330	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		330	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		330	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		330	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		330	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		330	ug/kg	1
Chrysene	218-01-9	8270D	ND		65	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		65	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		330	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		330	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		330	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		330	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		330	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		330	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		330	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		630	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		630	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		330	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		330	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		65	ug/kg	1
Fluorene	86-73-7	8270D	ND		65	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		330	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		330	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	1

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-001
Description: SED-54 0"-6" | Matrix: Solid
Date Sampled: 12/02/2019 1105 | Project Name: RI Implementation | % Solids: 23.1 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 1927	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		330	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		65	ug/kg	1
Isophorone	78-59-1	8270D	ND		330	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		65	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		330	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		630	ug/kg	1
Naphthalene	91-20-3	8270D	ND		65	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		630	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		630	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		630	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		330	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		630	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		330	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		330	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		65	ug/kg	1
Phenol	108-95-2	8270D	ND		330	ug/kg	1
Pyrene	129-00-0	8270D	ND		65	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		330	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		330	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		48	24-137
2-Fluorophenol		53	16-136
Nitrobenzene-d5		49	12-144
Phenol-d5		57	26-148
Terphenyl-d14		63	20-127
2,4,6-Tribromophenol		42	27-128

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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%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UL02023-002
Description: SED-54 6"-12"
Matrix: Solid
Date Sampled: 12/02/2019 1110
Project Name: RI Implementation
% Solids: 33.7 12/02/2019 2318
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/10/2019 1545	GMH		38611

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.68		0.50	mg/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-002
Description: SED-54 6"-12" | Matrix: Solid
Date Sampled: 12/02/2019 1110 | Project Name: RI Implementation | % Solids: 33.7 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/04/2019 0452	ALR1		37799	3.95

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	39		25	ug/kg	1
Benzene	71-43-2	8260B	ND		6.3	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		6.3	ug/kg	1
Bromoform	75-25-2	8260B	ND		6.3	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		6.3	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		25	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		6.3	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		6.3	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		6.3	ug/kg	1
Chloroethane	75-00-3	8260B	ND		6.3	ug/kg	1
Chloroform	67-66-3	8260B	ND		6.3	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		6.3	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		6.3	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		6.3	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		6.3	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		6.3	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		6.3	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		6.3	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		6.3	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		6.3	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		6.3	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		6.3	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		6.3	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		6.3	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		6.3	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		6.3	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		6.3	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		6.3	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		6.3	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		13	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		6.3	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		6.3	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		6.3	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		13	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		6.3	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		6.3	ug/kg	1
Styrene	100-42-5	8260B	ND		6.3	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		6.3	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		6.3	ug/kg	1
Toluene	108-88-3	8260B	ND		6.3	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		6.3	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		6.3	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		6.3	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		6.3	ug/kg	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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-002
Description: SED-54 6"-12" | Matrix: Solid
Date Sampled: 12/02/2019 1110 | Project Name: RI Implementation | % Solids: 33.7 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/04/2019 0452	ALR1		37799	3.95

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		6.3	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		6.3	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		6.3	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		13	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	53-142
Bromofluorobenzene		85	47-138
Toluene-d8		110	68-124

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-002
Description: SED-54 6"-12" | Matrix: Solid
Date Sampled: 12/02/2019 1110 | Project Name: RI Implementation | % Solids: 33.7 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 1950	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		63	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		63	ug/kg	1
Acetophenone	98-86-2	8270D	ND		320	ug/kg	1
Anthracene	120-12-7	8270D	ND		63	ug/kg	1
Atrazine	1912-24-9	8270D	ND		320	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		320	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		63	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		63	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		63	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		63	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		63	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		320	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		320	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		320	ug/kg	1
Caprolactam	105-60-2	8270D	ND		320	ug/kg	1
Carbazole	86-74-8	8270D	ND		320	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		320	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		320	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		320	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		320	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		320	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		320	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		320	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		320	ug/kg	1
Chrysene	218-01-9	8270D	ND		63	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		63	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		320	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		320	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		320	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		320	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		320	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		320	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		320	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		620	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		620	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		320	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		320	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		63	ug/kg	1
Fluorene	86-73-7	8270D	ND		63	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		320	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		320	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-002
Description: SED-54 6"-12" | Matrix: Solid
Date Sampled: 12/02/2019 1110 | Project Name: RI Implementation | % Solids: 33.7 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 1950	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		320	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		63	ug/kg	1
Isophorone	78-59-1	8270D	ND		320	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		63	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		320	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		620	ug/kg	1
Naphthalene	91-20-3	8270D	ND		63	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		620	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		620	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		620	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		320	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		620	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		320	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		320	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		63	ug/kg	1
Phenol	108-95-2	8270D	ND		320	ug/kg	1
Pyrene	129-00-0	8270D	ND		63	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		320	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		320	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		37	24-137
2-Fluorophenol		37	16-136
Nitrobenzene-d5		36	12-144
Phenol-d5		35	26-148
Terphenyl-d14		48	20-127
2,4,6-Tribromophenol	N	22	27-128

LOQ = Limit of Quantitation
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UL02023-003	
Description: SED-55 0"-6"		Matrix: Solid	
Date Sampled: 12/02/2019 1115	Project Name: RI Implementation	% Solids: 53.5	12/02/2019 2318
Date Received: 12/02/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/10/2019 1606	GMH		38611

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UL02023-003
Description: SED-55 0"-6"
Matrix: Solid
Date Sampled: 12/02/2019 1115
Project Name: RI Implementation
% Solids: 53.5 12/02/2019 2318
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/04/2019 1228	JM1		37838	5.13

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	ND		19	ug/kg	1
Benzene	71-43-2	8260B	ND		4.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		19	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.9	ug/kg	1
Styrene	100-42-5	8260B	ND		4.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.9	ug/kg	1
Toluene	108-88-3	8260B	ND		4.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.9	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company		Laboratory ID: UL02023-003	
Description: SED-55 0"-6"		Matrix: Solid	
Date Sampled: 12/02/2019 1115	Project Name: RI Implementation	% Solids: 53.5	12/02/2019 2318
Date Received: 12/02/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/04/2019 1228	JM1		37838	5.13

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	53-142
Bromofluorobenzene		86	47-138
Toluene-d8		111	68-124

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%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-003
Description: SED-55 0"-6" | Matrix: Solid
Date Sampled: 12/02/2019 1115 | Project Name: RI Implementation | % Solids: 53.5 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 2013	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		64	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		64	ug/kg	1
Acetophenone	98-86-2	8270D	ND		320	ug/kg	1
Anthracene	120-12-7	8270D	ND		64	ug/kg	1
Atrazine	1912-24-9	8270D	ND		320	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		320	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		64	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		64	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		64	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		64	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		64	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		320	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		320	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		320	ug/kg	1
Caprolactam	105-60-2	8270D	ND		320	ug/kg	1
Carbazole	86-74-8	8270D	ND		320	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		320	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		320	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		320	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		320	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		320	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		320	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		320	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		320	ug/kg	1
Chrysene	218-01-9	8270D	ND		64	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		64	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		320	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		320	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		320	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		320	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		320	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		320	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		320	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		630	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		630	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		320	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		320	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		64	ug/kg	1
Fluorene	86-73-7	8270D	ND		64	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		320	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		320	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-003
Description: SED-55 0"-6" | Matrix: Solid
Date Sampled: 12/02/2019 1115 | Project Name: RI Implementation | % Solids: 53.5 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 2013	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		320	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		64	ug/kg	1
Isophorone	78-59-1	8270D	ND		320	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		64	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		320	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		630	ug/kg	1
Naphthalene	91-20-3	8270D	ND		64	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		630	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		630	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		630	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		320	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		630	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		320	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		320	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		64	ug/kg	1
Phenol	108-95-2	8270D	ND		320	ug/kg	1
Pyrene	129-00-0	8270D	ND		64	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		320	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		320	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		44	24-137
2-Fluorophenol		32	16-136
Nitrobenzene-d5		47	12-144
Phenol-d5		43	26-148
Terphenyl-d14		56	20-127
2,4,6-Tribromophenol		43	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UL02023-004
Description: SED-55 6"-12"
Matrix: Solid
Date Sampled: 12/02/2019 1120
Project Name: RI Implementation
% Solids: 61.4 12/02/2019 2318
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/10/2019 1710	GMH		38611

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
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P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-004
Description: SED-55 6"-12" | Matrix: Solid
Date Sampled: 12/02/2019 1120 | Project Name: RI Implementation | % Solids: 61.4 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/04/2019 0515	ALR1		37799	5.08

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	200		20	ug/kg	1
Benzene	71-43-2	8260B	ND		4.9	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.9	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.9	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.9	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		20	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.9	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.9	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.9	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.9	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.9	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.9	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.9	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.9	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.9	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.9	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.9	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.9	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.9	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.9	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.9	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.9	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.9	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.9	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.9	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.9	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.9	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.9	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.9	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.8	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.9	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.9	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.9	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.8	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.9	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.9	ug/kg	1
Styrene	100-42-5	8260B	ND		4.9	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.9	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.9	ug/kg	1
Toluene	108-88-3	8260B	ND		4.9	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.9	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.9	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.9	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.9	ug/kg	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UL02023-004
Description: SED-55 6"-12"
Matrix: Solid
Date Sampled: 12/02/2019 1120
Project Name: RI Implementation
% Solids: 61.4 12/02/2019 2318
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/04/2019 0515	ALR1		37799	5.08

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.9	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.9	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.9	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.8	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	53-142
Bromofluorobenzene		93	47-138
Toluene-d8		103	68-124

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-004
Description: SED-55 6"-12" | Matrix: Solid
Date Sampled: 12/02/2019 1120 | Project Name: RI Implementation | % Solids: 61.4 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 2037	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		65	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		65	ug/kg	1
Acetophenone	98-86-2	8270D	ND		330	ug/kg	1
Anthracene	120-12-7	8270D	ND		65	ug/kg	1
Atrazine	1912-24-9	8270D	ND		330	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		330	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		65	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		65	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		65	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		65	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		65	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		330	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		330	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		330	ug/kg	1
Caprolactam	105-60-2	8270D	ND		330	ug/kg	1
Carbazole	86-74-8	8270D	ND		330	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		330	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		330	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		330	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		330	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		330	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		330	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		330	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		330	ug/kg	1
Chrysene	218-01-9	8270D	ND		65	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		65	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		330	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		330	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		330	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		330	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		330	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		330	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		330	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		640	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		640	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		330	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		330	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		65	ug/kg	1
Fluorene	86-73-7	8270D	ND		65	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		330	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		330	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	1

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-004
Description: SED-55 6"-12" | Matrix: Solid
Date Sampled: 12/02/2019 1120 | Project Name: RI Implementation | % Solids: 61.4 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 2037	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		330	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		65	ug/kg	1
Isophorone	78-59-1	8270D	ND		330	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		65	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		330	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		640	ug/kg	1
Naphthalene	91-20-3	8270D	ND		65	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		640	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		640	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		640	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		330	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		640	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		330	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		330	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		65	ug/kg	1
Phenol	108-95-2	8270D	ND		330	ug/kg	1
Pyrene	129-00-0	8270D	ND		65	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		330	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		330	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		43	24-137
2-Fluorophenol		40	16-136
Nitrobenzene-d5		48	12-144
Phenol-d5		41	26-148
Terphenyl-d14		56	20-127
2,4,6-Tribromophenol		37	27-128

LOQ = Limit of Quantitation
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Inorganic non-metals

Client: Westinghouse Electric Company		Laboratory ID: UL02023-005	
Description: SED-56 0"-6"		Matrix: Solid	
Date Sampled: 12/02/2019 1125	Project Name: RI Implementation	% Solids: 49.9	12/02/2019 2318
Date Received: 12/02/2019	Project Number: 60595649		

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/10/2019 1731	GMH		38611

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.52		0.50	mg/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-005
Description: SED-56 0"-6" | Matrix: Solid
Date Sampled: 12/02/2019 1125 | Project Name: RI Implementation | % Solids: 49.9 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/04/2019 1337	JM1		37838	4.79

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	220		21	ug/kg	1
Benzene	71-43-2	8260B	ND		5.2	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		5.2	ug/kg	1
Bromoform	75-25-2	8260B	ND		5.2	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		5.2	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		21	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		5.2	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		5.2	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		5.2	ug/kg	1
Chloroethane	75-00-3	8260B	ND		5.2	ug/kg	1
Chloroform	67-66-3	8260B	ND		5.2	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		5.2	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		5.2	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		5.2	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		5.2	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		5.2	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		5.2	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		5.2	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		5.2	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		5.2	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		5.2	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		5.2	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		5.2	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		5.2	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		5.2	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		5.2	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		5.2	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		5.2	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		5.2	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		10	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		5.2	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		5.2	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		5.2	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		10	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		5.2	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		5.2	ug/kg	1
Styrene	100-42-5	8260B	ND		5.2	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		5.2	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		5.2	ug/kg	1
Toluene	108-88-3	8260B	ND		5.2	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		5.2	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		5.2	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		5.2	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		5.2	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UL02023-005
Description: SED-56 0"-6"
Matrix: Solid
Date Sampled: 12/02/2019 1125
Project Name: RI Implementation
% Solids: 49.9 12/02/2019 2318
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/04/2019 1337	JM1		37838	4.79

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		5.2	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		5.2	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		5.2	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		10	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	53-142
Bromofluorobenzene		85	47-138
Toluene-d8		114	68-124

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-005
Description: SED-56 0"-6" | Matrix: Solid
Date Sampled: 12/02/2019 1125 | Project Name: RI Implementation | % Solids: 49.9 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 2100	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		66	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		66	ug/kg	1
Acetophenone	98-86-2	8270D	ND		330	ug/kg	1
Anthracene	120-12-7	8270D	ND		66	ug/kg	1
Atrazine	1912-24-9	8270D	ND		330	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		330	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		66	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		66	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		66	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		66	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		66	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		330	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		330	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		330	ug/kg	1
Caprolactam	105-60-2	8270D	ND		330	ug/kg	1
Carbazole	86-74-8	8270D	ND		330	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		330	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		330	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		330	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		330	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		330	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		330	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		330	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		330	ug/kg	1
Chrysene	218-01-9	8270D	ND		66	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		66	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		330	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		330	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		330	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		330	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		330	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		330	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		330	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		640	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		640	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		330	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		330	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		66	ug/kg	1
Fluorene	86-73-7	8270D	ND		66	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		330	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		330	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	1

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-005
Description: SED-56 0"-6" | Matrix: Solid
Date Sampled: 12/02/2019 1125 | Project Name: RI Implementation | % Solids: 49.9 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 2100	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		330	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		66	ug/kg	1
Isophorone	78-59-1	8270D	ND		330	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		66	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		330	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		640	ug/kg	1
Naphthalene	91-20-3	8270D	ND		66	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		640	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		640	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		640	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		330	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		640	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		330	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		330	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		66	ug/kg	1
Phenol	108-95-2	8270D	ND		330	ug/kg	1
Pyrene	129-00-0	8270D	ND		66	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		330	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		330	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		41	24-137
2-Fluorophenol		64	16-136
Nitrobenzene-d5		43	12-144
Phenol-d5		54	26-148
Terphenyl-d14		64	20-127
2,4,6-Tribromophenol		28	27-128

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UL02023-006
Description: SED-56 0"-6" DUP
Matrix: Solid
Date Sampled: 12/02/2019 1125
Project Name: RI Implementation
% Solids: 52.4 12/02/2019 2318
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/10/2019 1834	GMH		38611

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	0.74		0.50	mg/kg	1

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-006
Description: SED-56 0"-6" DUP | Matrix: Solid
Date Sampled: 12/02/2019 1125 | Project Name: RI Implementation | % Solids: 52.4 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/04/2019 1251	JM1		37838	5.18

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	23		19	ug/kg	1
Benzene	71-43-2	8260B	ND		4.8	ug/kg	1
Bromodichloromethane	75-27-4	8260B	ND		4.8	ug/kg	1
Bromoform	75-25-2	8260B	ND		4.8	ug/kg	1
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		4.8	ug/kg	1
2-Butanone (MEK)	78-93-3	8260B	ND		19	ug/kg	1
Carbon disulfide	75-15-0	8260B	ND		4.8	ug/kg	1
Carbon tetrachloride	56-23-5	8260B	ND		4.8	ug/kg	1
Chlorobenzene	108-90-7	8260B	ND		4.8	ug/kg	1
Chloroethane	75-00-3	8260B	ND		4.8	ug/kg	1
Chloroform	67-66-3	8260B	ND		4.8	ug/kg	1
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		4.8	ug/kg	1
Cyclohexane	110-82-7	8260B	ND		4.8	ug/kg	1
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		4.8	ug/kg	1
Dibromochloromethane	124-48-1	8260B	ND		4.8	ug/kg	1
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		4.8	ug/kg	1
1,2-Dichlorobenzene	95-50-1	8260B	ND		4.8	ug/kg	1
1,3-Dichlorobenzene	541-73-1	8260B	ND		4.8	ug/kg	1
1,4-Dichlorobenzene	106-46-7	8260B	ND		4.8	ug/kg	1
Dichlorodifluoromethane	75-71-8	8260B	ND		4.8	ug/kg	1
1,1-Dichloroethane	75-34-3	8260B	ND		4.8	ug/kg	1
1,2-Dichloroethane	107-06-2	8260B	ND		4.8	ug/kg	1
1,1-Dichloroethene	75-35-4	8260B	ND		4.8	ug/kg	1
cis-1,2-Dichloroethene	156-59-2	8260B	ND		4.8	ug/kg	1
trans-1,2-Dichloroethene	156-60-5	8260B	ND		4.8	ug/kg	1
1,2-Dichloropropane	78-87-5	8260B	ND		4.8	ug/kg	1
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		4.8	ug/kg	1
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		4.8	ug/kg	1
Ethylbenzene	100-41-4	8260B	ND		4.8	ug/kg	1
2-Hexanone	591-78-6	8260B	ND		9.7	ug/kg	1
Isopropylbenzene	98-82-8	8260B	ND		4.8	ug/kg	1
Methyl acetate	79-20-9	8260B	ND		4.8	ug/kg	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		4.8	ug/kg	1
4-Methyl-2-pentanone	108-10-1	8260B	ND		9.7	ug/kg	1
Methylcyclohexane	108-87-2	8260B	ND		4.8	ug/kg	1
Methylene chloride	75-09-2	8260B	ND		4.8	ug/kg	1
Styrene	100-42-5	8260B	ND		4.8	ug/kg	1
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		4.8	ug/kg	1
Tetrachloroethene	127-18-4	8260B	ND		4.8	ug/kg	1
Toluene	108-88-3	8260B	ND		4.8	ug/kg	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		4.8	ug/kg	1
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		4.8	ug/kg	1
1,1,1-Trichloroethane	71-55-6	8260B	ND		4.8	ug/kg	1
1,1,2-Trichloroethane	79-00-5	8260B	ND		4.8	ug/kg	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UL02023-006
Description: SED-56 0"-6" DUP
Matrix: Solid
Date Sampled: 12/02/2019 1125
Project Name: RI Implementation
% Solids: 52.4 12/02/2019 2318
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
1	5035	8260B	1	12/04/2019 1251	JM1		37838	5.18

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		4.8	ug/kg	1
Trichlorofluoromethane	75-69-4	8260B	ND		4.8	ug/kg	1
Vinyl chloride	75-01-4	8260B	ND		4.8	ug/kg	1
Xylenes (total)	1330-20-7	8260B	ND		9.7	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		87	53-142
Bromofluorobenzene		84	47-138
Toluene-d8		110	68-124

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
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-006
Description: SED-56 0"-6" DUP | Matrix: Solid
Date Sampled: 12/02/2019 1125 | Project Name: RI Implementation | % Solids: 52.4 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 2123	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		65	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		65	ug/kg	1
Acetophenone	98-86-2	8270D	ND		330	ug/kg	1
Anthracene	120-12-7	8270D	ND		65	ug/kg	1
Atrazine	1912-24-9	8270D	ND		330	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		330	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		65	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		65	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		65	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		65	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		65	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		330	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		330	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		330	ug/kg	1
Caprolactam	105-60-2	8270D	ND		330	ug/kg	1
Carbazole	86-74-8	8270D	ND		330	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		330	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		330	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		330	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		330	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		330	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		330	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		330	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		330	ug/kg	1
Chrysene	218-01-9	8270D	ND		65	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		65	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		330	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		330	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		330	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		330	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		330	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		330	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		330	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		640	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		640	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		330	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		330	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		65	ug/kg	1
Fluorene	86-73-7	8270D	ND		65	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		330	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		330	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	1

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-006
Description: SED-56 0"-6" DUP | Matrix: Solid
Date Sampled: 12/02/2019 1125 | Project Name: RI Implementation | % Solids: 52.4 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 2123	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		330	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		65	ug/kg	1
Isophorone	78-59-1	8270D	ND		330	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		65	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		330	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		640	ug/kg	1
Naphthalene	91-20-3	8270D	ND		65	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		640	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		640	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		640	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		330	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		640	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		330	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		330	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		65	ug/kg	1
Phenol	108-95-2	8270D	ND		330	ug/kg	1
Pyrene	129-00-0	8270D	ND		65	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		330	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		330	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		43	24-137
2-Fluorophenol		59	16-136
Nitrobenzene-d5		43	12-144
Phenol-d5		46	26-148
Terphenyl-d14		57	20-127
2,4,6-Tribromophenol		41	27-128

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
H = Out of holding time
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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UL02023-007
Description: SED-56 6"-12"
Matrix: Solid
Date Sampled: 12/02/2019 1130
Project Name: RI Implementation
% Solids: 62.6 12/02/2019 2318
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 9056A	1	12/10/2019 1855	GMH		38611

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Nitrate - N (soluble)		9056A	ND		0.50	mg/kg	1

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-007
Description: SED-56 6"-12" | Matrix: Solid
Date Sampled: 12/02/2019 1130 | Project Name: RI Implementation | % Solids: 62.6 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	12/08/2019 2151	ALR1		38275	7.08

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acetone	67-64-1	8260B	ND		14	ug/kg	2
Benzene	71-43-2	8260B	ND		3.5	ug/kg	2
Bromodichloromethane	75-27-4	8260B	ND		3.5	ug/kg	2
Bromoform	75-25-2	8260B	ND		3.5	ug/kg	2
Bromomethane (Methyl bromide)	74-83-9	8260B	ND		3.5	ug/kg	2
2-Butanone (MEK)	78-93-3	8260B	ND		14	ug/kg	2
Carbon disulfide	75-15-0	8260B	ND		3.5	ug/kg	2
Carbon tetrachloride	56-23-5	8260B	ND		3.5	ug/kg	2
Chlorobenzene	108-90-7	8260B	ND		3.5	ug/kg	2
Chloroethane	75-00-3	8260B	ND		3.5	ug/kg	2
Chloroform	67-66-3	8260B	ND		3.5	ug/kg	2
Chloromethane (Methyl chloride)	74-87-3	8260B	ND		3.5	ug/kg	2
Cyclohexane	110-82-7	8260B	ND		3.5	ug/kg	2
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	8260B	ND		3.5	ug/kg	2
Dibromochloromethane	124-48-1	8260B	ND		3.5	ug/kg	2
1,2-Dibromoethane (EDB)	106-93-4	8260B	ND		3.5	ug/kg	2
1,2-Dichlorobenzene	95-50-1	8260B	ND		3.5	ug/kg	2
1,3-Dichlorobenzene	541-73-1	8260B	ND		3.5	ug/kg	2
1,4-Dichlorobenzene	106-46-7	8260B	ND		3.5	ug/kg	2
Dichlorodifluoromethane	75-71-8	8260B	ND		3.5	ug/kg	2
1,1-Dichloroethane	75-34-3	8260B	ND		3.5	ug/kg	2
1,2-Dichloroethane	107-06-2	8260B	ND		3.5	ug/kg	2
1,1-Dichloroethene	75-35-4	8260B	ND		3.5	ug/kg	2
cis-1,2-Dichloroethene	156-59-2	8260B	ND		3.5	ug/kg	2
trans-1,2-Dichloroethene	156-60-5	8260B	ND		3.5	ug/kg	2
1,2-Dichloropropane	78-87-5	8260B	ND		3.5	ug/kg	2
cis-1,3-Dichloropropene	10061-01-5	8260B	ND		3.5	ug/kg	2
trans-1,3-Dichloropropene	10061-02-6	8260B	ND		3.5	ug/kg	2
Ethylbenzene	100-41-4	8260B	ND		3.5	ug/kg	2
2-Hexanone	591-78-6	8260B	ND		7.1	ug/kg	2
Isopropylbenzene	98-82-8	8260B	ND		3.5	ug/kg	2
Methyl acetate	79-20-9	8260B	ND		3.5	ug/kg	2
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		3.5	ug/kg	2
4-Methyl-2-pentanone	108-10-1	8260B	ND		7.1	ug/kg	2
Methylcyclohexane	108-87-2	8260B	ND		3.5	ug/kg	2
Methylene chloride	75-09-2	8260B	ND		3.5	ug/kg	2
Styrene	100-42-5	8260B	ND		3.5	ug/kg	2
1,1,2,2-Tetrachloroethane	79-34-5	8260B	ND		3.5	ug/kg	2
Tetrachloroethene	127-18-4	8260B	ND		3.5	ug/kg	2
Toluene	108-88-3	8260B	ND		3.5	ug/kg	2
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	8260B	ND		3.5	ug/kg	2
1,2,4-Trichlorobenzene	120-82-1	8260B	ND		3.5	ug/kg	2
1,1,1-Trichloroethane	71-55-6	8260B	ND		3.5	ug/kg	2
1,1,2-Trichloroethane	79-00-5	8260B	ND		3.5	ug/kg	2

LOQ = Limit of Quantitation
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UL02023-007
Description: SED-56 6"-12"
Matrix: Solid
Date Sampled: 12/02/2019 1130
Project Name: RI Implementation
% Solids: 62.6 12/02/2019 2318
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch	Sample Wt.(g)
2	5035	8260B	1	12/08/2019 2151	ALR1		38275	7.08

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Trichloroethene	79-01-6	8260B	ND		3.5	ug/kg	2
Trichlorofluoromethane	75-69-4	8260B	ND		3.5	ug/kg	2
Vinyl chloride	75-01-4	8260B	ND		3.5	ug/kg	2
Xylenes (total)	1330-20-7	8260B	ND		7.1	ug/kg	2

Surrogate	Q	Run 2 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	53-142
Bromofluorobenzene		97	47-138
Toluene-d8		107	68-124

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-007
Description: SED-56 6"-12" | Matrix: Solid
Date Sampled: 12/02/2019 1130 | Project Name: RI Implementation | % Solids: 62.6 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 2147	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Acenaphthene	83-32-9	8270D	ND		66	ug/kg	1
Acenaphthylene	208-96-8	8270D	ND		66	ug/kg	1
Acetophenone	98-86-2	8270D	ND		330	ug/kg	1
Anthracene	120-12-7	8270D	ND		66	ug/kg	1
Atrazine	1912-24-9	8270D	ND		330	ug/kg	1
Benzaldehyde	100-52-7	8270D	ND		330	ug/kg	1
Benzo(a)anthracene	56-55-3	8270D	ND		66	ug/kg	1
Benzo(a)pyrene	50-32-8	8270D	ND		66	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270D	ND		66	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270D	ND		66	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270D	ND		66	ug/kg	1
1,1'-Biphenyl	92-52-4	8270D	ND		330	ug/kg	1
4-Bromophenyl phenyl ether	101-55-3	8270D	ND		330	ug/kg	1
Butyl benzyl phthalate	85-68-7	8270D	ND		330	ug/kg	1
Caprolactam	105-60-2	8270D	ND		330	ug/kg	1
Carbazole	86-74-8	8270D	ND		330	ug/kg	1
bis (2-Chloro-1-methylethyl) ether	108-60-1	8270D	ND		330	ug/kg	1
4-Chloro-3-methyl phenol	59-50-7	8270D	ND		330	ug/kg	1
4-Chloroaniline	106-47-8	8270D	ND		330	ug/kg	1
bis(2-Chloroethoxy)methane	111-91-1	8270D	ND		330	ug/kg	1
bis(2-Chloroethyl)ether	111-44-4	8270D	ND		330	ug/kg	1
2-Chloronaphthalene	91-58-7	8270D	ND		330	ug/kg	1
2-Chlorophenol	95-57-8	8270D	ND		330	ug/kg	1
4-Chlorophenyl phenyl ether	7005-72-3	8270D	ND		330	ug/kg	1
Chrysene	218-01-9	8270D	ND		66	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270D	ND		66	ug/kg	1
Dibenzofuran	132-64-9	8270D	ND		330	ug/kg	1
3,3'-Dichlorobenzidine	91-94-1	8270D	ND		330	ug/kg	1
2,4-Dichlorophenol	120-83-2	8270D	ND		330	ug/kg	1
Diethylphthalate	84-66-2	8270D	ND		330	ug/kg	1
Dimethyl phthalate	131-11-3	8270D	ND		330	ug/kg	1
2,4-Dimethylphenol	105-67-9	8270D	ND		330	ug/kg	1
Di-n-butyl phthalate	84-74-2	8270D	ND		330	ug/kg	1
4,6-Dinitro-2-methylphenol	534-52-1	8270D	ND		1600	ug/kg	1
2,4-Dinitrophenol	51-28-5	8270D	ND		1600	ug/kg	1
2,4-Dinitrotoluene	121-14-2	8270D	ND		640	ug/kg	1
2,6-Dinitrotoluene	606-20-2	8270D	ND		640	ug/kg	1
Di-n-octylphthalate	117-84-0	8270D	ND		330	ug/kg	1
bis(2-Ethylhexyl)phthalate	117-81-7	8270D	ND		330	ug/kg	1
Fluoranthene	206-44-0	8270D	ND		66	ug/kg	1
Fluorene	86-73-7	8270D	ND		66	ug/kg	1
Hexachlorobenzene	118-74-1	8270D	ND		330	ug/kg	1
Hexachlorobutadiene	87-68-3	8270D	ND		330	ug/kg	1
Hexachlorocyclopentadiene	77-47-4	8270D	ND		1600	ug/kg	1

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-007
Description: SED-56 6"-12" | Matrix: Solid
Date Sampled: 12/02/2019 1130 | Project Name: RI Implementation | % Solids: 62.6 12/02/2019 2318
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3546	8270D	5	12/11/2019 2147	JCG	12/05/2019 1305	37989

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	Units	Run
Hexachloroethane	67-72-1	8270D	ND		330	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270D	ND		66	ug/kg	1
Isophorone	78-59-1	8270D	ND		330	ug/kg	1
2-Methylnaphthalene	91-57-6	8270D	ND		66	ug/kg	1
2-Methylphenol	95-48-7	8270D	ND		330	ug/kg	1
3+4-Methylphenol	106-44-5	8270D	ND		640	ug/kg	1
Naphthalene	91-20-3	8270D	ND		66	ug/kg	1
2-Nitroaniline	88-74-4	8270D	ND		640	ug/kg	1
3-Nitroaniline	99-09-2	8270D	ND		640	ug/kg	1
4-Nitroaniline	100-01-6	8270D	ND		640	ug/kg	1
Nitrobenzene	98-95-3	8270D	ND		330	ug/kg	1
2-Nitrophenol	88-75-5	8270D	ND		640	ug/kg	1
4-Nitrophenol	100-02-7	8270D	ND		1600	ug/kg	1
N-Nitrosodi-n-propylamine	621-64-7	8270D	ND		330	ug/kg	1
N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	8270D	ND		330	ug/kg	1
Pentachlorophenol	87-86-5	8270D	ND		1600	ug/kg	1
Phenanthrene	85-01-8	8270D	ND		66	ug/kg	1
Phenol	108-95-2	8270D	ND		330	ug/kg	1
Pyrene	129-00-0	8270D	ND		66	ug/kg	1
2,4,5-Trichlorophenol	95-95-4	8270D	ND		330	ug/kg	1
2,4,6-Trichlorophenol	88-06-2	8270D	ND		330	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		39	24-137
2-Fluorophenol		50	16-136
Nitrobenzene-d5		39	12-144
Phenol-d5		52	26-148
Terphenyl-d14		55	20-127
2,4,6-Tribromophenol		31	27-128

LOQ = Limit of Quantitation
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Inorganic non-metals

Client: Westinghouse Electric Company
Laboratory ID: UL02023-008
Description: EB-01-120219
Matrix: Aqueous
Date Sampled: 12/02/2019 1235
Project Name: RI Implementation
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Nitrate - N) 353.2	1	12/03/2019 1129	AMR		37728

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

LOQ = Limit of Quantitation
ND = Not detected at or above the LOQ
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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UL02023-008
Description: EB-01-120219
Matrix: Aqueous
Date Sampled: 12/02/2019 1235
Project Name: RI Implementation
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/03/2019 1316	TML		37730

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
1,1,2,2-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
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%

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UL02023-008
Description: EB-01-120219
Matrix: Aqueous
Date Sampled: 12/02/2019 1235
Project Name: RI Implementation
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/03/2019 1316	TML		37730

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		97	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		103	70-130

LOQ = Limit of Quantitation
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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UL02023-008
Description: EB-01-120219
Matrix: Aqueous
Date Sampled: 12/02/2019 1235
Project Name: RI Implementation
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/08/2019 1716	SCD	12/05/2019 1618	37996

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

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Semivolatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company | Laboratory ID: UL02023-008
Description: EB-01-120219 | Matrix: Aqueous
Date Sampled: 12/02/2019 1235 | Project Name: RI Implementation
Date Received: 12/02/2019 | Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270D	1	12/08/2019 1716	SCD	12/05/2019 1618	37996

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		81	37-129
2-Fluorophenol		57	24-127
Nitrobenzene-d5		89	38-127
Phenol-d5		70	28-128
Terphenyl-d14		104	10-148
2,4,6-Tribromophenol		79	35-144

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UL02023-009
Description: TB-01-120219
Matrix: Aqueous
Date Sampled: 12/02/2019
Project Name: RI Implementation
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/03/2019 1339	TML		37730

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
1,1,2,2-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

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Volatile Organic Compounds by GC/MS

Client: Westinghouse Electric Company
Laboratory ID: UL02023-009
Description: TB-01-120219
Matrix: Aqueous
Date Sampled: 12/02/2019
Project Name: RI Implementation
Date Received: 12/02/2019
Project Number: 60595649

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	1	12/03/2019 1339	TML		37730

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		96	70-130
Bromofluorobenzene		99	70-130
Toluene-d8		101	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
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W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
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QC Summary

Inorganic non-metals - MB

Sample ID: UQ37728-001
Batch: 37728
Analytical Method: 353.2

Matrix: Aqueous

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N	ND		1	0.020	mg/L	12/03/2019 1050

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - LCS

Sample ID: UQ37728-002
Batch: 37728
Analytical Method: 353.2

Matrix: Aqueous

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N	0.80	0.76		1	96	90-110	12/03/2019 1052

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - MS

Sample ID: UL02023-008MS
Batch: 37728
Analytical Method: 353.2
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N	ND	0.80	0.83		1	104	90-110	12/03/2019 1131

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - MSD

Sample ID: UL02023-008MD
Batch: 37728
Analytical Method: 353.2
Matrix: Aqueous

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N	ND	0.80	0.78		1	98	5.7	90-110	20	12/03/2019 1136

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - MB

Sample ID: UQ38611-001
Batch: 38611
Analytical Method: 9056A

Matrix: Solid

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Nitrate - N (soluble)	ND		1	0.50	mg/kg	12/10/2019 1437

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - LCS

Sample ID: UQ38611-002
Batch: 38611
Analytical Method: 9056A

Matrix: Solid

Parameter	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	0.80	0.81		1	101	80-120	12/10/2019 1501

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - MS

Sample ID: UL02023-003MS
Batch: 38611
Analytical Method: 9056A
Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Nitrate - N (soluble)	ND	8.0	8.0		1	100	80-120	12/10/2019 1627

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Inorganic non-metals - MSD

Sample ID: UL02023-003MD
Batch: 38611
Analytical Method: 9056A
Matrix: Solid

Parameter	Sample Amount (mg/kg)	Spike Amount (mg/kg)	Result (mg/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Nitrate - N (soluble)	ND	8.0	7.5		1	94	6.0	80-120	20	12/10/2019 1648

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37730-001
Batch: 37730
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/L	12/03/2019 1035
Benzene	ND		1	1.0	ug/L	12/03/2019 1035
Bromodichloromethane	ND		1	1.0	ug/L	12/03/2019 1035
Bromoform	ND		1	1.0	ug/L	12/03/2019 1035
Bromomethane (Methyl bromide)	ND		1	2.0	ug/L	12/03/2019 1035
2-Butanone (MEK)	ND		1	10	ug/L	12/03/2019 1035
Carbon disulfide	ND		1	1.0	ug/L	12/03/2019 1035
Carbon tetrachloride	ND		1	1.0	ug/L	12/03/2019 1035
Chlorobenzene	ND		1	1.0	ug/L	12/03/2019 1035
Chloroethane	ND		1	2.0	ug/L	12/03/2019 1035
Chloroform	ND		1	1.0	ug/L	12/03/2019 1035
Chloromethane (Methyl chloride)	ND		1	1.0	ug/L	12/03/2019 1035
Cyclohexane	ND		1	1.0	ug/L	12/03/2019 1035
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	1.0	ug/L	12/03/2019 1035
Dibromochloromethane	ND		1	1.0	ug/L	12/03/2019 1035
1,2-Dibromoethane (EDB)	ND		1	1.0	ug/L	12/03/2019 1035
1,2-Dichlorobenzene	ND		1	1.0	ug/L	12/03/2019 1035
1,3-Dichlorobenzene	ND		1	1.0	ug/L	12/03/2019 1035
1,4-Dichlorobenzene	ND		1	1.0	ug/L	12/03/2019 1035
Dichlorodifluoromethane	ND		1	2.0	ug/L	12/03/2019 1035
1,1-Dichloroethane	ND		1	1.0	ug/L	12/03/2019 1035
1,2-Dichloroethane	ND		1	1.0	ug/L	12/03/2019 1035
1,1-Dichloroethene	ND		1	1.0	ug/L	12/03/2019 1035
cis-1,2-Dichloroethene	ND		1	1.0	ug/L	12/03/2019 1035
trans-1,2-Dichloroethene	ND		1	1.0	ug/L	12/03/2019 1035
1,2-Dichloropropane	ND		1	1.0	ug/L	12/03/2019 1035
cis-1,3-Dichloropropene	ND		1	1.0	ug/L	12/03/2019 1035
trans-1,3-Dichloropropene	ND		1	1.0	ug/L	12/03/2019 1035
Ethylbenzene	ND		1	1.0	ug/L	12/03/2019 1035
2-Hexanone	ND		1	10	ug/L	12/03/2019 1035
Isopropylbenzene	ND		1	1.0	ug/L	12/03/2019 1035
Methyl acetate	ND		1	1.0	ug/L	12/03/2019 1035
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	ug/L	12/03/2019 1035
4-Methyl-2-pentanone	ND		1	10	ug/L	12/03/2019 1035
Methylcyclohexane	ND		1	5.0	ug/L	12/03/2019 1035
Methylene chloride	ND		1	1.0	ug/L	12/03/2019 1035
Styrene	ND		1	1.0	ug/L	12/03/2019 1035
1,1,2,2-Tetrachloroethane	ND		1	1.0	ug/L	12/03/2019 1035
Tetrachloroethene	ND		1	1.0	ug/L	12/03/2019 1035
Toluene	ND		1	1.0	ug/L	12/03/2019 1035
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	1.0	ug/L	12/03/2019 1035
1,2,4-Trichlorobenzene	ND		1	1.0	ug/L	12/03/2019 1035
1,1,1-Trichloroethane	ND		1	1.0	ug/L	12/03/2019 1035
1,1,2-Trichloroethane	ND		1	1.0	ug/L	12/03/2019 1035

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37730-001
Batch: 37730
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	1.0	ug/L	12/03/2019 1035
Trichlorofluoromethane	ND		1	1.0	ug/L	12/03/2019 1035
Vinyl chloride	ND		1	1.0	ug/L	12/03/2019 1035
Xylenes (total)	ND		1	1.0	ug/L	12/03/2019 1035

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		101	70-130
Toluene-d8		100	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37730-002
Batch: 37730
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	98		1	98	60-140	12/03/2019 0947
Benzene	50	50		1	100	70-130	12/03/2019 0947
Bromodichloromethane	50	52		1	103	70-130	12/03/2019 0947
Bromoform	50	48		1	96	70-130	12/03/2019 0947
Bromomethane (Methyl bromide)	50	41		1	81	70-130	12/03/2019 0947
2-Butanone (MEK)	100	96		1	96	70-130	12/03/2019 0947
Carbon disulfide	50	43		1	86	70-130	12/03/2019 0947
Carbon tetrachloride	50	49		1	99	70-130	12/03/2019 0947
Chlorobenzene	50	50		1	99	70-130	12/03/2019 0947
Chloroethane	50	45		1	89	70-130	12/03/2019 0947
Chloroform	50	50		1	100	70-130	12/03/2019 0947
Chloromethane (Methyl chloride)	50	39		1	79	60-140	12/03/2019 0947
Cyclohexane	50	50		1	99	70-130	12/03/2019 0947
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	96	70-130	12/03/2019 0947
Dibromochloromethane	50	52		1	104	70-130	12/03/2019 0947
1,2-Dibromoethane (EDB)	50	50		1	99	70-130	12/03/2019 0947
1,2-Dichlorobenzene	50	49		1	98	70-130	12/03/2019 0947
1,3-Dichlorobenzene	50	49		1	99	70-130	12/03/2019 0947
1,4-Dichlorobenzene	50	49		1	99	70-130	12/03/2019 0947
Dichlorodifluoromethane	50	42		1	84	60-140	12/03/2019 0947
1,1-Dichloroethane	50	49		1	99	70-130	12/03/2019 0947
1,2-Dichloroethane	50	49		1	97	70-130	12/03/2019 0947
1,1-Dichloroethene	50	52		1	103	70-130	12/03/2019 0947
cis-1,2-Dichloroethene	50	49		1	97	70-130	12/03/2019 0947
trans-1,2-Dichloroethene	50	53		1	106	70-130	12/03/2019 0947
1,2-Dichloropropane	50	50		1	101	70-130	12/03/2019 0947
cis-1,3-Dichloropropene	50	55		1	110	70-130	12/03/2019 0947
trans-1,3-Dichloropropene	50	55		1	109	70-130	12/03/2019 0947
Ethylbenzene	50	50		1	101	70-130	12/03/2019 0947
2-Hexanone	100	95		1	95	70-130	12/03/2019 0947
Isopropylbenzene	50	51		1	102	70-130	12/03/2019 0947
Methyl acetate	50	49		1	99	70-130	12/03/2019 0947
Methyl tertiary butyl ether (MTBE)	50	48		1	95	70-130	12/03/2019 0947
4-Methyl-2-pentanone	100	96		1	96	70-130	12/03/2019 0947
Methylcyclohexane	50	50		1	101	70-130	12/03/2019 0947
Methylene chloride	50	42		1	84	70-130	12/03/2019 0947
Styrene	50	52		1	104	70-130	12/03/2019 0947
1,1,2,2-Tetrachloroethane	50	48		1	95	70-130	12/03/2019 0947
Tetrachloroethene	50	50		1	99	70-130	12/03/2019 0947
Toluene	50	50		1	100	70-130	12/03/2019 0947
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	47		1	94	70-130	12/03/2019 0947
1,2,4-Trichlorobenzene	50	49		1	98	70-130	12/03/2019 0947
1,1,1-Trichloroethane	50	49		1	99	70-130	12/03/2019 0947
1,1,2-Trichloroethane	50	48		1	96	70-130	12/03/2019 0947

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37730-002
Batch: 37730
Analytical Method: 8260B

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	50		1	100	70-130	12/03/2019 0947
Trichlorofluoromethane	50	42		1	84	70-130	12/03/2019 0947
Vinyl chloride	50	39		1	78	70-130	12/03/2019 0947
Xylenes (total)	100	100		1	102	70-130	12/03/2019 0947

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		96	70-130
Bromofluorobenzene		103	70-130
Toluene-d8		100	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37799-001
Batch: 37799
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/kg	12/03/2019 2342
Benzene	ND		1	5.0	ug/kg	12/03/2019 2342
Bromodichloromethane	ND		1	5.0	ug/kg	12/03/2019 2342
Bromoform	ND		1	5.0	ug/kg	12/03/2019 2342
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	12/03/2019 2342
2-Butanone (MEK)	ND		1	20	ug/kg	12/03/2019 2342
Carbon disulfide	ND		1	5.0	ug/kg	12/03/2019 2342
Carbon tetrachloride	ND		1	5.0	ug/kg	12/03/2019 2342
Chlorobenzene	ND		1	5.0	ug/kg	12/03/2019 2342
Chloroethane	ND		1	5.0	ug/kg	12/03/2019 2342
Chloroform	ND		1	5.0	ug/kg	12/03/2019 2342
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	12/03/2019 2342
Cyclohexane	ND		1	5.0	ug/kg	12/03/2019 2342
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	12/03/2019 2342
Dibromochloromethane	ND		1	5.0	ug/kg	12/03/2019 2342
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	12/03/2019 2342
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	12/03/2019 2342
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	12/03/2019 2342
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	12/03/2019 2342
Dichlorodifluoromethane	ND		1	5.0	ug/kg	12/03/2019 2342
1,1-Dichloroethane	ND		1	5.0	ug/kg	12/03/2019 2342
1,2-Dichloroethane	ND		1	5.0	ug/kg	12/03/2019 2342
1,1-Dichloroethene	ND		1	5.0	ug/kg	12/03/2019 2342
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/03/2019 2342
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/03/2019 2342
1,2-Dichloropropane	ND		1	5.0	ug/kg	12/03/2019 2342
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/03/2019 2342
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/03/2019 2342
Ethylbenzene	ND		1	5.0	ug/kg	12/03/2019 2342
2-Hexanone	ND		1	10	ug/kg	12/03/2019 2342
Isopropylbenzene	ND		1	5.0	ug/kg	12/03/2019 2342
Methyl acetate	ND		1	5.0	ug/kg	12/03/2019 2342
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	12/03/2019 2342
4-Methyl-2-pentanone	ND		1	10	ug/kg	12/03/2019 2342
Methylcyclohexane	ND		1	5.0	ug/kg	12/03/2019 2342
Methylene chloride	ND		1	5.0	ug/kg	12/03/2019 2342
Styrene	ND		1	5.0	ug/kg	12/03/2019 2342
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	12/03/2019 2342
Tetrachloroethene	ND		1	5.0	ug/kg	12/03/2019 2342
Toluene	ND		1	5.0	ug/kg	12/03/2019 2342
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	12/03/2019 2342
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	12/03/2019 2342
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	12/03/2019 2342
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	12/03/2019 2342

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37799-001
Batch: 37799
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	12/03/2019 2342
Trichlorofluoromethane	ND		1	5.0	ug/kg	12/03/2019 2342
Vinyl chloride	ND		1	5.0	ug/kg	12/03/2019 2342
Xylenes (total)	ND		1	10	ug/kg	12/03/2019 2342

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		92	53-142
Bromofluorobenzene		98	47-138
Toluene-d8		101	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37799-002
Batch: 37799
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	110		1	107	60-140	12/03/2019 2319
Benzene	50	47		1	94	70-130	12/03/2019 2319
Bromodichloromethane	50	47		1	95	70-130	12/03/2019 2319
Bromoform	50	48		1	95	70-130	12/03/2019 2319
Bromomethane (Methyl bromide)	50	45		1	90	70-130	12/03/2019 2319
2-Butanone (MEK)	100	95		1	95	60-140	12/03/2019 2319
Carbon disulfide	50	47		1	94	70-130	12/03/2019 2319
Carbon tetrachloride	50	49		1	97	70-130	12/03/2019 2319
Chlorobenzene	50	48		1	96	70-130	12/03/2019 2319
Chloroethane	50	48		1	97	70-130	12/03/2019 2319
Chloroform	50	46		1	92	70-130	12/03/2019 2319
Chloromethane (Methyl chloride)	50	44		1	87	60-140	12/03/2019 2319
Cyclohexane	50	52		1	103	70-130	12/03/2019 2319
1,2-Dibromo-3-chloropropane (DBCP)	50	43		1	86	70-130	12/03/2019 2319
Dibromochloromethane	50	48		1	96	70-130	12/03/2019 2319
1,2-Dibromoethane (EDB)	50	47		1	94	70-130	12/03/2019 2319
1,2-Dichlorobenzene	50	48		1	96	70-130	12/03/2019 2319
1,3-Dichlorobenzene	50	49		1	99	70-130	12/03/2019 2319
1,4-Dichlorobenzene	50	49		1	98	70-130	12/03/2019 2319
Dichlorodifluoromethane	50	47		1	95	60-140	12/03/2019 2319
1,1-Dichloroethane	50	46		1	92	70-130	12/03/2019 2319
1,2-Dichloroethane	50	46		1	92	70-130	12/03/2019 2319
1,1-Dichloroethene	50	56		1	111	70-130	12/03/2019 2319
cis-1,2-Dichloroethene	50	46		1	91	70-130	12/03/2019 2319
trans-1,2-Dichloroethene	50	50		1	101	70-130	12/03/2019 2319
1,2-Dichloropropane	50	47		1	94	70-130	12/03/2019 2319
cis-1,3-Dichloropropene	50	50		1	100	70-130	12/03/2019 2319
trans-1,3-Dichloropropene	50	51		1	102	70-130	12/03/2019 2319
Ethylbenzene	50	49		1	98	70-130	12/03/2019 2319
2-Hexanone	100	110		1	107	70-130	12/03/2019 2319
Isopropylbenzene	50	48		1	95	70-130	12/03/2019 2319
Methyl acetate	50	43		1	85	70-130	12/03/2019 2319
Methyl tertiary butyl ether (MTBE)	50	47		1	94	70-130	12/03/2019 2319
4-Methyl-2-pentanone	100	87		1	87	70-130	12/03/2019 2319
Methylcyclohexane	50	55		1	109	70-130	12/03/2019 2319
Methylene chloride	50	43		1	86	70-130	12/03/2019 2319
Styrene	50	49		1	97	70-130	12/03/2019 2319
1,1,2,2-Tetrachloroethane	50	46		1	91	70-130	12/03/2019 2319
Tetrachloroethene	50	50		1	100	70-130	12/03/2019 2319
Toluene	50	47		1	94	70-130	12/03/2019 2319
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	51		1	102	70-130	12/03/2019 2319
1,2,4-Trichlorobenzene	50	47		1	95	70-130	12/03/2019 2319
1,1,1-Trichloroethane	50	46		1	92	70-130	12/03/2019 2319
1,1,2-Trichloroethane	50	47		1	94	70-130	12/03/2019 2319

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37799-002
Batch: 37799
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	47		1	95	70-130	12/03/2019 2319
Trichlorofluoromethane	50	50		1	101	70-130	12/03/2019 2319
Vinyl chloride	50	43		1	87	70-130	12/03/2019 2319
Xylenes (total)	100	98		1	98	70-130	12/03/2019 2319

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		89	53-142
Bromofluorobenzene		99	47-138
Toluene-d8		104	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37838-001
Batch: 37838
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/kg	12/04/2019 1015
Benzene	ND		1	5.0	ug/kg	12/04/2019 1015
Bromodichloromethane	ND		1	5.0	ug/kg	12/04/2019 1015
Bromoform	ND		1	5.0	ug/kg	12/04/2019 1015
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	12/04/2019 1015
2-Butanone (MEK)	ND		1	20	ug/kg	12/04/2019 1015
Carbon disulfide	ND		1	5.0	ug/kg	12/04/2019 1015
Carbon tetrachloride	ND		1	5.0	ug/kg	12/04/2019 1015
Chlorobenzene	ND		1	5.0	ug/kg	12/04/2019 1015
Chloroethane	ND		1	5.0	ug/kg	12/04/2019 1015
Chloroform	ND		1	5.0	ug/kg	12/04/2019 1015
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	12/04/2019 1015
Cyclohexane	ND		1	5.0	ug/kg	12/04/2019 1015
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	12/04/2019 1015
Dibromochloromethane	ND		1	5.0	ug/kg	12/04/2019 1015
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	12/04/2019 1015
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	12/04/2019 1015
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	12/04/2019 1015
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	12/04/2019 1015
Dichlorodifluoromethane	ND		1	5.0	ug/kg	12/04/2019 1015
1,1-Dichloroethane	ND		1	5.0	ug/kg	12/04/2019 1015
1,2-Dichloroethane	ND		1	5.0	ug/kg	12/04/2019 1015
1,1-Dichloroethene	ND		1	5.0	ug/kg	12/04/2019 1015
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/04/2019 1015
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/04/2019 1015
1,2-Dichloropropane	ND		1	5.0	ug/kg	12/04/2019 1015
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/04/2019 1015
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/04/2019 1015
Ethylbenzene	ND		1	5.0	ug/kg	12/04/2019 1015
2-Hexanone	ND		1	10	ug/kg	12/04/2019 1015
Isopropylbenzene	ND		1	5.0	ug/kg	12/04/2019 1015
Methyl acetate	ND		1	5.0	ug/kg	12/04/2019 1015
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	12/04/2019 1015
4-Methyl-2-pentanone	ND		1	10	ug/kg	12/04/2019 1015
Methylcyclohexane	ND		1	5.0	ug/kg	12/04/2019 1015
Methylene chloride	ND		1	5.0	ug/kg	12/04/2019 1015
Styrene	ND		1	5.0	ug/kg	12/04/2019 1015
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	12/04/2019 1015
Tetrachloroethene	ND		1	5.0	ug/kg	12/04/2019 1015
Toluene	ND		1	5.0	ug/kg	12/04/2019 1015
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	12/04/2019 1015
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	12/04/2019 1015
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	12/04/2019 1015
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	12/04/2019 1015

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ37838-001
Batch: 37838
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	12/04/2019 1015
Trichlorofluoromethane	ND		1	5.0	ug/kg	12/04/2019 1015
Vinyl chloride	ND		1	5.0	ug/kg	12/04/2019 1015
Xylenes (total)	ND		1	10	ug/kg	12/04/2019 1015

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		91	53-142
Bromofluorobenzene		101	47-138
Toluene-d8		99	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37838-002
Batch: 37838
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	100		1	100	60-140	12/04/2019 0952
Benzene	50	47		1	94	70-130	12/04/2019 0952
Bromodichloromethane	50	48		1	97	70-130	12/04/2019 0952
Bromoform	50	49		1	99	70-130	12/04/2019 0952
Bromomethane (Methyl bromide)	50	48		1	97	70-130	12/04/2019 0952
2-Butanone (MEK)	100	94		1	94	60-140	12/04/2019 0952
Carbon disulfide	50	46		1	92	70-130	12/04/2019 0952
Carbon tetrachloride	50	47		1	93	70-130	12/04/2019 0952
Chlorobenzene	50	48		1	95	70-130	12/04/2019 0952
Chloroethane	50	52		1	104	70-130	12/04/2019 0952
Chloroform	50	47		1	94	70-130	12/04/2019 0952
Chloromethane (Methyl chloride)	50	48		1	97	60-140	12/04/2019 0952
Cyclohexane	50	47		1	94	70-130	12/04/2019 0952
1,2-Dibromo-3-chloropropane (DBCP)	50	46		1	92	70-130	12/04/2019 0952
Dibromochloromethane	50	49		1	97	70-130	12/04/2019 0952
1,2-Dibromoethane (EDB)	50	47		1	95	70-130	12/04/2019 0952
1,2-Dichlorobenzene	50	49		1	98	70-130	12/04/2019 0952
1,3-Dichlorobenzene	50	48		1	97	70-130	12/04/2019 0952
1,4-Dichlorobenzene	50	49		1	98	70-130	12/04/2019 0952
Dichlorodifluoromethane	50	50		1	99	60-140	12/04/2019 0952
1,1-Dichloroethane	50	47		1	93	70-130	12/04/2019 0952
1,2-Dichloroethane	50	46		1	92	70-130	12/04/2019 0952
1,1-Dichloroethene	50	53		1	106	70-130	12/04/2019 0952
cis-1,2-Dichloroethene	50	47		1	95	70-130	12/04/2019 0952
trans-1,2-Dichloroethene	50	50		1	100	70-130	12/04/2019 0952
1,2-Dichloropropane	50	48		1	97	70-130	12/04/2019 0952
cis-1,3-Dichloropropene	50	51		1	102	70-130	12/04/2019 0952
trans-1,3-Dichloropropene	50	50		1	101	70-130	12/04/2019 0952
Ethylbenzene	50	48		1	95	70-130	12/04/2019 0952
2-Hexanone	100	100		1	102	70-130	12/04/2019 0952
Isopropylbenzene	50	47		1	93	70-130	12/04/2019 0952
Methyl acetate	50	47		1	94	70-130	12/04/2019 0952
Methyl tertiary butyl ether (MTBE)	50	46		1	91	70-130	12/04/2019 0952
4-Methyl-2-pentanone	100	93		1	93	70-130	12/04/2019 0952
Methylcyclohexane	50	47		1	94	70-130	12/04/2019 0952
Methylene chloride	50	44		1	88	70-130	12/04/2019 0952
Styrene	50	48		1	96	70-130	12/04/2019 0952
1,1,2,2-Tetrachloroethane	50	47		1	93	70-130	12/04/2019 0952
Tetrachloroethene	50	48		1	95	70-130	12/04/2019 0952
Toluene	50	45		1	90	70-130	12/04/2019 0952
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	46		1	92	70-130	12/04/2019 0952
1,2,4-Trichlorobenzene	50	50		1	100	70-130	12/04/2019 0952
1,1,1-Trichloroethane	50	46		1	93	70-130	12/04/2019 0952
1,1,2-Trichloroethane	50	48		1	95	70-130	12/04/2019 0952

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37838-002
Batch: 37838
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	46		1	93	70-130	12/04/2019 0952
Trichlorofluoromethane	50	48		1	96	70-130	12/04/2019 0952
Vinyl chloride	50	45		1	90	70-130	12/04/2019 0952
Xylenes (total)	100	96		1	96	70-130	12/04/2019 0952

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		80	53-142
Bromofluorobenzene		84	47-138
Toluene-d8		82	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: UL02023-003MS
Batch: 37838
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	ND	110	320	N	1	287	70-130	12/04/2019 1745
Benzene	ND	55	57		1	103	70-130	12/04/2019 1745
Bromodichloromethane	ND	55	55		1	100	70-130	12/04/2019 1745
Bromoform	ND	55	56		1	101	70-130	12/04/2019 1745
Bromomethane (Methyl bromide)	ND	55	44		1	80	70-130	12/04/2019 1745
2-Butanone (MEK)	ND	110	68	N	1	62	70-130	12/04/2019 1745
Carbon disulfide	ND	55	59		1	108	70-130	12/04/2019 1745
Carbon tetrachloride	ND	55	60		1	109	70-130	12/04/2019 1745
Chlorobenzene	ND	55	59		1	108	70-130	12/04/2019 1745
Chloroethane	ND	55	50		1	90	70-130	12/04/2019 1745
Chloroform	ND	55	56		1	102	70-130	12/04/2019 1745
Chloromethane (Methyl chloride)	ND	55	44		1	80	60-140	12/04/2019 1745
Cyclohexane	ND	55	65		1	119	70-130	12/04/2019 1745
1,2-Dibromo-3-chloropropane (DBCP)	ND	55	67		1	121	70-130	12/04/2019 1745
Dibromochloromethane	ND	55	59		1	107	70-130	12/04/2019 1745
1,2-Dibromoethane (EDB)	ND	55	58		1	105	70-130	12/04/2019 1745
1,2-Dichlorobenzene	ND	55	63		1	114	70-130	12/04/2019 1745
1,3-Dichlorobenzene	ND	55	68		1	124	70-130	12/04/2019 1745
1,4-Dichlorobenzene	ND	55	68		1	124	70-130	12/04/2019 1745
Dichlorodifluoromethane	ND	55	49		1	90	60-140	12/04/2019 1745
1,1-Dichloroethane	ND	55	57		1	104	70-130	12/04/2019 1745
1,2-Dichloroethane	ND	55	53		1	96	70-130	12/04/2019 1745
1,1-Dichloroethene	ND	55	70		1	128	70-130	12/04/2019 1745
cis-1,2-Dichloroethene	ND	55	56		1	102	70-130	12/04/2019 1745
trans-1,2-Dichloroethene	ND	55	64		1	117	70-130	12/04/2019 1745
1,2-Dichloropropane	ND	55	56		1	101	70-130	12/04/2019 1745
cis-1,3-Dichloropropene	ND	55	56		1	102	70-130	12/04/2019 1745
trans-1,3-Dichloropropene	ND	55	62		1	112	70-130	12/04/2019 1745
Ethylbenzene	ND	55	62		1	113	70-130	12/04/2019 1745
2-Hexanone	ND	110	92		1	84	70-130	12/04/2019 1745
Isopropylbenzene	ND	55	59		1	107	70-130	12/04/2019 1745
Methyl acetate	ND	55	110	N	1	209	70-130	12/04/2019 1745
Methyl tertiary butyl ether (MTBE)	ND	55	52		1	94	70-130	12/04/2019 1745
4-Methyl-2-pentanone	ND	110	100		1	93	70-130	12/04/2019 1745
Methylcyclohexane	ND	55	65		1	118	70-130	12/04/2019 1745
Methylene chloride	ND	55	55		1	100	70-130	12/04/2019 1745
Styrene	ND	55	57		1	104	70-130	12/04/2019 1745
1,1,2,2-Tetrachloroethane	ND	55	71		1	130	70-130	12/04/2019 1745
Tetrachloroethene	ND	55	66		1	120	70-130	12/04/2019 1745
Toluene	ND	55	61		1	110	70-130	12/04/2019 1745
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	55	65		1	119	70-130	12/04/2019 1745
1,2,4-Trichlorobenzene	ND	55	43		1	79	70-130	12/04/2019 1745
1,1,1-Trichloroethane	ND	55	58		1	105	70-130	12/04/2019 1745
1,1,2-Trichloroethane	ND	55	58		1	105	70-130	12/04/2019 1745

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MS

Sample ID: UL02023-003MS
Batch: 37838
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	ND	55	57		1	104	70-130	12/04/2019 1745
Trichlorofluoromethane	ND	55	51		1	93	70-130	12/04/2019 1745
Vinyl chloride	ND	55	44		1	79	70-130	12/04/2019 1745
Xylenes (total)	ND	110	120		1	111	70-130	12/04/2019 1745

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		87	53-142
Bromofluorobenzene		90	47-138
Toluene-d8		110	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MSD

Sample ID: UL02023-003MD
Batch: 37838
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	ND	100	290	N	1	278	10	70-130	20	12/04/2019 1808
Benzene	ND	51	50		1	98	12	70-130	20	12/04/2019 1808
Bromodichloromethane	ND	51	49		1	96	10	70-130	20	12/04/2019 1808
Bromoform	ND	51	50		1	98	10	70-130	20	12/04/2019 1808
Bromomethane (Methyl bromide)	ND	51	39		1	76	11	70-130	20	12/04/2019 1808
2-Butanone (MEK)	ND	100	63	N	1	61	8.8	70-130	20	12/04/2019 1808
Carbon disulfide	ND	51	51		1	100	15	70-130	20	12/04/2019 1808
Carbon tetrachloride	ND	51	53		1	102	13	70-130	20	12/04/2019 1808
Chlorobenzene	ND	51	51		1	99	15	70-130	20	12/04/2019 1808
Chloroethane	ND	51	43		1	83	15	70-130	20	12/04/2019 1808
Chloroform	ND	51	50		1	97	12	70-130	20	12/04/2019 1808
Chloromethane (Methyl chloride)	ND	51	37		1	73	16	60-140	20	12/04/2019 1808
Cyclohexane	ND	51	56		1	110	15	70-130	20	12/04/2019 1808
1,2-Dibromo-3-chloropropane (DBCP)	ND	51	59		1	115	12	70-130	20	12/04/2019 1808
Dibromochloromethane	ND	51	53		1	102	11	70-130	20	12/04/2019 1808
1,2-Dibromoethane (EDB)	ND	51	52		1	101	11	70-130	20	12/04/2019 1808
1,2-Dichlorobenzene	ND	51	55		1	107	13	70-130	20	12/04/2019 1808
1,3-Dichlorobenzene	ND	51	58		1	112	16	70-130	20	12/04/2019 1808
1,4-Dichlorobenzene	ND	51	57		1	112	17	70-130	20	12/04/2019 1808
Dichlorodifluoromethane	ND	51	41		1	80	18	60-140	20	12/04/2019 1808
1,1-Dichloroethane	ND	51	51		1	99	11	70-130	20	12/04/2019 1808
1,2-Dichloroethane	ND	51	48		1	94	9.4	70-130	20	12/04/2019 1808
1,1-Dichloroethene	ND	51	62		1	120	13	70-130	20	12/04/2019 1808
cis-1,2-Dichloroethene	ND	51	50		1	97	12	70-130	20	12/04/2019 1808
trans-1,2-Dichloroethene	ND	51	56		1	109	13	70-130	20	12/04/2019 1808
1,2-Dichloropropane	ND	51	50		1	97	11	70-130	20	12/04/2019 1808
cis-1,3-Dichloropropene	ND	51	51		1	100	8.6	70-130	20	12/04/2019 1808
trans-1,3-Dichloropropene	ND	51	54		1	106	13	70-130	20	12/04/2019 1808
Ethylbenzene	ND	51	53		1	104	15	70-130	20	12/04/2019 1808
2-Hexanone	ND	100	85		1	83	7.3	70-130	20	12/04/2019 1808
Isopropylbenzene	ND	51	51		1	98	15	70-130	20	12/04/2019 1808
Methyl acetate	ND	51	100	N	1	197	13	70-130	20	12/04/2019 1808
Methyl tertiary butyl ether (MTBE)	ND	51	46		1	91	11	70-130	20	12/04/2019 1808
4-Methyl-2-pentanone	ND	100	96		1	93	6.2	70-130	20	12/04/2019 1808
Methylcyclohexane	ND	51	55		1	107	17	70-130	20	12/04/2019 1808
Methylene chloride	ND	51	48		1	93	14	70-130	20	12/04/2019 1808
Styrene	ND	51	50		1	97	15	70-130	20	12/04/2019 1808
1,1,2,2-Tetrachloroethane	ND	51	64		1	124	11	70-130	20	12/04/2019 1808
Tetrachloroethene	ND	51	56		1	109	16	70-130	20	12/04/2019 1808
Toluene	ND	51	52		1	101	15	70-130	20	12/04/2019 1808
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	51	58		1	112	13	70-130	20	12/04/2019 1808
1,2,4-Trichlorobenzene	ND	51	39		1	76	11	70-130	20	12/04/2019 1808
1,1,1-Trichloroethane	ND	51	51		1	99	13	70-130	20	12/04/2019 1808
1,1,2-Trichloroethane	ND	51	51		1	100	12	70-130	20	12/04/2019 1808

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MSD

Sample ID: UL02023-003MD
Batch: 37838
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	ND	51	51		1	100	11	70-130	20	12/04/2019 1808
Trichlorofluoromethane	ND	51	41	+	1	80	22	70-130	20	12/04/2019 1808
Vinyl chloride	ND	51	37		1	72	17	70-130	20	12/04/2019 1808
Xylenes (total)	ND	100	100		1	102	15	70-130	20	12/04/2019 1808

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		88	53-142
Bromofluorobenzene		86	47-138
Toluene-d8		107	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ38275-001
Batch: 38275
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acetone	ND		1	20	ug/kg	12/08/2019 1601
Benzene	ND		1	5.0	ug/kg	12/08/2019 1601
Bromodichloromethane	ND		1	5.0	ug/kg	12/08/2019 1601
Bromoform	ND		1	5.0	ug/kg	12/08/2019 1601
Bromomethane (Methyl bromide)	ND		1	5.0	ug/kg	12/08/2019 1601
2-Butanone (MEK)	ND		1	20	ug/kg	12/08/2019 1601
Carbon disulfide	ND		1	5.0	ug/kg	12/08/2019 1601
Carbon tetrachloride	ND		1	5.0	ug/kg	12/08/2019 1601
Chlorobenzene	ND		1	5.0	ug/kg	12/08/2019 1601
Chloroethane	ND		1	5.0	ug/kg	12/08/2019 1601
Chloroform	ND		1	5.0	ug/kg	12/08/2019 1601
Chloromethane (Methyl chloride)	ND		1	5.0	ug/kg	12/08/2019 1601
Cyclohexane	ND		1	5.0	ug/kg	12/08/2019 1601
1,2-Dibromo-3-chloropropane (DBCP)	ND		1	5.0	ug/kg	12/08/2019 1601
Dibromochloromethane	ND		1	5.0	ug/kg	12/08/2019 1601
1,2-Dibromoethane (EDB)	ND		1	5.0	ug/kg	12/08/2019 1601
1,2-Dichlorobenzene	ND		1	5.0	ug/kg	12/08/2019 1601
1,3-Dichlorobenzene	ND		1	5.0	ug/kg	12/08/2019 1601
1,4-Dichlorobenzene	ND		1	5.0	ug/kg	12/08/2019 1601
Dichlorodifluoromethane	ND		1	5.0	ug/kg	12/08/2019 1601
1,1-Dichloroethane	ND		1	5.0	ug/kg	12/08/2019 1601
1,2-Dichloroethane	ND		1	5.0	ug/kg	12/08/2019 1601
1,1-Dichloroethene	ND		1	5.0	ug/kg	12/08/2019 1601
cis-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/08/2019 1601
trans-1,2-Dichloroethene	ND		1	5.0	ug/kg	12/08/2019 1601
1,2-Dichloropropane	ND		1	5.0	ug/kg	12/08/2019 1601
cis-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/08/2019 1601
trans-1,3-Dichloropropene	ND		1	5.0	ug/kg	12/08/2019 1601
Ethylbenzene	ND		1	5.0	ug/kg	12/08/2019 1601
2-Hexanone	ND		1	10	ug/kg	12/08/2019 1601
Isopropylbenzene	ND		1	5.0	ug/kg	12/08/2019 1601
Methyl acetate	ND		1	5.0	ug/kg	12/08/2019 1601
Methyl tertiary butyl ether (MTBE)	ND		1	5.0	ug/kg	12/08/2019 1601
4-Methyl-2-pentanone	ND		1	10	ug/kg	12/08/2019 1601
Methylcyclohexane	ND		1	5.0	ug/kg	12/08/2019 1601
Methylene chloride	ND		1	5.0	ug/kg	12/08/2019 1601
Styrene	ND		1	5.0	ug/kg	12/08/2019 1601
1,1,2,2-Tetrachloroethane	ND		1	5.0	ug/kg	12/08/2019 1601
Tetrachloroethene	ND		1	5.0	ug/kg	12/08/2019 1601
Toluene	ND		1	5.0	ug/kg	12/08/2019 1601
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		1	5.0	ug/kg	12/08/2019 1601
1,2,4-Trichlorobenzene	ND		1	5.0	ug/kg	12/08/2019 1601
1,1,1-Trichloroethane	ND		1	5.0	ug/kg	12/08/2019 1601
1,1,2-Trichloroethane	ND		1	5.0	ug/kg	12/08/2019 1601

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: UQ38275-001
Batch: 38275
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Trichloroethene	ND		1	5.0	ug/kg	12/08/2019 1601
Trichlorofluoromethane	ND		1	5.0	ug/kg	12/08/2019 1601
Vinyl chloride	ND		1	5.0	ug/kg	12/08/2019 1601
Xylenes (total)	ND		1	10	ug/kg	12/08/2019 1601

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		92	53-142
Bromofluorobenzene		101	47-138
Toluene-d8		102	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ38275-002
Batch: 38275
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acetone	100	89		1	89	60-140	12/08/2019 1514
Benzene	50	48		1	96	70-130	12/08/2019 1514
Bromodichloromethane	50	50		1	99	70-130	12/08/2019 1514
Bromoform	50	50		1	101	70-130	12/08/2019 1514
Bromomethane (Methyl bromide)	50	46		1	92	70-130	12/08/2019 1514
2-Butanone (MEK)	100	86		1	86	60-140	12/08/2019 1514
Carbon disulfide	50	41		1	83	70-130	12/08/2019 1514
Carbon tetrachloride	50	49		1	98	70-130	12/08/2019 1514
Chlorobenzene	50	49		1	98	70-130	12/08/2019 1514
Chloroethane	50	50		1	101	70-130	12/08/2019 1514
Chloroform	50	48		1	97	70-130	12/08/2019 1514
Chloromethane (Methyl chloride)	50	47		1	94	60-140	12/08/2019 1514
Cyclohexane	50	51		1	102	70-130	12/08/2019 1514
1,2-Dibromo-3-chloropropane (DBCP)	50	48		1	96	70-130	12/08/2019 1514
Dibromochloromethane	50	49		1	99	70-130	12/08/2019 1514
1,2-Dibromoethane (EDB)	50	49		1	98	70-130	12/08/2019 1514
1,2-Dichlorobenzene	50	50		1	100	70-130	12/08/2019 1514
1,3-Dichlorobenzene	50	49		1	99	70-130	12/08/2019 1514
1,4-Dichlorobenzene	50	50		1	100	70-130	12/08/2019 1514
Dichlorodifluoromethane	50	45		1	89	60-140	12/08/2019 1514
1,1-Dichloroethane	50	47		1	95	70-130	12/08/2019 1514
1,2-Dichloroethane	50	49		1	97	70-130	12/08/2019 1514
1,1-Dichloroethene	50	56		1	112	70-130	12/08/2019 1514
cis-1,2-Dichloroethene	50	49		1	99	70-130	12/08/2019 1514
trans-1,2-Dichloroethene	50	53		1	105	70-130	12/08/2019 1514
1,2-Dichloropropane	50	49		1	98	70-130	12/08/2019 1514
cis-1,3-Dichloropropene	50	52		1	104	70-130	12/08/2019 1514
trans-1,3-Dichloropropene	50	52		1	104	70-130	12/08/2019 1514
Ethylbenzene	50	49		1	98	70-130	12/08/2019 1514
2-Hexanone	100	97		1	97	70-130	12/08/2019 1514
Isopropylbenzene	50	49		1	97	70-130	12/08/2019 1514
Methyl acetate	50	48		1	96	70-130	12/08/2019 1514
Methyl tertiary butyl ether (MTBE)	50	47		1	94	70-130	12/08/2019 1514
4-Methyl-2-pentanone	100	98		1	98	70-130	12/08/2019 1514
Methylcyclohexane	50	52		1	104	70-130	12/08/2019 1514
Methylene chloride	50	45		1	89	70-130	12/08/2019 1514
Styrene	50	49		1	98	70-130	12/08/2019 1514
1,1,2,2-Tetrachloroethane	50	48		1	97	70-130	12/08/2019 1514
Tetrachloroethene	50	49		1	98	70-130	12/08/2019 1514
Toluene	50	46		1	91	70-130	12/08/2019 1514
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	50		1	101	70-130	12/08/2019 1514
1,2,4-Trichlorobenzene	50	52		1	103	70-130	12/08/2019 1514
1,1,1-Trichloroethane	50	47		1	94	70-130	12/08/2019 1514
1,1,2-Trichloroethane	50	48		1	96	70-130	12/08/2019 1514

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: UQ38275-002
Batch: 38275
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Trichloroethene	50	49		1	97	70-130	12/08/2019 1514
Trichlorofluoromethane	50	47		1	94	70-130	12/08/2019 1514
Vinyl chloride	50	43		1	86	70-130	12/08/2019 1514
Xylenes (total)	100	99		1	99	70-130	12/08/2019 1514

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		93	53-142
Bromofluorobenzene		104	47-138
Toluene-d8		104	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ38275-003
Batch: 38275
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acetone	100	90		1	90	1.3	60-140	20	12/08/2019 1537
Benzene	50	48		1	95	0.30	70-130	20	12/08/2019 1537
Bromodichloromethane	50	49		1	99	0.42	70-130	20	12/08/2019 1537
Bromoform	50	52		1	104	3.4	70-130	20	12/08/2019 1537
Bromomethane (Methyl bromide)	50	48		1	95	3.3	70-130	20	12/08/2019 1537
2-Butanone (MEK)	100	89		1	89	3.4	60-140	20	12/08/2019 1537
Carbon disulfide	50	42		1	84	1.6	70-130	20	12/08/2019 1537
Carbon tetrachloride	50	50		1	99	1.5	70-130	20	12/08/2019 1537
Chlorobenzene	50	48		1	97	0.96	70-130	20	12/08/2019 1537
Chloroethane	50	50		1	101	0.16	70-130	20	12/08/2019 1537
Chloroform	50	49		1	98	1.3	70-130	20	12/08/2019 1537
Chloromethane (Methyl chloride)	50	46		1	92	3.0	60-140	20	12/08/2019 1537
Cyclohexane	50	51		1	103	0.11	70-130	20	12/08/2019 1537
1,2-Dibromo-3-chloropropane (DBCP)	50	49		1	97	1.3	70-130	20	12/08/2019 1537
Dibromochloromethane	50	49		1	99	0.075	70-130	20	12/08/2019 1537
1,2-Dibromoethane (EDB)	50	49		1	99	0.79	70-130	20	12/08/2019 1537
1,2-Dichlorobenzene	50	49		1	98	1.5	70-130	20	12/08/2019 1537
1,3-Dichlorobenzene	50	49		1	97	1.1	70-130	20	12/08/2019 1537
1,4-Dichlorobenzene	50	49		1	98	1.4	70-130	20	12/08/2019 1537
Dichlorodifluoromethane	50	42		1	84	5.5	60-140	20	12/08/2019 1537
1,1-Dichloroethane	50	48		1	96	1.3	70-130	20	12/08/2019 1537
1,2-Dichloroethane	50	48		1	97	0.67	70-130	20	12/08/2019 1537
1,1-Dichloroethene	50	57		1	113	0.88	70-130	20	12/08/2019 1537
cis-1,2-Dichloroethene	50	50		1	101	1.8	70-130	20	12/08/2019 1537
trans-1,2-Dichloroethene	50	54		1	108	2.6	70-130	20	12/08/2019 1537
1,2-Dichloropropane	50	50		1	99	1.0	70-130	20	12/08/2019 1537
cis-1,3-Dichloropropene	50	52		1	104	0.28	70-130	20	12/08/2019 1537
trans-1,3-Dichloropropene	50	52		1	103	0.79	70-130	20	12/08/2019 1537
Ethylbenzene	50	49		1	98	0.32	70-130	20	12/08/2019 1537
2-Hexanone	100	97		1	97	0.16	70-130	20	12/08/2019 1537
Isopropylbenzene	50	48		1	96	1.3	70-130	20	12/08/2019 1537
Methyl acetate	50	51		1	102	6.4	70-130	20	12/08/2019 1537
Methyl tertiary butyl ether (MTBE)	50	48		1	96	2.1	70-130	20	12/08/2019 1537
4-Methyl-2-pentanone	100	100		1	102	4.3	70-130	20	12/08/2019 1537
Methylcyclohexane	50	52		1	104	0.023	70-130	20	12/08/2019 1537
Methylene chloride	50	47		1	94	4.8	70-130	20	12/08/2019 1537
Styrene	50	49		1	99	0.87	70-130	20	12/08/2019 1537
1,1,2,2-Tetrachloroethane	50	49		1	98	0.96	70-130	20	12/08/2019 1537
Tetrachloroethene	50	47		1	94	3.3	70-130	20	12/08/2019 1537
Toluene	50	45		1	90	1.0	70-130	20	12/08/2019 1537
1,1,2-Trichloro-1,2,2-Trifluoroethane	50	49		1	98	2.6	70-130	20	12/08/2019 1537
1,2,4-Trichlorobenzene	50	50		1	101	2.6	70-130	20	12/08/2019 1537
1,1,1-Trichloroethane	50	48		1	96	2.2	70-130	20	12/08/2019 1537
1,1,2-Trichloroethane	50	48		1	96	0.23	70-130	20	12/08/2019 1537

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: UQ38275-003
Batch: 38275
Analytical Method: 8260B

Matrix: Solid
Prep Method: 5035

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Trichloroethene	50	48		1	96	0.72	70-130	20	12/08/2019 1537
Trichlorofluoromethane	50	47		1	94	0.068	70-130	20	12/08/2019 1537
Vinyl chloride	50	43		1	87	0.90	70-130	20	12/08/2019 1537
Xylenes (total)	100	98		1	98	0.64	70-130	20	12/08/2019 1537

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		93	53-142
Bromofluorobenzene		101	47-138
Toluene-d8		99	68-124

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ37989-001
Batch: 37989
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 12/05/2019 1305

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Acenaphthene	ND		1	13	ug/kg	12/09/2019 1205
Acenaphthylene	ND		1	13	ug/kg	12/09/2019 1205
Acetophenone	ND		1	67	ug/kg	12/09/2019 1205
Anthracene	ND		1	13	ug/kg	12/09/2019 1205
Atrazine	ND		1	67	ug/kg	12/09/2019 1205
Benzaldehyde	ND		1	67	ug/kg	12/09/2019 1205
Benzo(a)anthracene	ND		1	13	ug/kg	12/09/2019 1205
Benzo(a)pyrene	ND		1	13	ug/kg	12/09/2019 1205
Benzo(b)fluoranthene	ND		1	13	ug/kg	12/09/2019 1205
Benzo(g,h,i)perylene	ND		1	13	ug/kg	12/09/2019 1205
Benzo(k)fluoranthene	ND		1	13	ug/kg	12/09/2019 1205
1,1'-Biphenyl	ND		1	67	ug/kg	12/09/2019 1205
4-Bromophenyl phenyl ether	ND		1	67	ug/kg	12/09/2019 1205
Butyl benzyl phthalate	ND		1	67	ug/kg	12/09/2019 1205
Caprolactam	ND		1	67	ug/kg	12/09/2019 1205
Carbazole	ND		1	67	ug/kg	12/09/2019 1205
bis (2-Chloro-1-methylethyl) ether	ND		1	67	ug/kg	12/09/2019 1205
4-Chloro-3-methyl phenol	ND		1	67	ug/kg	12/09/2019 1205
4-Chloroaniline	ND		1	67	ug/kg	12/09/2019 1205
bis(2-Chloroethoxy)methane	ND		1	67	ug/kg	12/09/2019 1205
bis(2-Chloroethyl)ether	ND		1	67	ug/kg	12/09/2019 1205
2-Chloronaphthalene	ND		1	67	ug/kg	12/09/2019 1205
2-Chlorophenol	ND		1	67	ug/kg	12/09/2019 1205
4-Chlorophenyl phenyl ether	ND		1	67	ug/kg	12/09/2019 1205
Chrysene	ND		1	13	ug/kg	12/09/2019 1205
Dibenzo(a,h)anthracene	ND		1	13	ug/kg	12/09/2019 1205
Dibenzofuran	ND		1	67	ug/kg	12/09/2019 1205
3,3'-Dichlorobenzidine	ND		1	67	ug/kg	12/09/2019 1205
2,4-Dichlorophenol	ND		1	67	ug/kg	12/09/2019 1205
Diethylphthalate	ND		1	67	ug/kg	12/09/2019 1205
Dimethyl phthalate	ND		1	67	ug/kg	12/09/2019 1205
2,4-Dimethylphenol	ND		1	67	ug/kg	12/09/2019 1205
Di-n-butyl phthalate	ND		1	67	ug/kg	12/09/2019 1205
4,6-Dinitro-2-methylphenol	ND		1	330	ug/kg	12/09/2019 1205
2,4-Dinitrophenol	ND		1	330	ug/kg	12/09/2019 1205
2,4-Dinitrotoluene	ND		1	130	ug/kg	12/09/2019 1205
2,6-Dinitrotoluene	ND		1	130	ug/kg	12/09/2019 1205
Di-n-octylphthalate	ND		1	67	ug/kg	12/09/2019 1205
bis(2-Ethylhexyl)phthalate	ND		1	67	ug/kg	12/09/2019 1205
Fluoranthene	ND		1	13	ug/kg	12/09/2019 1205
Fluorene	ND		1	13	ug/kg	12/09/2019 1205
Hexachlorobenzene	ND		1	67	ug/kg	12/09/2019 1205
Hexachlorobutadiene	ND		1	67	ug/kg	12/09/2019 1205
Hexachlorocyclopentadiene	ND		1	330	ug/kg	12/09/2019 1205

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ37989-001
Batch: 37989
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 12/05/2019 1305

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Hexachloroethane	ND		1	67	ug/kg	12/09/2019 1205
Indeno(1,2,3-c,d)pyrene	ND		1	13	ug/kg	12/09/2019 1205
Isophorone	ND		1	67	ug/kg	12/09/2019 1205
2-Methylnaphthalene	ND		1	13	ug/kg	12/09/2019 1205
2-Methylphenol	ND		1	67	ug/kg	12/09/2019 1205
3+4-Methylphenol	ND		1	130	ug/kg	12/09/2019 1205
Naphthalene	ND		1	13	ug/kg	12/09/2019 1205
2-Nitroaniline	ND		1	130	ug/kg	12/09/2019 1205
3-Nitroaniline	ND		1	130	ug/kg	12/09/2019 1205
4-Nitroaniline	ND		1	130	ug/kg	12/09/2019 1205
Nitrobenzene	ND		1	67	ug/kg	12/09/2019 1205
2-Nitrophenol	ND		1	130	ug/kg	12/09/2019 1205
4-Nitrophenol	ND		1	330	ug/kg	12/09/2019 1205
N-Nitrosodi-n-propylamine	ND		1	67	ug/kg	12/09/2019 1205
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	67	ug/kg	12/09/2019 1205
Pentachlorophenol	ND		1	330	ug/kg	12/09/2019 1205
Phenanthrene	ND		1	13	ug/kg	12/09/2019 1205
Phenol	ND		1	67	ug/kg	12/09/2019 1205
Pyrene	ND		1	13	ug/kg	12/09/2019 1205
2,4,5-Trichlorophenol	ND		1	67	ug/kg	12/09/2019 1205
2,4,6-Trichlorophenol	ND		1	67	ug/kg	12/09/2019 1205

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		66	24-137
2-Fluorophenol		79	16-136
Nitrobenzene-d5		72	12-144
Phenol-d5		83	26-148
Terphenyl-d14		95	20-127
2,4,6-Tribromophenol		58	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37989-002
Batch: 37989
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 12/05/2019 1305

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	670	520		1	78	46-114	12/09/2019 1229
Acenaphthylene	670	550		1	83	44-122	12/09/2019 1229
Acetophenone	670	480		1	72	48-111	12/09/2019 1229
Anthracene	670	520		1	78	50-119	12/09/2019 1229
Atrazine	670	600		1	90	48-116	12/09/2019 1229
Benzaldehyde	670	330		1	49	10-110	12/09/2019 1229
Benzo(a)anthracene	670	570		1	86	47-121	12/09/2019 1229
Benzo(a)pyrene	670	600		1	90	55-134	12/09/2019 1229
Benzo(b)fluoranthene	670	560		1	83	28-139	12/09/2019 1229
Benzo(g,h,i)perylene	670	520		1	78	36-125	12/09/2019 1229
Benzo(k)fluoranthene	670	570		1	85	47-130	12/09/2019 1229
1,1'-Biphenyl	670	540		1	80	49-110	12/09/2019 1229
4-Bromophenyl phenyl ether	670	500		1	74	46-118	12/09/2019 1229
Butyl benzyl phthalate	670	500		1	74	46-128	12/09/2019 1229
Caprolactam	670	530		1	79	43-121	12/09/2019 1229
Carbazole	670	520		1	78	47-128	12/09/2019 1229
bis (2-Chloro-1-methylethyl) ether	670	460		1	70	31-102	12/09/2019 1229
4-Chloro-3-methyl phenol	670	490		1	73	49-118	12/09/2019 1229
4-Chloroaniline	670	320		1	48	17-106	12/09/2019 1229
bis(2-Chloroethoxy)methane	670	440		1	67	39-108	12/09/2019 1229
bis(2-Chloroethyl)ether	670	540		1	81	32-105	12/09/2019 1229
2-Chloronaphthalene	670	530		1	80	31-127	12/09/2019 1229
2-Chlorophenol	670	580		1	87	37-106	12/09/2019 1229
4-Chlorophenyl phenyl ether	670	580		1	87	47-116	12/09/2019 1229
Chrysene	670	560		1	85	45-126	12/09/2019 1229
Dibenzo(a,h)anthracene	670	550		1	83	45-122	12/09/2019 1229
Dibenzofuran	670	510		1	77	45-112	12/09/2019 1229
3,3'-Dichlorobenzidine	670	450		1	67	10-119	12/09/2019 1229
2,4-Dichlorophenol	670	540		1	80	41-113	12/09/2019 1229
Diethylphthalate	670	570		1	85	49-123	12/09/2019 1229
Dimethyl phthalate	670	540		1	81	48-120	12/09/2019 1229
2,4-Dimethylphenol	670	720		1	108	33-123	12/09/2019 1229
Di-n-butyl phthalate	670	500		1	75	51-129	12/09/2019 1229
4,6-Dinitro-2-methylphenol	670	460		1	69	40-130	12/09/2019 1229
2,4-Dinitrophenol	1300	860		1	65	10-113	12/09/2019 1229
2,4-Dinitrotoluene	670	590		1	88	48-124	12/09/2019 1229
2,6-Dinitrotoluene	670	530		1	79	47-125	12/09/2019 1229
Di-n-octylphthalate	670	540		1	81	49-142	12/09/2019 1229
bis(2-Ethylhexyl)phthalate	670	520		1	78	45-128	12/09/2019 1229
Fluoranthene	670	660		1	98	50-123	12/09/2019 1229
Fluorene	670	510		1	76	48-117	12/09/2019 1229
Hexachlorobenzene	670	510		1	77	44-122	12/09/2019 1229
Hexachlorobutadiene	670	550		1	82	33-103	12/09/2019 1229
Hexachlorocyclopentadiene	3300	2700		1	82	18-121	12/09/2019 1229

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37989-002
Batch: 37989
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 12/05/2019 1305

Parameter	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexachloroethane	670	610		1	92	30-96	12/09/2019 1229
Indeno(1,2,3-c,d)pyrene	670	550		1	82	45-123	12/09/2019 1229
Isophorone	670	530		1	79	41-113	12/09/2019 1229
2-Methylnaphthalene	670	510		1	76	40-106	12/09/2019 1229
2-Methylphenol	670	660		1	100	32-107	12/09/2019 1229
3+4-Methylphenol	670	610		1	91	39-108	12/09/2019 1229
Naphthalene	670	470		1	70	36-110	12/09/2019 1229
2-Nitroaniline	670	590		1	88	45-123	12/09/2019 1229
3-Nitroaniline	670	480		1	72	24-127	12/09/2019 1229
4-Nitroaniline	670	670		1	100	48-127	12/09/2019 1229
Nitrobenzene	670	450		1	68	33-114	12/09/2019 1229
2-Nitrophenol	670	500		1	75	35-108	12/09/2019 1229
4-Nitrophenol	1300	1100		1	80	18-154	12/09/2019 1229
N-Nitrosodi-n-propylamine	670	580		1	87	32-115	12/09/2019 1229
N-Nitrosodiphenylamine (Diphenylamine)	670	480		1	72	53-150	12/09/2019 1229
Pentachlorophenol	1300	890		1	66	27-138	12/09/2019 1229
Phenanthrene	670	480		1	72	49-117	12/09/2019 1229
Phenol	670	580		1	87	36-108	12/09/2019 1229
Pyrene	670	540		1	81	47-119	12/09/2019 1229
2,4,5-Trichlorophenol	670	580		1	87	46-122	12/09/2019 1229
2,4,6-Trichlorophenol	670	580		1	87	38-115	12/09/2019 1229

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		78	24-137
2-Fluorophenol		77	16-136
Nitrobenzene-d5		71	12-144
Phenol-d5		87	26-148
Terphenyl-d14		88	20-127
2,4,6-Tribromophenol		72	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: UL02023-003MS
Batch: 37989
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 12/05/2019 1305

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Acenaphthene	ND	660	270	N	5	41	46-114	12/11/2019 2210
Acenaphthylene	ND	660	310		5	48	44-122	12/11/2019 2210
Acetophenone	ND	660	420		5	63	48-111	12/11/2019 2210
Anthracene	ND	660	270	N	5	41	50-119	12/11/2019 2210
Atrazine	ND	660	320		5	49	48-116	12/11/2019 2210
Benzaldehyde	ND	660	440		5	66	10-110	12/11/2019 2210
Benzo(a)anthracene	ND	660	360		5	54	47-121	12/11/2019 2210
Benzo(a)pyrene	ND	660	380		5	57	55-134	12/11/2019 2210
Benzo(b)fluoranthene	ND	660	390		5	59	28-139	12/11/2019 2210
Benzo(g,h,i)perylene	ND	660	280		5	43	36-125	12/11/2019 2210
Benzo(k)fluoranthene	ND	660	350		5	54	47-130	12/11/2019 2210
1,1'-Biphenyl	ND	660	280	N	5	42	49-110	12/11/2019 2210
4-Bromophenyl phenyl ether	ND	660	270	N	5	42	46-118	12/11/2019 2210
Butyl benzyl phthalate	ND	660	350		5	52	46-128	12/11/2019 2210
Caprolactam	ND	660	320		5	48	43-121	12/11/2019 2210
Carbazole	ND	660	280	N	5	43	47-128	12/11/2019 2210
bis (2-Chloro-1-methylethyl) ether	ND	660	700	N	5	107	31-102	12/11/2019 2210
4-Chloro-3-methyl phenol	ND	660	330		5	51	49-118	12/11/2019 2210
4-Chloroaniline	ND	660	110	N	5	16	17-106	12/11/2019 2210
bis(2-Chloroethoxy)methane	ND	660	280		5	42	39-108	12/11/2019 2210
bis(2-Chloroethyl)ether	ND	660	290		5	44	32-105	12/11/2019 2210
2-Chloronaphthalene	ND	660	270		5	42	31-127	12/11/2019 2210
2-Chlorophenol	ND	660	370		5	57	37-106	12/11/2019 2210
4-Chlorophenyl phenyl ether	ND	660	330		5	50	47-116	12/11/2019 2210
Chrysene	ND	660	320		5	49	45-126	12/11/2019 2210
Dibenzo(a,h)anthracene	ND	660	310		5	47	45-122	12/11/2019 2210
Dibenzofuran	ND	660	320		5	48	45-112	12/11/2019 2210
3,3'-Dichlorobenzidine	ND	660	ND	N	5	0.00	10-119	12/11/2019 2210
2,4-Dichlorophenol	ND	660	310		5	48	41-113	12/11/2019 2210
Diethylphthalate	ND	660	290	N	5	44	49-123	12/11/2019 2210
Dimethyl phthalate	ND	660	340		5	52	48-120	12/11/2019 2210
2,4-Dimethylphenol	ND	660	400		5	61	33-123	12/11/2019 2210
Di-n-butyl phthalate	ND	660	280	N	5	42	51-129	12/11/2019 2210
4,6-Dinitro-2-methylphenol	ND	660	490		5	74	40-130	12/11/2019 2210
2,4-Dinitrophenol	ND	1300	1000		5	80	45-127	12/11/2019 2210
2,4-Dinitrotoluene	ND	660	280	N	5	43	48-124	12/11/2019 2210
2,6-Dinitrotoluene	ND	660	360		5	55	47-125	12/11/2019 2210
Di-n-octylphthalate	ND	660	370		5	57	49-142	12/11/2019 2210
bis(2-Ethylhexyl)phthalate	ND	660	340		5	51	45-128	12/11/2019 2210
Fluoranthene	ND	660	370		5	57	50-123	12/11/2019 2210
Fluorene	ND	660	270	N	5	41	48-117	12/11/2019 2210
Hexachlorobenzene	ND	660	260	N	5	40	44-122	12/11/2019 2210
Hexachlorobutadiene	ND	660	340		5	51	33-103	12/11/2019 2210
Hexachlorocyclopentadiene	ND	3300	2300		5	69	18-121	12/11/2019 2210

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MS

Sample ID: UL02023-003MS
Batch: 37989
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 12/05/2019 1305

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Hexachloroethane	ND	660	340		5	51	30-96	12/11/2019 2210
Indeno(1,2,3-c,d)pyrene	ND	660	290	N	5	44	45-123	12/11/2019 2210
Isophorone	ND	660	310		5	47	41-113	12/11/2019 2210
2-Methylnaphthalene	ND	660	260		5	40	40-106	12/11/2019 2210
2-Methylphenol	ND	660	420		5	64	32-107	12/11/2019 2210
3+4-Methylphenol	ND	660	370		5	56	39-108	12/11/2019 2210
Naphthalene	ND	660	290		5	44	36-110	12/11/2019 2210
2-Nitroaniline	ND	660	260	N	5	39	45-123	12/11/2019 2210
3-Nitroaniline	ND	660	ND	N	5	0.00	24-127	12/11/2019 2210
4-Nitroaniline	ND	660	ND	N	5	0.00	48-127	12/11/2019 2210
Nitrobenzene	ND	660	300		5	45	33-114	12/11/2019 2210
2-Nitrophenol	ND	660	270		5	40	35-108	12/11/2019 2210
4-Nitrophenol	ND	1300	1300		5	101	18-154	12/11/2019 2210
N-Nitrosodi-n-propylamine	ND	660	400		5	61	32-115	12/11/2019 2210
N-Nitrosodiphenylamine (Diphenylamine)	ND	660	180	N	5	27	53-150	12/11/2019 2210
Pentachlorophenol	ND	1300	500		5	38	27-138	12/11/2019 2210
Phenanthrene	ND	660	290	N	5	44	49-117	12/11/2019 2210
Phenol	ND	660	330		5	50	36-108	12/11/2019 2210
Pyrene	ND	660	370		5	56	47-119	12/11/2019 2210
2,4,5-Trichlorophenol	ND	660	320		5	48	46-122	12/11/2019 2210
2,4,6-Trichlorophenol	ND	660	310		5	47	38-115	12/11/2019 2210

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		41	24-137
2-Fluorophenol		40	16-136
Nitrobenzene-d5		41	12-144
Phenol-d5		52	26-148
Terphenyl-d14		52	20-127
2,4,6-Tribromophenol		41	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: UL02023-003MD
Batch: 37989
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 12/05/2019 1305

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Acenaphthene	ND	650	270	N	5	41	2.5	46-114	30	12/11/2019 2234
Acenaphthylene	ND	650	300		5	46	5.6	44-122	30	12/11/2019 2234
Acetophenone	ND	650	330		5	50	24	48-111	40	12/11/2019 2234
Anthracene	ND	650	280	N	5	43	4.7	50-119	30	12/11/2019 2234
Atrazine	ND	650	290	N	5	44	11	48-116	40	12/11/2019 2234
Benzaldehyde	ND	650	330		5	50	28	10-110	40	12/11/2019 2234
Benzo(a)anthracene	ND	650	360		5	55	0.23	47-121	30	12/11/2019 2234
Benzo(a)pyrene	ND	650	350	N	5	53	8.2	55-134	30	12/11/2019 2234
Benzo(b)fluoranthene	ND	650	370		5	57	3.8	28-139	30	12/11/2019 2234
Benzo(g,h,i)perylene	ND	650	270		5	41	5.1	36-125	30	12/11/2019 2234
Benzo(k)fluoranthene	ND	650	330		5	51	6.5	47-130	30	12/11/2019 2234
1,1'-Biphenyl	ND	650	280	N	5	42	1.4	49-110	40	12/11/2019 2234
4-Bromophenyl phenyl ether	ND	650	300		5	46	9.2	46-118	40	12/11/2019 2234
Butyl benzyl phthalate	ND	650	310		5	48	10	46-128	40	12/11/2019 2234
Caprolactam	ND	650	290		5	45	8.8	43-121	40	12/11/2019 2234
Carbazole	ND	650	300	N	5	45	4.4	47-128	40	12/11/2019 2234
bis (2-Chloro-1-methylethyl) ether	ND	650	430	+	5	67	47	31-102	40	12/11/2019 2234
4-Chloro-3-methyl phenol	ND	650	280	N	5	43	18	49-118	40	12/11/2019 2234
4-Chloroaniline	ND	650	120		5	19	13	17-106	40	12/11/2019 2234
bis(2-Chloroethoxy)methane	ND	650	230	N	5	36	18	39-108	40	12/11/2019 2234
bis(2-Chloroethyl)ether	ND	650	300		5	46	3.0	32-105	40	12/11/2019 2234
2-Chloronaphthalene	ND	650	290		5	45	6.8	31-127	40	12/11/2019 2234
2-Chlorophenol	ND	650	320		5	49	16	37-106	40	12/11/2019 2234
4-Chlorophenyl phenyl ether	ND	650	300		5	47	8.9	47-116	40	12/11/2019 2234
Chrysene	ND	650	350		5	55	8.9	45-126	30	12/11/2019 2234
Dibenzo(a,h)anthracene	ND	650	280	N	5	43	11	45-122	30	12/11/2019 2234
Dibenzofuran	ND	650	300		5	46	6.5	45-112	40	12/11/2019 2234
3,3'-Dichlorobenzidine	ND	650	ND	N	5	0.00	0.00	10-119	40	12/11/2019 2234
2,4-Dichlorophenol	ND	650	340		5	52	6.7	41-113	40	12/11/2019 2234
Diethylphthalate	ND	650	290	N	5	45	0.98	49-123	40	12/11/2019 2234
Dimethyl phthalate	ND	650	300	N	5	46	13	48-120	40	12/11/2019 2234
2,4-Dimethylphenol	ND	650	350		5	53	14	33-123	40	12/11/2019 2234
Di-n-butyl phthalate	ND	650	260	N	5	40	7.1	51-129	40	12/11/2019 2234
4,6-Dinitro-2-methylphenol	ND	650	530		5	81	8.0	40-130	40	12/11/2019 2234
2,4-Dinitrophenol	ND	1300	1100		5	85	4.7	45-127	40	12/11/2019 2234
2,4-Dinitrotoluene	ND	650	300	N	5	47	6.6	48-124	40	12/11/2019 2234
2,6-Dinitrotoluene	ND	650	360		5	55	1.9	47-125	40	12/11/2019 2234
Di-n-octylphthalate	ND	650	340		5	52	9.3	49-142	40	12/11/2019 2234
bis(2-Ethylhexyl)phthalate	ND	650	300		5	46	12	45-128	40	12/11/2019 2234
Fluoranthene	ND	650	330		5	50	14	50-123	30	12/11/2019 2234
Fluorene	ND	650	290	N	5	45	6.1	48-117	30	12/11/2019 2234
Hexachlorobenzene	ND	650	240	N	5	38	7.8	44-122	40	12/11/2019 2234
Hexachlorobutadiene	ND	650	280		5	44	17	33-103	40	12/11/2019 2234
Hexachlorocyclopentadiene	ND	3200	2200		5	68	2.7	18-121	40	12/11/2019 2234

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MSD

Sample ID: UL02023-003MD
Batch: 37989
Analytical Method: 8270D

Matrix: Solid
Prep Method: 3546
Prep Date: 12/05/2019 1305

Parameter	Sample Amount (ug/kg)	Spike Amount (ug/kg)	Result (ug/kg)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Hexachloroethane	ND	650	300		5	46	12	30-96	40	12/11/2019 2234
Indeno(1,2,3-c,d)pyrene	ND	650	300		5	46	3.3	45-123	30	12/11/2019 2234
Isophorone	ND	650	310		5	47	0.33	41-113	40	12/11/2019 2234
2-Methylnaphthalene	ND	650	300		5	46	12	40-106	30	12/11/2019 2234
2-Methylphenol	ND	650	330		5	51	23	32-107	40	12/11/2019 2234
3+4-Methylphenol	ND	650	350		5	55	3.9	39-108	40	12/11/2019 2234
Naphthalene	ND	650	290		5	45	2.6	36-110	30	12/11/2019 2234
2-Nitroaniline	ND	650	200	N	5	31	23	45-123	40	12/11/2019 2234
3-Nitroaniline	ND	650	ND	N	5	0.00	0.00	24-127	40	12/11/2019 2234
4-Nitroaniline	ND	650	ND	N	5	0.00	0.00	48-127	40	12/11/2019 2234
Nitrobenzene	ND	650	280		5	44	4.4	33-114	40	12/11/2019 2234
2-Nitrophenol	ND	650	320		5	49	18	35-108	40	12/11/2019 2234
4-Nitrophenol	ND	1300	1200		5	96	6.5	18-154	40	12/11/2019 2234
N-Nitrosodi-n-propylamine	ND	650	310		5	48	24	32-115	40	12/11/2019 2234
N-Nitrosodiphenylamine (Diphenylamine)	ND	650	170	N	5	27	3.1	53-150	40	12/11/2019 2234
Pentachlorophenol	ND	1300	440		5	34	13	27-138	40	12/11/2019 2234
Phenanthrene	ND	650	290	N	5	45	0.032	49-117	30	12/11/2019 2234
Phenol	ND	650	280		5	43	16	36-108	40	12/11/2019 2234
Pyrene	ND	650	340		5	52	8.0	47-119	30	12/11/2019 2234
2,4,5-Trichlorophenol	ND	650	300		5	46	6.7	46-122	40	12/11/2019 2234
2,4,6-Trichlorophenol	ND	650	300		5	47	2.3	38-115	40	12/11/2019 2234

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		38	24-137
2-Fluorophenol		38	16-136
Nitrobenzene-d5		38	12-144
Phenol-d5		48	26-148
Terphenyl-d14		50	20-127
2,4,6-Tribromophenol	N	25	27-128

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ37996-001
Batch: 37996
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 12/05/2019 1618

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
1,1'-Biphenyl	ND		1	4.0	ug/L	12/08/2019 0350
2,4,5-Trichlorophenol	ND		1	4.0	ug/L	12/08/2019 0350
2,4,6-Trichlorophenol	ND		1	4.0	ug/L	12/08/2019 0350
2,4-Dichlorophenol	ND		1	8.0	ug/L	12/08/2019 0350
2,4-Dimethylphenol	ND		1	4.0	ug/L	12/08/2019 0350
2,4-Dinitrophenol	ND		1	20	ug/L	12/08/2019 0350
2,4-Dinitrotoluene	ND		1	8.0	ug/L	12/08/2019 0350
2,6-Dinitrotoluene	ND		1	8.0	ug/L	12/08/2019 0350
2-Chloronaphthalene	ND		1	4.0	ug/L	12/08/2019 0350
2-Chlorophenol	ND		1	4.0	ug/L	12/08/2019 0350
2-Methylnaphthalene	ND		1	0.80	ug/L	12/08/2019 0350
2-Methylphenol	ND		1	4.0	ug/L	12/08/2019 0350
2-Nitroaniline	ND		1	8.0	ug/L	12/08/2019 0350
2-Nitrophenol	ND		1	4.0	ug/L	12/08/2019 0350
3,3'-Dichlorobenzidine	ND		1	4.0	ug/L	12/08/2019 0350
3+4-Methylphenol	ND		1	4.0	ug/L	12/08/2019 0350
3-Nitroaniline	ND		1	8.0	ug/L	12/08/2019 0350
4,6-Dinitro-2-methylphenol	ND		1	20	ug/L	12/08/2019 0350
4-Bromophenyl phenyl ether	ND		1	4.0	ug/L	12/08/2019 0350
4-Chloro-3-methyl phenol	ND		1	4.0	ug/L	12/08/2019 0350
4-Chloroaniline	ND		1	8.0	ug/L	12/08/2019 0350
4-Chlorophenyl phenyl ether	ND		1	4.0	ug/L	12/08/2019 0350
4-Nitroaniline	ND		1	8.0	ug/L	12/08/2019 0350
4-Nitrophenol	ND		1	20	ug/L	12/08/2019 0350
Acenaphthene	ND		1	0.80	ug/L	12/08/2019 0350
Acenaphthylene	ND		1	0.80	ug/L	12/08/2019 0350
Acetophenone	ND		1	4.0	ug/L	12/08/2019 0350
Anthracene	ND		1	0.80	ug/L	12/08/2019 0350
Atrazine	ND		1	4.0	ug/L	12/08/2019 0350
Benzaldehyde	ND		1	8.0	ug/L	12/08/2019 0350
Benzo(a)anthracene	ND		1	0.80	ug/L	12/08/2019 0350
Benzo(a)pyrene	ND		1	0.80	ug/L	12/08/2019 0350
Benzo(b)fluoranthene	ND		1	0.80	ug/L	12/08/2019 0350
Benzo(g,h,i)perylene	ND		1	0.80	ug/L	12/08/2019 0350
Benzo(k)fluoranthene	ND		1	0.80	ug/L	12/08/2019 0350
bis (2-Chloro-1-methylethyl) ether	ND		1	4.0	ug/L	12/08/2019 0350
bis(2-Chloroethoxy)methane	ND		1	4.0	ug/L	12/08/2019 0350
bis(2-Chloroethyl)ether	ND		1	4.0	ug/L	12/08/2019 0350
bis(2-Ethylhexyl)phthalate	ND		1	4.0	ug/L	12/08/2019 0350
Butyl benzyl phthalate	ND		1	4.0	ug/L	12/08/2019 0350
Caprolactam	ND		1	8.0	ug/L	12/08/2019 0350
Carbazole	ND		1	4.0	ug/L	12/08/2019 0350
Chrysene	ND		1	0.80	ug/L	12/08/2019 0350
Dibenzo(a,h)anthracene	ND		1	0.80	ug/L	12/08/2019 0350

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - MB

Sample ID: UQ37996-001
Batch: 37996
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 12/05/2019 1618

Parameter	Result	Q	Dil	LOQ	Units	Analysis Date
Dibenzofuran	ND		1	4.0	ug/L	12/08/2019 0350
Diethylphthalate	ND		1	4.0	ug/L	12/08/2019 0350
Dimethyl phthalate	ND		1	4.0	ug/L	12/08/2019 0350
Di-n-butyl phthalate	ND		1	4.0	ug/L	12/08/2019 0350
Di-n-octylphthalate	ND		1	4.0	ug/L	12/08/2019 0350
Fluoranthene	ND		1	0.80	ug/L	12/08/2019 0350
Fluorene	ND		1	0.80	ug/L	12/08/2019 0350
Hexachlorobenzene	ND		1	4.0	ug/L	12/08/2019 0350
Hexachlorobutadiene	ND		1	4.0	ug/L	12/08/2019 0350
Hexachlorocyclopentadiene	ND		1	20	ug/L	12/08/2019 0350
Hexachloroethane	ND		1	4.0	ug/L	12/08/2019 0350
Indeno(1,2,3-c,d)pyrene	ND		1	0.80	ug/L	12/08/2019 0350
Isophorone	ND		1	4.0	ug/L	12/08/2019 0350
Naphthalene	ND		1	0.80	ug/L	12/08/2019 0350
Nitrobenzene	ND		1	4.0	ug/L	12/08/2019 0350
N-Nitrosodi-n-propylamine	ND		1	4.0	ug/L	12/08/2019 0350
N-Nitrosodiphenylamine (Diphenylamine)	ND		1	4.0	ug/L	12/08/2019 0350
Pentachlorophenol	ND		1	20	ug/L	12/08/2019 0350
Phenanthrene	ND		1	0.80	ug/L	12/08/2019 0350
Phenol	ND		1	4.0	ug/L	12/08/2019 0350
Pyrene	ND		1	0.80	ug/L	12/08/2019 0350

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		88	37-129
2-Fluorophenol		52	24-127
Nitrobenzene-d5		92	38-127
Phenol-d5		78	28-128
Terphenyl-d14		114	10-148
2,4,6-Tribromophenol		80	35-144

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37996-002
Batch: 37996
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 12/05/2019 1618

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
1,1'-Biphenyl	40	35		1	87	30-130	12/08/2019 0415
2,4,5-Trichlorophenol	40	35		1	88	30-123	12/08/2019 0415
2,4,6-Trichlorophenol	40	36		1	90	30-130	12/08/2019 0415
2,4-Dichlorophenol	40	35		1	88	30-121	12/08/2019 0415
2,4-Dimethylphenol	40	34		1	86	20-125	12/08/2019 0415
2,4-Dinitrophenol	80	72		1	90	11-126	12/08/2019 0415
2,4-Dinitrotoluene	40	38		1	96	30-130	12/08/2019 0415
2,6-Dinitrotoluene	40	37		1	91	30-130	12/08/2019 0415
2-Chloronaphthalene	40	35		1	87	30-130	12/08/2019 0415
2-Chlorophenol	40	34		1	86	30-130	12/08/2019 0415
2-Methylnaphthalene	40	33		1	83	40-132	12/08/2019 0415
2-Methylphenol	40	35		1	88	30-130	12/08/2019 0415
2-Nitroaniline	40	40		1	101	30-130	12/08/2019 0415
2-Nitrophenol	40	36		1	89	30-130	12/08/2019 0415
3,3'-Dichlorobenzidine	40	28		1	70	10-126	12/08/2019 0415
3+4-Methylphenol	40	36		1	89	30-130	12/08/2019 0415
3-Nitroaniline	40	28		1	71	30-130	12/08/2019 0415
4,6-Dinitro-2-methylphenol	40	41		1	101	30-130	12/08/2019 0415
4-Bromophenyl phenyl ether	40	35		1	87	30-124	12/08/2019 0415
4-Chloro-3-methyl phenol	40	37		1	93	30-123	12/08/2019 0415
4-Chloroaniline	40	29		1	72	12-157	12/08/2019 0415
4-Chlorophenyl phenyl ether	40	35		1	87	30-121	12/08/2019 0415
4-Nitroaniline	40	38		1	96	30-135	12/08/2019 0415
4-Nitrophenol	80	75		1	94	30-130	12/08/2019 0415
Acenaphthene	40	36		1	89	30-122	12/08/2019 0415
Acenaphthylene	40	36		1	89	30-130	12/08/2019 0415
Acetophenone	40	36		1	90	30-130	12/08/2019 0415
Anthracene	40	37		1	91	30-123	12/08/2019 0415
Atrazine	40	37		1	92	30-130	12/08/2019 0415
Benzaldehyde	40	22		1	55	20-115	12/08/2019 0415
Benzo(a)anthracene	40	36		1	90	40-125	12/08/2019 0415
Benzo(a)pyrene	40	35		1	87	40-128	12/08/2019 0415
Benzo(b)fluoranthene	40	35		1	88	30-130	12/08/2019 0415
Benzo(g,h,i)perylene	40	36		1	89	30-130	12/08/2019 0415
Benzo(k)fluoranthene	40	35		1	87	30-130	12/08/2019 0415
bis (2-Chloro-1-methylethyl) ether	40	37		1	92	30-130	12/08/2019 0415
bis(2-Chloroethoxy)methane	40	36		1	90	30-130	12/08/2019 0415
bis(2-Chloroethyl)ether	40	37		1	92	30-130	12/08/2019 0415
bis(2-Ethylhexyl)phthalate	40	32		1	81	30-130	12/08/2019 0415
Butyl benzyl phthalate	40	39		1	97	30-130	12/08/2019 0415
Caprolactam	40	39		1	97	30-130	12/08/2019 0415
Carbazole	40	35		1	88	30-130	12/08/2019 0415
Chrysene	40	36		1	91	30-130	12/08/2019 0415
Dibenzo(a,h)anthracene	40	35		1	88	30-130	12/08/2019 0415

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
ND = Not detected at or above the LOQ

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Semivolatile Organic Compounds by GC/MS - LCS

Sample ID: UQ37996-002
Batch: 37996
Analytical Method: 8270D

Matrix: Aqueous
Prep Method: 3520C
Prep Date: 12/05/2019 1618

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Dibenzofuran	40	35		1	88	30-118	12/08/2019 0415
Diethylphthalate	40	37		1	93	40-125	12/08/2019 0415
Dimethyl phthalate	40	37		1	93	40-127	12/08/2019 0415
Di-n-butyl phthalate	40	37		1	93	40-127	12/08/2019 0415
Di-n-octylphthalate	40	30		1	75	30-130	12/08/2019 0415
Fluoranthene	40	36		1	89	40-128	12/08/2019 0415
Fluorene	40	36		1	89	30-124	12/08/2019 0415
Hexachlorobenzene	40	36		1	90	30-125	12/08/2019 0415
Hexachlorobutadiene	40	31		1	78	24-110	12/08/2019 0415
Hexachlorocyclopentadiene	200	150		1	73	22-122	12/08/2019 0415
Hexachloroethane	40	32		1	79	30-130	12/08/2019 0415
Indeno(1,2,3-c,d)pyrene	40	35		1	87	30-130	12/08/2019 0415
Isophorone	40	38		1	95	30-130	12/08/2019 0415
Naphthalene	40	34		1	84	30-130	12/08/2019 0415
Nitrobenzene	40	39		1	98	30-130	12/08/2019 0415
N-Nitrosodi-n-propylamine	40	38		1	94	30-130	12/08/2019 0415
N-Nitrosodiphenylamine (Diphenylamine)	40	36		1	89	30-123	12/08/2019 0415
Pentachlorophenol	80	65		1	81	30-130	12/08/2019 0415
Phenanthrene	40	36		1	90	40-123	12/08/2019 0415
Phenol	40	36		1	89	30-130	12/08/2019 0415
Pyrene	40	37		1	93	40-126	12/08/2019 0415

Surrogate	Q	% Rec	Acceptance Limit
2-Fluorobiphenyl		86	37-129
2-Fluorophenol		82	24-127
Nitrobenzene-d5		89	38-127
Phenol-d5		87	28-128
Terphenyl-d14		101	10-148
2,4,6-Tribromophenol		90	35-144

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+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody
and
Miscellaneous Documents

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

SHEALY Chain of Custody Record

Number 101499

Client: WESTINGHOUSE	Report to Contact: Dana Joyner	Telephone No. / E-mail: 803 647 1420 JoynerDD@Westinghouse.com	Quote No.
Address: 5801 Bluff Rd.	Sampler's Signature: x	Analysis (Attach list if more space is needed)	Page 1 of 1
City: Hopkins	State: SC	Zip Code:	
Project Name: RI Implementation	Printed Name: Carmen Leyshock		

UL02023

Project No. 60595649	P.O. No.			Matrix			No of Containers by Preservative Type										
Sample ID / Description (Containers for each sample may be combined on one line)	Date	Time	Number of Composites	Aqueous	Solid	Non-Aqueous	Unpres	H2SO4	HNO3	HCl	NaOH	Na2S2O3	VOC's 8260	SVOC's 8270	NITRATES	Remarks / Cooler I.D.
SED-54 0-6"	12-2-19	1105	G		X		1					1	X	X	X	TB-01-120219 VOC's 8260
SED-54 6-12"		1110	G		X		1					1	X	X	X	
SED-55 0-6"		1115	G		X		1					1	X	X	X	
SED-55-MS 0-6"		1115	G		X		1					1	X	X	X	
SED-55-MSD 0-6"		1115	G		X		1					1	X	X	X	
SED-55 6-12"		1120	G		X		1					1	X	X	X	
SED-56 0-6"		1125	G		X		1					1	X	X	X	
SED-56-DUP 0-6"		1125	G		X		1					1	X	X	X	
SED-56 6-12"		1130	G		X		1					1	X	X	X	
EB-01-120219		1235	G	X			3			3			X	X	X	

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☒ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab

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

QC Requirements (Specify)

	Date	Time
1. Relinquished by	12-2-19	1418
2. Relinquished by		
3. Relinquished by		
4. Relinquished by		

	Date	Time
1. Received by		
2. Received by		
3. Received by		
4. Laboratory Received by	12-2-19	1418

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

LAB USE ONLY: Received on ice (Circle) Yes No Ice Pack: Receipt Temp 1-3 °C

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

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

SHEALY ENVIRONMENTAL SERVICES, INC.

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

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

Sample Receipt Checklist (SRC)

Client: WESTINGHOUSE Cooler Inspected by/date: MEC / 12/2/19 Lot #: UL02023

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: 19-2044

1.3 / 1.3 °C NA / NA °C NA / NA °C NA / NA °C

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

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☐ Yes	☐ No	☑ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☐ Yes	☐ No	☑ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC?
☑ Yes	☐ No		7. Were sample IDs listed on all sample containers?
☑ Yes	☐ No		8. Was collection date & time listed on the COC?
☑ Yes	☐ No		9. Was collection date & time listed on all sample containers?
☑ Yes	☐ No		10. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)? _____
☑ Yes	☐ No		13. Was adequate sample volume available?
☑ Yes	☐ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☐ Yes	☑ No	☐ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	19. Were all applicable NH_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?
☑ Yes	☐ No		21. Was the quote number listed on the container label? If yes, Quote # 22261

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 ($Na_2S_2O_3$) with Shealy ID: NA.

SR barcode labels applied by: MEC/JSH Date: 12/2/19

Comments: