

Operation, Maintenance and Monitoring Report JANUARY 2019

**NOW Corporation
NYSDEC Site No. 3-14-008**

**Work Assignment No.
D007626-25**

Prepared for:

SUPERFUND STANDBY PROGRAM
New York State
Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Prepared by:

AECOM Technical Services Northeast, Inc.
40 British American Boulevard
Latham, New York 12110

March 2019

March 5, 2019

Mr. Robert Strang
NYSDEC Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233-7013

**Re: NOW Corporation - Site No. 3-14-008
O&M Summary Report: January 2019**

Dear Mr. Strang:

This monthly summary report describes the operation, maintenance and monitoring (OM&M) of the remedial system at the NOW Corporation site in the Town of Clinton, New York, for a 41-day period **(December 7, 2018 – January 17, 2019)**.

With the exceptions noted below, if any, the pump and treat system was online and operational throughout the reporting period. Approximately 638,900 gallons of water were treated. Discharge from the treatment system averaged approximately 15,600 gallons per day (gpd).

As of the last day of the reporting period, a total of 114,397,000 gallons of groundwater had been recovered and treated by the system since it became operational in February 1998.

Table 1 summarizes influent and effluent analytical data for water samples collected on January 17, 2019. **There were no exceedances of effluent limitations.** A copy of the analytical laboratory report is attached. Total VOCs in the most contaminated extraction well (TW-2A) was 960 ug/L; last month's value was 965 ug/L.

Table 2 presents selected operational data recorded on the sampling date.

There was no downtime during the reporting period. Pumps in recovery wells were operational throughout the period.

AECOM made one site visit to conduct the required system inspection, perform scheduled and unscheduled maintenance, and to collect water samples. Details for the current period follow:

January 17 – Performed monthly system inspection and influent and effluent sampling. Turned all recovery well pumps off to allow recharge prior to sampling to ensure all recovery wells were contributing to effluent and total influent samples. Performed general housekeeping of building interior. Confirmed proper operation of heat tape on exposed portion of outdoor effluent line.

The VFD regulating the stripper blower was at 60 Hz throughout the reporting period, and remained at that setting upon departure.

Page 2
Mr. Robert Strang
NYSDEC

Please feel free to contact me at (518) 951-2262, or at stephen.choiniere@aecom.com if you have any questions or comments regarding this report or the operation of the treatment system.

Sincerely,
AECOM Technical Services Northeast, Inc.

A handwritten signature in dark ink, appearing to read "Stephen Choiniere". The signature is fluid and cursive, with a long horizontal stroke at the end.

Stephen R. Choiniere
Project Manager

Table 1
Summary of Influent and Effluent Data
Sampling Date: January 17, 2019
NOW Corporation Site
NYSDEC Site No. 3-14-008
Town of Clinton, New York

Analytes/ Parameters	Total Influent	Effluent	Recovery Wells			Effluent Limitations	
			TW-1	TW-2A	TW-3		(units)
Quantity treated, avg per day		15,584				Monitor	gallons
pH	7.6	7.2				6.5 to 8.5	standard units
Oil and Grease	<1.5	<1.5	NA	NA	NA	15	mg/L
Total Cyanide	<0.010	<0.010	NA	NA	NA	0.01	mg/L
TDS	270	250	NA	NA	NA	1000	mg/L
TSS	21	<5	NA	NA	NA	50	mg/L
Aluminum, Total	<300	<300	NA	NA	NA	Monitor	ug/L
Arsenic, Total	<50.0	<50.0	NA	NA	NA	100	ug/L
Barium, Total	70.6	69.4	NA	NA	NA	Monitor	ug/L
Chromium	<15.0	<15.0	NA	NA	NA	400	ug/L
Copper	<20.0	<20.0	NA	NA	NA	24	ug/L
Iron	393	<200	NA	NA	NA	600	ug/L
Mercury	<0.20	<0.20	NA	NA	NA	0.8	ug/L
Manganese	492	37.3	NA	NA	NA	Monitor	ug/L
Nickel	0.50 J	<10.0	NA	NA	NA	200	ug/L
Zinc	6.8 J	<20.0	NA	NA	NA	150	ug/L
1,1,1-Trichloroethane	560	<1	0.6 J	630	14	10	ug/L
1,1,2-Trichloroethane	<1	<1	<1	<2	<1	1.2	ug/L
1,1-Dichloroethane	95	<1	19	84	6	10	ug/L
1,1-Dichloroethene	9	<1	4	6	1 J	0.5	ug/L
1,2-Dichloroethane	<1	<1	<1	<2	<1	1.6	ug/L
2-Butanone	<10	<10	<10	<20	<10	NL	ug/L
Benzene	<1	<1	<1	<2	<1	1.4	ug/L
Chlorobenzene	<1	<1	<1	<2	<1	10	ug/L
Chloroethane	0.3 J	<1	<1	0.5 J	0.4 J	10	ug/L
cis -1,2-Dichloroethene	7	<1	3	9	0.6 J	5	ug/L
Ethylbenzene	<1	<1	<1	<2	<1	10	ug/L
o-Xylene	<1	<1	<1	<2	<1	5	ug/L
m,p-Xylene	<5	<5	<5	<10	<5	10	ug/L
Tetrachloroethene	<1	<1	<1	<2	<1	1.4	ug/L
Tertrahydrofuran	<10	1 J	<10	<20	<10	NL	ug/L
Toluene	<1	<1	<1	<2	<1	10	ug/L
Trichloroethene	190	<1	33	230	15	6	ug/L
Vinyl Chloride	0.4 J	<1	<1	0.4 J	<1	0.6	ug/L

Notes:

- 1) Detected concentrations are presented in **bold** typeface, and are expressed in the units shown in far right column.
- 2) Effluent concentration boxed in **bold** denotes exceedance of effluent limitations.
- 3) NA indicates not analyzed.
- 4) "J" indicates an estimated concentration below the reporting limit (RL).
- 5) "B" denotes metal detected in method blank at concentration below the RL, but above the method detection limit.
- 6) "D" indicates result from a diluted sample.
- 7) NL indicates no effluent limitations specified.

Table 2
Summary of January 2019 O&M Data

NOW Corporation Site
Town of Clinton, New York

Instrumentation/Readings:		1/17/19	Units
<i>TW-1</i>			
	Pumping Rate	1	GPM
	Water Level Above Transducer	15.98	feet
	Flow Meter Reading	9,294,700	gallons
	Pump Pressure	0	psi
<i>TW-2A</i>			
	Pumping Rate	12	GPM
	Water Level Above Transducer	35.25	feet
	Flow Meter Reading	18,006,000	gallons
	Pump Pressure	0	psi
<i>TW-3</i>			
	Pumping Rate	7	GPM
	Water Level Above Transducer	29.17	feet
	Flow Meter Reading	16,167,600	gallons
	Pump Pressure	0	psi
<i>VFD Setting</i>			
	Arrival	60	Hz
	Departure	60	Hz
<i>Air Stripper</i>			
	Stripper Blower Pressure	13	inches H ₂ O
	Air Temperature in Stripper	50	°F
<i>Effluent Flow</i>			
	Effluent Flow this period	638,925	gallons
	Total Effluent Flow	114,397,134	gallons

Report Date:
04-Feb-19 13:10

Laboratory Report SC53161

AECOM Environment
40 British American Boulevard
Latham, NY 12110
Attn: Stephen Choiniere

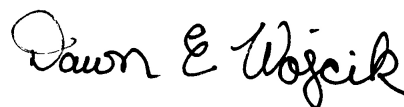
Project: Now Corp - Staatsburg, NY
Project #: 60276639-1

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87936
Maine # MA138
New Hampshire # 2972/2538
New Jersey # MA011
New York # 11393
Pennsylvania # 68-04426/68-02924
Rhode Island # LAO00348
USDA # P330-15-00375
Vermont # VT-11393



Authorized by:
Dawn Wojcik
Laboratory Director



Eurofins Spectrum Analytical holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 34 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

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Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Sample Summary

Work Order: SC53161
Project: Now Corp - Staatsburg, NY
Project Number: 60276639-1

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SC53161-01	EFF 60 011719	Ground Water	17-Jan-19 12:50	18-Jan-19 10:34
SC53161-02	INF 011719	Ground Water	17-Jan-19 12:40	18-Jan-19 10:34
SC53161-03	TW-1 011719	Ground Water	17-Jan-19 12:35	18-Jan-19 10:34
SC53161-04	TW-2A 011719	Ground Water	17-Jan-19 12:45	18-Jan-19 10:34
SC53161-05	TW-3 011719	Ground Water	17-Jan-19 12:43	18-Jan-19 10:34
SC53161-06	TB 011719	Trip Blank	17-Jan-19 00:00	18-Jan-19 10:34

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

The samples were received 2.4 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

E1664A**Laboratory Control Samples:**

CC32008-LCS

A Blank spike was performed instead of a matrix spike

Oil and Grease by EPA 1664A

CC32008-BLK

A Blank spike was performed instead of a matrix spike

Oil and Grease by EPA 1664A

CC32008-LCSD

A Blank spike was performed instead of a matrix spike

Oil and Grease by EPA 1664A

SW-846 6010C**Samples:**

SC53161-02 *INF 011719*

Estimated value

Nickel

Zinc

SW-846 8260C**Laboratory Control Samples:**

LCSY59Q

Estimated value

Ethanol

LCSY63Q

Estimated value

Ethanol

Samples:

SC53161-01 *EFF 60 011719*

SW-846 8260C

Samples:

SC53161-01 *EFF 60 011719*

Estimated value

Acetone
Tetrahydrofuran

SC53161-02 *INF 011719*

Estimated value

Chloroethane
Vinyl Chloride

SC53161-03 *TW-1 011719*

Estimated value

1,1,1-Trichloroethane
Acetone

SC53161-04 *TW-2A 011719*

Estimated value

Chloroethane
Vinyl Chloride

SC53161-05 *TW-3 011719*

Estimated value

1,1-Dichloroethene
Chloroethane
cis-1,2-Dichloroethene

LCSY59Y

Estimated value

Ethanol

LCSY63Y

Estimated value

Ethanol

Sample Acceptance Check Form

Client: AECOM Environment - Latham, NY
Project: Now Corp - Staatsburg, NY / 60276639-1
Work Order: SC53161
Sample(s) received on: 1/18/2019

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Were custody seals present?	☒	☐	☐
Were custody seals intact?	☒	☐	☐
Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	☒	☐	☐
Were samples cooled on ice upon transfer to laboratory representative?	☒	☐	☐
Were sample containers received intact?	☒	☐	☐
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☒	☐	☐
Were samples accompanied by a Chain of Custody document?	☒	☐	☐
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☒	☐	☐
Did sample container labels agree with Chain of Custody document?	☒	☐	☐
Were samples received within method-specific holding times?	☒	☐	☐

Summary of Hits

Lab ID: SC53161-01

Client ID: EFF 60 011719

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Tot. Diss. Solids	250		10	mg/L	SM2540C-11
Barium	0.0694		0.0050	mg/l	SW-846 6010C
Manganese	0.0373		0.0200	mg/l	SW-846 6010C
Acetone	1	J.	20	ug/l	SW-846 8260C
Tetrahydrofuran	1	J.	10	ug/l	SW-846 8260C

Lab ID: SC53161-02

Client ID: INF 011719

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Tot. Diss. Solids	270		10	mg/L	SM2540C-11
Total Suspended Solids	21		5.0	mg/L	SM2540D-11
Barium	0.0706		0.0050	mg/l	SW-846 6010C
Iron	0.393		0.200	mg/l	SW-846 6010C
Manganese	0.492		0.0200	mg/l	SW-846 6010C
Nickel	0.0050	J.	0.0100	mg/l	SW-846 6010C
Zinc	0.0068	J.	0.0200	mg/l	SW-846 6010C
1,1-Dichloroethane	95		1	ug/l	SW-846 8260C
1,1-Dichloroethene	9		1	ug/l	SW-846 8260C
Chloroethane	0.3	J.	1	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	7		1	ug/l	SW-846 8260C
Trichloroethene	190		1	ug/l	SW-846 8260C
Vinyl Chloride	0.4	J.	1	ug/l	SW-846 8260C
1,1,1-Trichloroethane	560		2	ug/l	SW-846 8260C dil

Lab ID: SC53161-03

Client ID: TW-1 011719

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1,1-Trichloroethane	0.6	J.	1	ug/l	SW-846 8260C
1,1-Dichloroethane	19		1	ug/l	SW-846 8260C
1,1-Dichloroethene	4		1	ug/l	SW-846 8260C
Acetone	2	J.	20	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	3		1	ug/l	SW-846 8260C
Trichloroethene	33		1	ug/l	SW-846 8260C

Lab ID: SC53161-04

Client ID: TW-2A 011719

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1-Dichloroethane	84		2	ug/l	SW-846 8260C
1,1-Dichloroethene	6		2	ug/l	SW-846 8260C
Chloroethane	0.5	J.	2	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	9		2	ug/l	SW-846 8260C
Trichloroethene	230		2	ug/l	SW-846 8260C
Vinyl Chloride	0.4	J.	2	ug/l	SW-846 8260C
1,1,1-Trichloroethane	630		20	ug/l	SW-846 8260C dil

Lab ID: SC53161-05

Client ID: TW-3 011719

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1,1-Trichloroethane	14		1	ug/l	SW-846 8260C
1,1-Dichloroethane	6		1	ug/l	SW-846 8260C
1,1-Dichloroethene	1	J.	1	ug/l	SW-846 8260C
Chloroethane	0.4	J.	1	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	0.6	J.	1	ug/l	SW-846 8260C
Trichloroethene	15		1	ug/l	SW-846 8260C

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

Sample Identification

EFF 60 011719

SC53161-01

Client Project #

60276639-1

Matrix

Ground Water

Collection Date/Time

17-Jan-19 12:50

Received

18-Jan-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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Total Metals by EPA 200/6000 Series MethodsPrepared by method General Prep-Metal

Preservation

Field
Preserved;
pH<2
confirmed

N/A

1

EPA 200/6000
methods

18-Jan-19

ABW

1900089

Subcontracted AnalysesPrepared by method E1664A*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*Oil and Grease by EPA
1664A

< 1.5

mg/L

1.5

1.1

E1664A

22-Jan-19
07:4122-Jan-19
07:41

CT007

464252A

Prepared by method SM2540C-11*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*

Tot. Diss. Solids

250

mg/L

10

1

SM2540C-11

21-Jan-19
06:3421-Jan-19
06:34

CT007

464105A

Prepared by method SM2540D-11*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*

Total Suspended Solids

< 5.0

mg/L

5.0

1

SM2540D-11

22-Jan-19
07:3322-Jan-19
07:33

CT007

464260A

Subcontracted AnalysesPrepared by method METHOD*Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670*

57-12-5 Total Cyanide (water)

< 0.010

mg/l

0.010

0.0050

1

EPA 335.4

22-Jan-19
15:1523-Jan-19
15:49

10670

J2210210

Subcontracted AnalysesPrepared by method SW-846 3005A*Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670*

7429-90-5 Aluminum < 0.300 mg/l 0.300 0.153 1 SW-846 6010C 23-Jan-19 07:30 29-Jan-19 17:02 10670 02214044

7440-38-2 Arsenic < 0.0500 mg/l 0.0500 0.0160 1 " " " " "

7440-39-3 Barium 0.0694 mg/l 0.0050 0.0010 1 " " " " "

7440-47-3 Chromium < 0.0150 mg/l 0.0150 0.0053 1 " " " " "

7440-50-8 Copper < 0.0200 mg/l 0.0200 0.0062 1 " " " " "

7439-89-6 Iron < 0.200 mg/l 0.200 0.0400 1 " " " " "

7439-96-5 Manganese 0.0373 mg/l 0.0200 0.0011 1 " " " " "

7440-02-0 Nickel < 0.0100 mg/l 0.0100 0.0031 1 " " " " "

7440-66-6 Zinc < 0.0200 mg/l 0.0200 0.0030 1 " " " " "

Prepared by method METHOD*Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670*

7439-97-6 Mercury < 0.00020 mg/l 0.00020 0.000050 1 SW-846 7470A 24-Jan-19 07:55 28-Jan-19 10:20 10670 02305713

Subcontracted AnalysesPrepared by method SW-846 5030C*Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670*

630-20-6 1,1,1,2-Tetrachloroethane < 1 ug/l 1 0.2 1 SW-846 8260C 29-Jan-19 17:13 29-Jan-19 17:14 10670 190291A

71-55-6 1,1,1-Trichloroethane < 1 ug/l 1 0.3 1 " " " " "

79-34-5 1,1,2,2-Tetrachloroethane < 1 ug/l 1 0.2 1 " " " " "

79-00-5 1,1,2-Trichloroethane < 1 ug/l 1 0.2 1 " " " " "

75-34-3 1,1-Dichloroethane < 1 ug/l 1 0.2 1 " " " " "

75-35-4 1,1-Dichloroethene < 1 ug/l 1 0.2 1 " " " " "

563-58-6 1,1-Dichloropropene < 5 ug/l 5 0.2 1 " " " " "

87-61-6 1,2,3-Trichlorobenzene < 5 ug/l 5 0.4 1 " " " " "

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification

EFF 60 011719

SC53161-01

Client Project #

60276639-1

Matrix

Ground Water

Collection Date/Time

17-Jan-19 12:50

Received

18-Jan-19

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670*

96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	SW-846 8260C	29-Jan-19 17:13	29-Jan-19 17:14	10670	190291A	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	
67-64-1	Acetone	1	J.	ug/l	20	0.7	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	

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Sample Identification

EFF 60 011719

SC53161-01

Client Project #

60276639-1

Matrix

Ground Water

Collection Date/Time

17-Jan-19 12:50

Received

18-Jan-19

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670*

100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	SW-846 8260C	29-Jan-19 17:13	29-Jan-19 17:14	10670	'190291A	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	1	J.	ug/l	10	0.7	1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	

Surrogate recoveries:

17060-07-0	1,2-Dichloroethane-d4	101			80-120 %			"	"	"	"	"	
460-00-4	4-Bromofluorobenzene	96			80-120 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	98			80-120 %			"	"	"	"	"	
2037-26-5	Toluene-d8	99			80-120 %			"	"	"	"	"	

Sample Identification

INF 011719
SC53161-02

Client Project #
60276639-1

Matrix
Ground Water

Collection Date/Time
17-Jan-19 12:40

Received
18-Jan-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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Total Metals by EPA 200/6000 Series MethodsPrepared by method General Prep-Metal

Preservation	Field Preserved; pH<2 confirmed	N/A					1	EPA 200/6000 methods	18-Jan-19		ABW	1900089	
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Subcontracted AnalysesPrepared by method E1664A

Analysis performed by Phoenix Environmental Labs, Inc. * - CT007

Oil and Grease by EPA 1664A	< 1.5	mg/L		1.5			1.1	E1664A	22-Jan-19 07:43	22-Jan-19 07:43	CT007	464252A	
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Prepared by method SM2540C-11

Analysis performed by Phoenix Environmental Labs, Inc. * - CT007

Tot. Diss. Solids	270	mg/L		10			1	SM2540C-11	21-Jan-19 06:35	21-Jan-19 06:35	CT007	464105A	
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Prepared by method SM2540D-11

Analysis performed by Phoenix Environmental Labs, Inc. * - CT007

Total Suspended Solids	21	mg/L		5.0			1	SM2540D-11	22-Jan-19 07:34	22-Jan-19 07:34	CT007	464260A	
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Subcontracted AnalysesPrepared by method METHOD

Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670

57-12-5 Total Cyanide (water)	< 0.010	mg/l		0.010	0.0050		1	EPA 335.4	22-Jan-19 15:15	23-Jan-19 15:51	10670	02210210	
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Subcontracted AnalysesPrepared by method SW-846 3005A

Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670

7440-39-3 Barium	0.0706	mg/l		0.0050	0.0010		1	SW-846 6010C	23-Jan-19 07:30	29-Jan-19 17:02	10670	02214044	
7429-90-5 Aluminum	< 0.300	mg/l		0.300	0.153		1	"	"	29-Jan-19 17:05	"	"	
7440-38-2 Arsenic	< 0.0500	mg/l		0.0500	0.0160		1	"	"	"	"	"	
7440-47-3 Chromium	< 0.0150	mg/l		0.0150	0.0053		1	"	"	"	"	"	
7440-50-8 Copper	< 0.0200	mg/l		0.0200	0.0062		1	"	"	"	"	"	
7439-89-6 Iron	0.393	mg/l		0.200	0.0400		1	"	"	"	"	"	
7439-96-5 Manganese	0.492	mg/l		0.0200	0.0011		1	"	"	"	"	"	
7440-02-0 Nickel	0.0050	mg/l	J.	0.0100	0.0031		1	"	"	"	"	"	
7440-66-6 Zinc	0.0068	mg/l	J.	0.0200	0.0030		1	"	"	"	"	"	

Prepared by method METHOD

Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670

7439-97-6 Mercury	< 0.00020	mg/l		0.00020	0.000050		1	SW-846 7470A	24-Jan-19 07:55	28-Jan-19 10:37	10670	02305713	
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Subcontracted AnalysesPrepared by method SW-846 5030C

Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670

630-20-6 1,1,1,2-Tetrachloroethane	< 1	ug/l		1	0.2		1	SW-846 8260C	30-Jan-19 02:14	30-Jan-19 02:15	10670	190293A	
79-34-5 1,1,2,2-Tetrachloroethane	< 1	ug/l		1	0.2		1	"	"	"	"	"	
79-00-5 1,1,2-Trichloroethane	< 1	ug/l		1	0.2		1	"	"	"	"	"	
75-34-3 1,1-Dichloroethane	95	ug/l		1	0.2		1	"	"	"	"	"	
75-35-4 1,1-Dichloroethene	9	ug/l		1	0.2		1	"	"	"	"	"	
563-58-6 1,1-Dichloropropene	< 5	ug/l		5	0.2		1	"	"	"	"	"	
87-61-6 1,2,3-Trichlorobenzene	< 5	ug/l		5	0.4		1	"	"	"	"	"	

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Sample Identification

INF 011719

SC53161-02

Client Project #

60276639-1

Matrix

Ground Water

Collection Date/Time

17-Jan-19 12:40

Received

18-Jan-19

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Subcontracted Analyses													
<u>Subcontracted Analyses</u>													
<i>Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670</i>													
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	SW-846 8260C	30-Jan-19 02:14	30-Jan-19 02:15	10670	'190293A	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	"
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	"
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	"
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	"
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-00-3	Chloroethane	0.3	J.	ug/l	1	0.2	1	"	"	"	"	"	"
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	7		ug/l	1	0.2	1	"	"	"	"	"	"
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	"
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"

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Sample Identification

INF 011719

SC53161-02

Client Project #

60276639-1

Matrix

Ground Water

Collection Date/Time

17-Jan-19 12:40

Received

18-Jan-19

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670*

100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	SW-846 8260C	30-Jan-19 02:14	30-Jan-19 02:15	10670	'190293A	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	
79-01-6	Trichloroethene	190		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	0.4	J.	ug/l	1	0.2	1	"	"	"	"	"	

Surrogate recoveries:

17060-07-0	1,2-Dichloroethane-d4	101			80-120 %			"	"	"	"	"	
460-00-4	4-Bromofluorobenzene	96			80-120 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	104			80-120 %			"	"	"	"	"	
2037-26-5	Toluene-d8	99			80-120 %			"	"	"	"	"	

Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670

71-55-6	1,1,1-Trichloroethane	560		ug/l	2	0.6	2	SW-846 8260C dil	29-Jan-19 20:11	29-Jan-19 20:12	10670	'190291A	
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Sample Identification

TW-1 011719

SC53161-03

Client Project #

60276639-1

Matrix

Ground Water

Collection Date/Time

17-Jan-19 12:35

Received

18-Jan-19

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
Subcontracted Analyses													
Subcontracted Analyses													
Prepared by method SW-846.5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846.8260C	29-Jan-19 17:35	29-Jan-19 17:36	10670	'190291A	
71-55-6	1,1,1-Trichloroethane	0.6	J.	ug/l	1	0.3	1	"	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	19		ug/l	1	0.2	1	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	4		ug/l	1	0.2	1	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	"
67-64-1	Acetone	2	J.	ug/l	20	0.7	1	"	"	"	"	"	"
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	"
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	"
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"

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Sample Identification

TW-1 011719

SC53161-03

Client Project #

60276639-1

Matrix

Ground Water

Collection Date/Time

17-Jan-19 12:35

Received

18-Jan-19

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670*

156-59-2	cis-1,2-Dichloroethene	3		ug/l	1	0.2	1	SW-846 8260C	29-Jan-19 17:35	29-Jan-19 17:36	10670	190291A	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	
79-01-6	Trichloroethene	33		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	

Surrogate recoveries:

17060-07-0	1,2-Dichloroethane-d4	101			80-120 %			"	"	"	"	"	
460-00-4	4-Bromofluorobenzene	96			80-120 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	98			80-120 %			"	"	"	"	"	
2037-26-5	Toluene-d8	99			80-120 %			"	"	"	"	"	

Sample Identification

TW-2A 011719

SC53161-04

Client Project #

60276639-1

Matrix

Ground Water

Collection Date/Time

17-Jan-19 12:45

Received

18-Jan-19

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
Subcontracted Analyses													
Subcontracted Analyses													
Prepared by method SW-846.5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
630-20-6	1,1,1,2-Tetrachloroethane	< 2		ug/l	2	0.4	2	SW-846.8260C	30-Jan-19 02:36	30-Jan-19 02:37	10670	'190293A	
79-34-5	1,1,2,2-Tetrachloroethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	84		ug/l	2	0.4	2	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	6		ug/l	2	0.4	2	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	< 10		ug/l	10	0.8	2	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 10		ug/l	10	0.6	2	"	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	< 10		ug/l	10	2	2	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	< 10		ug/l	10	0.6	2	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
107-06-2	1,2-Dichloroethane	< 2		ug/l	2	0.6	2	"	"	"	"	"	"
78-87-5	1,2-Dichloropropane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
108-70-3	1,3,5-Trichlorobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	< 10		ug/l	10	0.6	2	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
123-91-1	1,4-Dioxane	< 500		ug/l	500	58	2	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 2		ug/l	2	0.6	2	"	"	"	"	"	"
78-93-3	2-Butanone	< 20		ug/l	20	0.6	2	"	"	"	"	"	"
95-49-8	2-Chlorotoluene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
591-78-6	2-Hexanone	< 20		ug/l	20	0.6	2	"	"	"	"	"	"
106-43-4	4-Chlorotoluene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone	< 20		ug/l	20	1	2	"	"	"	"	"	"
67-64-1	Acetone	< 40		ug/l	40	1	2	"	"	"	"	"	"
107-13-1	Acrylonitrile	< 40		ug/l	40	0.6	2	"	"	"	"	"	"
71-43-2	Benzene	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
108-86-1	Bromobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
74-97-5	Bromochloromethane	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
75-25-2	Bromoform	< 8		ug/l	8	0.4	2	"	"	"	"	"	"
74-83-9	Bromomethane	< 2		ug/l	2	0.6	2	"	"	"	"	"	"
75-15-0	Carbon Disulfide	< 10		ug/l	10	0.4	2	"	"	"	"	"	"
56-23-5	Carbon Tetrachloride	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
75-00-3	Chloroethane	0.5	J.	ug/l	2	0.4	2	"	"	"	"	"	"
67-66-3	Chloroform	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
74-87-3	Chloromethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	"
156-59-2	cis-1,2-Dichloroethene	9		ug/l	2	0.4	2	"	"	"	"	"	"

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Sample Identification

TW-2A 011719

SC53161-04

Client Project #

60276639-1

Matrix

Ground Water

Collection Date/Time

17-Jan-19 12:45

Received

18-Jan-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670*

10061-01-5	cis-1,3-Dichloropropene	< 2		ug/l	2	0.4	2	SW-846 8260C	30-Jan-19 02:36	30-Jan-19 02:37	10670	'190293A	
124-48-1	Dibromochloromethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	
74-95-3	Dibromomethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 2		ug/l	2	0.4	2	"	"	"	"	"	
64-17-5	Ethanol	< 1500		ug/l	1500	560	2	"	"	"	"	"	
60-29-7	Ethyl ether	< 10		ug/l	10	0.4	2	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 2		ug/l	2	0.4	2	"	"	"	"	"	
100-41-4	Ethylbenzene	< 2		ug/l	2	0.8	2	"	"	"	"	"	
76-13-1	Freon 113	< 20		ug/l	20	0.4	2	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 10		ug/l	10	1	2	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 10		ug/l	10	2	2	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 2		ug/l	2	0.4	2	"	"	"	"	"	
75-09-2	Methylene Chloride	< 2		ug/l	2	0.6	2	"	"	"	"	"	
91-20-3	Naphthalene	< 10		ug/l	10	2	2	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	
95-47-6	o-Xylene	< 2		ug/l	2	0.8	2	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 10		ug/l	10	0.4	2	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	
100-42-5	Styrene	< 10		ug/l	10	0.4	2	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 10		ug/l	10	2	2	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 100		ug/l	100	24	2	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 10		ug/l	10	0.6	2	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 2		ug/l	2	0.4	2	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 20		ug/l	20	1	2	"	"	"	"	"	
108-88-3	Toluene	< 2		ug/l	2	0.4	2	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 2		ug/l	2	0.4	2	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 2		ug/l	2	0.4	2	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 100		ug/l	100	12	2	"	"	"	"	"	
79-01-6	Trichloroethene	230		ug/l	2	0.4	2	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	
75-01-4	Vinyl Chloride	0.4	J.	ug/l	2	0.4	2	"	"	"	"	"	

Surrogate recoveries:

17060-07-0	1,2-Dichloroethane-d4	102			80-120 %			"	"	"	"	"	
460-00-4	4-Bromofluorobenzene	95			80-120 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	102			80-120 %			"	"	"	"	"	
2037-26-5	Toluene-d8	99			80-120 %			"	"	"	"	"	

Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670

71-55-6	1,1,1-Trichloroethane	630		ug/l	20	6	20	SW-846 8260C dil	30-Jan-19 02:58	30-Jan-19 02:59	10670	"	
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Sample Identification

TW-3 011719

SC53161-05

Client Project #

60276639-1

Matrix

Ground Water

Collection Date/Time

17-Jan-19 12:43

Received

18-Jan-19

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
Subcontracted Analyses													
Subcontracted Analyses													
Prepared by method SW-846.5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	30-Jan-19 03:20	30-Jan-19 03:21	10670	'190293A	
71-55-6	1,1,1-Trichloroethane	14		ug/l	1	0.3	1	"	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	6		ug/l	1	0.2	1	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	1	J.	ug/l	1	0.2	1	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloroprop ane	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	"
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	"
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	"
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	"
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-00-3	Chloroethane	0.4	J.	ug/l	1	0.2	1	"	"	"	"	"	"
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"

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Sample Identification

TW-3 011719

SC53161-05

Client Project #

60276639-1

Matrix

Ground Water

Collection Date/Time

17-Jan-19 12:43

Received

18-Jan-19

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670*

156-59-2	cis-1,2-Dichloroethene	0.6	J.	ug/l	1	0.2	1	SW-846 8260C	30-Jan-19 03:20	30-Jan-19 03:21	10670	'190293A	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	"
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	"
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	"
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	"
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	"
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	"
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	"
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	"
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	"
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	"
79-01-6	Trichloroethene	15		ug/l	1	0.2	1	"	"	"	"	"	"
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"

Surrogate recoveries:

17060-07-0	1,2-Dichloroethane-d4	102			80-120 %			"	"	"	"	"	"
460-00-4	4-Bromofluorobenzene	95			80-120 %			"	"	"	"	"	"
1868-53-7	Dibromofluoromethane	98			80-120 %			"	"	"	"	"	"
2037-26-5	Toluene-d8	99			80-120 %			"	"	"	"	"	"

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Sample Identification

TB 011719

SC53161-06

Client Project #

60276639-1

Matrix

Trip Blank

Collection Date/Time

17-Jan-19 00:00

Received

18-Jan-19

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
Subcontracted Analyses													
Subcontracted Analyses													
Prepared by method SW-846.5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846.8260C	30-Jan-19 00:46	30-Jan-19 00:47	10670	'190293A	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	"
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	"
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	"
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	"
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	"
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	"
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	"
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	"
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	"
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	"
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	"
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	"
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	"

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Sample Identification

TB 011719

SC53161-06

Client Project #

60276639-1

Matrix

Trip Blank

Collection Date/Time

17-Jan-19 00:00

Received

18-Jan-19

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
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Subcontracted AnalysesSubcontracted Analyses*Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670*

156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	SW-846 8260C	30-Jan-19 00:46	30-Jan-19 00:47	10670	'190293A	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	

Surrogate recoveries:

17060-07-0	1,2-Dichloroethane-d4	101			80-120 %			"	"	"	"	"	
460-00-4	4-Bromofluorobenzene	95			80-120 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	96			80-120 %			"	"	"	"	"	
2037-26-5	Toluene-d8	99			80-120 %			"	"	"	"	"	

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>E1664A</u>										
Batch 464252A - E1664A										
<u>BLK (CC32008-BLK)</u>				<u>Source: SC53161-01</u>		<u>Prepared & Analyzed: 22-Jan-19</u>				
Oil and Grease by EPA 1664A	< 1.4	c1	mg/L	1.4	40	BRL	BRL	-		
<u>LCS (CC32008-LCS)</u>				<u>Source: SC53161-01</u>		<u>Prepared & Analyzed: 22-Jan-19</u>				
Oil and Grease by EPA 1664A	38.50	c1	mg/L	1.4	40	BRL	96	85-115		20
<u>LCSD (CC32008-LCSD)</u>				<u>Source: SC53161-01</u>		<u>Prepared & Analyzed: 22-Jan-19</u>				
Oil and Grease by EPA 1664A	38.30	c1	mg/L	1.4	40	BRL	96	85-115	0.0	20
<u>SM2540C-11</u>										
Batch 464105A - SM2540C-11										
<u>BLK (CC31274-BLK)</u>				<u>Source: CC31274</u>		<u>Prepared & Analyzed: 21-Jan-19</u>				
Tot. Diss. Solids	< 10		mg/L	10	207	BRL	-			
<u>DUP (CC31274-DUP)</u>				<u>Source: CC31274</u>		<u>Prepared & Analyzed: 21-Jan-19</u>				
Tot. Diss. Solids	120		mg/L	10	207		-		8.0	20
<u>LCS (CC31274-LCS)</u>				<u>Source: CC31274</u>		<u>Prepared & Analyzed: 21-Jan-19</u>				
Tot. Diss. Solids	199.0		mg/L	10	207		96	85-115		20
<u>SM2540D-11</u>										
Batch 464260A - SM2540D-11										
<u>BLK (CC32009-BLK)</u>				<u>Source: SC53161-02</u>		<u>Prepared & Analyzed: 22-Jan-19</u>				
Total Suspended Solids	< 5.0		mg/L	5.0	61.3	BRL	-			
<u>DUP (CC32009-DUP)</u>				<u>Source: SC53161-02</u>		<u>Prepared & Analyzed: 22-Jan-19</u>				
Total Suspended Solids	19		mg/L	5.0	61.3		-			20
<u>LCS (CC32009-LCS)</u>				<u>Source: SC53161-02</u>		<u>Prepared & Analyzed: 22-Jan-19</u>				
Total Suspended Solids	58.00		mg/L	5.0	61.3		95	85-115		20

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>EPA 335.4</u>										
Batch 19022102101B - METHOD										
<u>Blank (P02202ABB)</u>	<u>Prepared: 22-Jan-19 Analyzed: 23-Jan-19</u>									
Total Cyanide (water)	< 0.010		mg/l	0.010				-		
<u>LCS (P02202AQQ)</u>	<u>Prepared: 22-Jan-19 Analyzed: 23-Jan-19</u>									
Total Cyanide (water)	0.18		mg/l	0.010	0.20		92	90-110		
<u>Laboratory Dup (P971152D271552B)</u>	<u>Source: SC53161-02 Prepared: 22-Jan-19 Analyzed: 23-Jan-19</u>									
Total Cyanide (water)	< 0.010		mg/l	0.010		BRL		-	0	20
<u>Matrix Spike (P971152R271553B)</u>	<u>Source: SC53161-02 Prepared: 22-Jan-19 Analyzed: 23-Jan-19</u>									
Total Cyanide (water)	0.19		mg/l	0.010	0.20	BRL	97	90-110		
<u>SW-846 6010C</u>										
Batch 190221404406 - SW-846 3005A										
<u>Blank (P02204FBB)</u>	<u>Prepared: 23-Jan-19 Analyzed: 29-Jan-19</u>									
Iron	< 0.200		mg/l	0.200				-		
Zinc	< 0.0200		mg/l	0.0200				-		
Nickel	< 0.0100		mg/l	0.0100				-		
Manganese	< 0.0200		mg/l	0.0200				-		
Copper	< 0.0200		mg/l	0.0200				-		
Chromium	< 0.0150		mg/l	0.0150				-		
Barium	< 0.0050		mg/l	0.0050				-		
Aluminum	< 0.300		mg/l	0.300				-		
Arsenic	< 0.0500		mg/l	0.0500				-		
<u>LCS (P02204FQQ)</u>	<u>Prepared: 23-Jan-19 Analyzed: 29-Jan-19</u>									
Manganese	0.513		mg/l	0.0200	0.500		103	90-112		
Iron	0.950		mg/l	0.200	1.00		95	85-115		
Zinc	0.493		mg/l	0.0200	0.500		99	89-111		
Aluminum	1.98		mg/l	0.300	2.00		99	80-120		
Chromium	0.200		mg/l	0.0150	0.200		100	87-110		
Nickel	0.514		mg/l	0.0100	0.500		103	90-114		
Barium	2.00		mg/l	0.0050	2.00		100	87-111		
Arsenic	0.148		mg/l	0.0500	0.150		99	80-120		
Copper	0.256		mg/l	0.0200	0.250		103	90-115		
<u>SW-846 7470A</u>										
Batch 190230571309 - METHOD										
<u>Blank (P02371IBB)</u>	<u>Prepared: 24-Jan-19 Analyzed: 28-Jan-19</u>									
Mercury	< 0.00020		mg/l	0.00020				-		
<u>LCS (P02371IQQ)</u>	<u>Prepared: 24-Jan-19 Analyzed: 28-Jan-19</u>									
Mercury	0.00088		mg/l	0.00020	0.0010		88	80-114		
<u>Laboratory Dup (P971151D221022)</u>	<u>Source: SC53161-01 Prepared: 24-Jan-19 Analyzed: 28-Jan-19</u>									
Mercury	< 0.00020		mg/l	0.00020		BRL		-	0	20
<u>Matrix Spike Dup (P971151M221031)</u>	<u>Source: SC53161-01 Prepared: 24-Jan-19 Analyzed: 28-Jan-19</u>									
Mercury	0.00087		mg/l	0.00020	0.0010	BRL	87	80-120	2	20
<u>Matrix Spike (P971151R221029)</u>	<u>Source: SC53161-01 Prepared: 24-Jan-19 Analyzed: 28-Jan-19</u>									
Mercury	0.00085		mg/l	0.00020	0.0010	BRL	85	80-120		
<u>SW-846 8260C</u>										
Batch Y190291AA - SW-846 5030C										
<u>LCS (LCSY58Q)</u>	<u>Prepared & Analyzed: 29-Jan-19</u>									
di-Isopropyl ether	21		ug/l	1	20		106	70-124		
Freon 113	22		ug/l	10	20		112	73-139		
Ethylbenzene	21		ug/l	1	20		105	80-120		
Ethyl t-butyl ether	20		ug/l	1	20		98	68-121		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW-846 8260C</u>										
Batch Y190291AA - SW-846 5030C										
<u>LCS (LCSY58Q)</u>	<u>Prepared & Analyzed: 29-Jan-19</u>									
Isopropylbenzene	21		ug/l	5	20		106	80-120		
Ethyl ether	21		ug/l	5	20		104	59-141		
m+p-Xylene	42		ug/l	5	40		106	80-120		
Hexachlorobutadiene	20		ug/l	5	20		99	63-120		
Dichlorodifluoromethane	11		ug/l	1	20		57	41-127		
Dibromomethane	21		ug/l	1	20		104	80-120		
Dibromochloromethane	20		ug/l	1	20		99	71-120		
cis-1,2-Dichloroethene	22		ug/l	1	20		108	80-120		
Chloromethane	15		ug/l	1	20		74	56-121		
Chloroform	21		ug/l	1	20		107	80-120		
Chloroethane	15		ug/l	1	20		77	55-123		
Methyl Tertiary Butyl Ether	20		ug/l	1	20		99	69-122		
Trichlorofluoromethane	17		ug/l	1	20		83	55-135		
cis-1,3-Dichloropropene	21		ug/l	1	20		103	75-120		
t-Amyl methyl ether	20		ug/l	5	20		101	66-120		
1,3-Dichloropropane	21		ug/l	1	20		105	80-120		
Trichloroethene	21		ug/l	1	20		107	80-120		
Chlorobenzene	21		ug/l	1	20		106	80-120		
trans-1,3-Dichloropropene	20		ug/l	1	20		98	67-120		
trans-1,2-Dichloroethene	22		ug/l	1	20		108	80-120		
Tetrahydrofuran	100		ug/l	10	100		100	54-144		
trans-1,4-Dichloro-2-butene	110		ug/l	50	100		106	33-143		
t-Butyl alcohol	190		ug/l	50	200		94	60-130		
Methylene Chloride	21		ug/l	1	20		106	80-120		
Styrene	21		ug/l	5	20		104	80-120		
sec-Butylbenzene	21		ug/l	5	20		106	77-120		
p-Isopropyltoluene	21		ug/l	5	20		105	76-120		
o-Xylene	21		ug/l	1	20		104	80-120		
n-Propylbenzene	22		ug/l	5	20		108	79-121		
n-Butylbenzene	21		ug/l	5	20		103	76-120		
Naphthalene	20		ug/l	5	20		101	53-124		
tert-Butylbenzene	20		ug/l	5	20		102	78-120		
1,2,3-Trichlorobenzene	20		ug/l	5	20		101	66-120		
1,3,5-Trichlorobenzene	20		ug/l	5	20		101	66-123		
1,2-Dichloropropane	22		ug/l	1	20		110	80-120		
1,2-Dichloroethane	22		ug/l	1	20		108	73-124		
1,2-Dichlorobenzene	21		ug/l	5	20		104	80-120		
1,2-Dibromoethane	21		ug/l	1	20		104	77-120		
1,2-Dibromo-3-chloropropane	19		ug/l	5	20		95	47-131		
1,2,4-Trimethylbenzene	21		ug/l	5	20		104	75-120		
1,4-Dioxane	520		ug/l	250	500		103	63-146		
1,2,3-Trichloropropane	21		ug/l	5	20		103	75-124		
Toluene	21		ug/l	1	20		104	80-120		
1,1-Dichloropropene	21		ug/l	5	20		107	78-120		
1,1-Dichloroethene	22		ug/l	1	20		112	80-131		
1,1-Dichloroethane	21		ug/l	1	20		106	80-120		
1,1,2-Trichloroethane	22		ug/l	1	20		109	80-120		
1,1,2,2-Tetrachloroethane	21		ug/l	1	20		105	72-120		
1,1,1-Trichloroethane	21		ug/l	1	20		105	67-126		
1,1,1,2-Tetrachloroethane	20		ug/l	1	20		101	78-120		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW-846 8260C</u>										
Batch Y190291AA - SW-846 5030C										
<u>LCS (LCSY58Q)</u>					<u>Prepared & Analyzed: 29-Jan-19</u>					
1,2,4-Trichlorobenzene	20		ug/l	5	20		100	63-120		
4-Methyl-2-pentanone	100		ug/l	10	100		100	62-133		
Carbon Disulfide	19		ug/l	5	20		93	65-128		
Bromomethane	15		ug/l	1	20		73	53-128		
Bromoform	17		ug/l	4	20		84	51-120		
Bromodichloromethane	20		ug/l	1	20		100	71-120		
Bromochloromethane	19		ug/l	5	20		96	80-120		
Bromobenzene	21		ug/l	5	20		104	80-120		
Benzene	21		ug/l	1	20		107	80-120		
1,3,5-Trimethylbenzene	21		ug/l	5	20		104	75-120		
Acetone	180		ug/l	20	150		119	54-157		
1,3-Dichlorobenzene	20		ug/l	5	20		102	80-120		
4-Chlorotoluene	21		ug/l	5	20		103	80-120		
2-Hexanone	91		ug/l	10	100		91	56-135		
2-Chlorotoluene	21		ug/l	5	20		103	80-120		
2-Butanone	140		ug/l	10	150		96	59-135		
2,2-Dichloropropane	20		ug/l	1	20		100	55-142		
Vinyl Chloride	16		ug/l	1	20		78	56-120		
1,4-Dichlorobenzene	21		ug/l	5	20		104	80-120		
Carbon Tetrachloride	21		ug/l	1	20		103	64-134		
Acrylonitrile	96		ug/l	20	100		96	60-129		
Tetrachloroethene	21		ug/l	1	20		106	80-120		
Surrogate: Toluene-d8	50		ug/l		50	50	101	80-120		
Surrogate: 1,2-Dichloroethane-d4	51		ug/l		50	51	101	80-120		
Surrogate: 4-Bromofluorobenzene	50		ug/l		50	50	100	80-120		
Surrogate: Dibromofluoromethane	49		ug/l		50	49	98	80-120		
<u>LCSD (LCSY58Y)</u>					<u>Prepared & Analyzed: 29-Jan-19</u>					
Trichlorofluoromethane	16		ug/l	1	20		81	55-135	2	30
Vinyl Chloride	15		ug/l	1	20		77	56-120	2	30
1,1,1,2-Tetrachloroethane	20		ug/l	1	20		100	78-120	1	30
1,1,2,2-Tetrachloroethane	21		ug/l	1	20		105	72-120	1	30
1,1-Dichloroethane	21		ug/l	1	20		105	80-120	1	30
1,1-Dichloroethene	23		ug/l	1	20		113	80-131	1	30
1,1-Dichloropropene	22		ug/l	5	20		108	78-120	1	30
1,2,3-Trichlorobenzene	20		ug/l	5	20		102	66-120	1	30
1,2,3-Trichloropropane	21		ug/l	5	20		105	75-124	2	30
Trichloroethene	21		ug/l	1	20		106	80-120	1	30
1,2,4-Trimethylbenzene	21		ug/l	5	20		104	75-120	1	30
Toluene	21		ug/l	1	20		104	80-120	0	30
1,2-Dibromo-3-chloropropane	19		ug/l	5	20		96	47-131	1	30
1,2-Dibromoethane	21		ug/l	1	20		104	77-120	0	30
1,2-Dichlorobenzene	21		ug/l	5	20		105	80-120	1	30
1,2-Dichloroethane	21		ug/l	1	20		107	73-124	1	30
1,2-Dichloropropane	22		ug/l	1	20		109	80-120	1	30
1,2,4-Trichlorobenzene	21		ug/l	5	20		103	63-120	2	30
t-Amyl methyl ether	20		ug/l	5	20		102	66-120	1	30
Methylene Chloride	22		ug/l	1	20		108	80-120	2	30
Naphthalene	21		ug/l	5	20		104	53-124	3	30
n-Butylbenzene	21		ug/l	5	20		105	76-120	2	30
n-Propylbenzene	22		ug/l	5	20		109	79-121	1	30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW-846 8260C</u>										
Batch Y190291AA - SW-846 5030C										
<u>LCSD (LCSY58Y)</u>	<u>Prepared & Analyzed: 29-Jan-19</u>									
o-Xylene	21		ug/l	1	20		103	80-120	1	30
p-Isopropyltoluene	21		ug/l	5	20		106	76-120	1	30
trans-1,3-Dichloropropene	19		ug/l	1	20		97	67-120	2	30
Styrene	21		ug/l	5	20		104	80-120	1	30
trans-1,4-Dichloro-2-butene	110		ug/l	50	100		106	33-143	0	30
t-Butyl alcohol	200		ug/l	50	200		98	60-130	4	30
tert-Butylbenzene	21		ug/l	5	20		104	78-120	2	30
Tetrachloroethene	21		ug/l	1	20		105	80-120	1	30
Tetrahydrofuran	93		ug/l	10	100		93	54-144	7	30
1,1,2-Trichloroethane	22		ug/l	1	20		108	80-120	1	30
trans-1,2-Dichloroethene	22		ug/l	1	20		109	80-120	1	30
1,3,5-Trichlorobenzene	20		ug/l	5	20		102	66-123	1	30
sec-Butylbenzene	21		ug/l	5	20		107	77-120	1	30
Dibromomethane	21		ug/l	1	20		104	80-120	0	30
Bromoform	17		ug/l	4	20		83	51-120	2	30
Bromomethane	13		ug/l	1	20		63	53-128	14	30
Carbon Disulfide	19		ug/l	5	20		94	65-128	1	30
Carbon Tetrachloride	20		ug/l	1	20		102	64-134	1	30
Chlorobenzene	21		ug/l	1	20		104	80-120	1	30
Chloroethane	14		ug/l	1	20		71	55-123	8	30
Chloroform	21		ug/l	1	20		106	80-120	1	30
Chloromethane	14		ug/l	1	20		72	56-121	2	30
1,3,5-Trimethylbenzene	21		ug/l	5	20		105	75-120	1	30
Bromodichloromethane	20		ug/l	1	20		100	71-120	0	30
1,1,1-Trichloroethane	21		ug/l	1	20		104	67-126	1	30
cis-1,2-Dichloroethene	22		ug/l	1	20		108	80-120	1	30
Dichlorodifluoromethane	12		ug/l	1	20		58	41-127	2	30
di-Isopropyl ether	21		ug/l	1	20		107	70-124	1	30
Ethyl ether	21		ug/l	5	20		104	59-141	0	30
Ethyl t-butyl ether	20		ug/l	1	20		99	68-121	2	30
Ethylbenzene	21		ug/l	1	20		104	80-120	1	30
Freon 113	23		ug/l	10	20		113	73-139	1	30
Hexachlorobutadiene	20		ug/l	5	20		102	63-120	3	30
Isopropylbenzene	21		ug/l	5	20		105	80-120	1	30
m+p-Xylene	42		ug/l	5	40		105	80-120	1	30
Methyl Tertiary Butyl Ether	20		ug/l	1	20		100	69-122	0	30
cis-1,3-Dichloropropene	21		ug/l	1	20		103	75-120	1	30
2-Hexanone	90		ug/l	10	100		90	56-135	1	30
1,3-Dichloropropane	21		ug/l	1	20		106	80-120	1	30
1,3-Dichlorobenzene	21		ug/l	5	20		103	80-120	1	30
Dibromochloromethane	19		ug/l	1	20		97	71-120	2	30
Bromochloromethane	19		ug/l	5	20		95	80-120	1	30
1,4-Dioxane	540		ug/l	250	500		109	63-146	5	30
2,2-Dichloropropane	20		ug/l	1	20		100	55-142	0	30
2-Butanone	140		ug/l	10	150		95	59-135	1	30
2-Chlorotoluene	21		ug/l	5	20		103	80-120	0	30
1,4-Dichlorobenzene	21		ug/l	5	20		104	80-120	1	30
4-Chlorotoluene	21		ug/l	5	20		103	80-120	0	30
4-Methyl-2-pentanone	100		ug/l	10	100		100	62-133	0	30
Acrylonitrile	96		ug/l	20	100		96	60-129	0	30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW-846 8260C</u>										
Batch Y190291AA - SW-846 5030C										
<u>LCSD (LCSY58Y)</u>					<u>Prepared & Analyzed: 29-Jan-19</u>					
Benzene	21		ug/l	1	20		106	80-120	1	30
Bromobenzene	21		ug/l	5	20		104	80-120	0	30
Acetone	170		ug/l	20	150		117	54-157	2	30
Surrogate: Dibromofluoromethane	49		ug/l		50	49	99	80-120		
Surrogate: Toluene-d8	50		ug/l		50	50	100	80-120		
Surrogate: 1,2-Dichloroethane-d4	52		ug/l		50	52	103	80-120		
Surrogate: 4-Bromofluorobenzene	50		ug/l		50	50	99	80-120		
<u>LCS (LCSY59Q)</u>					<u>Prepared & Analyzed: 29-Jan-19</u>					
Ethanol	480	J.	ug/l	750	500		97	31-180		
<u>LCSD (LCSY59Y)</u>					<u>Prepared & Analyzed: 29-Jan-19</u>					
Ethanol	500	J.	ug/l	750	500		101	31-180	4	30
<u>Blank (VBLKY58B)</u>					<u>Prepared & Analyzed: 29-Jan-19</u>					
1,2-Dichlorobenzene	< 5		ug/l	5				-		
1,2-Dichloroethane	< 1		ug/l	1				-		
2-Butanone	< 10		ug/l	10				-		
1,2-Dichloropropane	< 1		ug/l	1				-		
1,3,5-Trichlorobenzene	< 5		ug/l	5				-		
2,2-Dichloropropane	< 1		ug/l	1				-		
1,4-Dioxane	< 250		ug/l	250				-		
1,4-Dichlorobenzene	< 5		ug/l	5				-		
1,2-Dibromoethane	< 1		ug/l	1				-		
1,3-Dichloropropane	< 1		ug/l	1				-		
1,3-Dichlorobenzene	< 5		ug/l	5				-		
1,3,5-Trimethylbenzene	< 5		ug/l	5				-		
1,2-Dibromo-3-chloropropane	< 5		ug/l	5				-		
1,2,4-Trimethylbenzene	< 5		ug/l	5				-		
1,2,4-Trichlorobenzene	< 5		ug/l	5				-		
1,2,3-Trichloropropane	< 5		ug/l	5				-		
1,2,3-Trichlorobenzene	< 5		ug/l	5				-		
1,1-Dichloropropene	< 5		ug/l	5				-		
Vinyl Chloride	< 1		ug/l	1				-		
1,1-Dichloroethane	< 1		ug/l	1				-		
Hexachlorobutadiene	< 5		ug/l	5				-		
2-Chlorotoluene	< 5		ug/l	5				-		
1,1,1,2-Tetrachloroethane	< 1		ug/l	1				-		
1,1,1-Trichloroethane	< 1		ug/l	1				-		
1,1,2,2-Tetrachloroethane	< 1		ug/l	1				-		
1,1,2-Trichloroethane	< 1		ug/l	1				-		
1,1-Dichloroethene	< 1		ug/l	1				-		
Styrene	< 5		ug/l	5				-		
Ethylbenzene	< 1		ug/l	1				-		
Freon 113	< 10		ug/l	10				-		
Isopropylbenzene	< 5		ug/l	5				-		
m+p-Xylene	< 5		ug/l	5				-		
Methyl Tertiary Butyl Ether	< 1		ug/l	1				-		
Methylene Chloride	< 1		ug/l	1				-		
Naphthalene	< 5		ug/l	5				-		
n-Butylbenzene	< 5		ug/l	5				-		
n-Propylbenzene	< 5		ug/l	5				-		
o-Xylene	< 1		ug/l	1				-		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW-846 8260C</u>										
Batch Y190291AA - SW-846 5030C										
<u>Blank (VBLKY58B)</u>	<u>Prepared & Analyzed: 29-Jan-19</u>									
Ethyl ether	< 5		ug/l	5				-		
sec-Butylbenzene	< 5		ug/l	5				-		
Ethanol	< 750		ug/l	750				-		
t-Amyl methyl ether	< 5		ug/l	5				-		
t-Butyl alcohol	< 50		ug/l	50				-		
tert-Butylbenzene	< 5		ug/l	5				-		
Tetrachloroethene	< 1		ug/l	1				-		
Tetrahydrofuran	< 10		ug/l	10				-		
Toluene	< 1		ug/l	1				-		
trans-1,2-Dichloroethene	< 1		ug/l	1				-		
trans-1,3-Dichloropropene	< 1		ug/l	1				-		
trans-1,4-Dichloro-2-butene	< 50		ug/l	50				-		
Trichloroethene	< 1		ug/l	1				-		
Trichlorofluoromethane	< 1		ug/l	1				-		
p-Isopropyltoluene	< 5		ug/l	5				-		
Carbon Tetrachloride	< 1		ug/l	1				-		
4-Chlorotoluene	< 5		ug/l	5				-		
4-Methyl-2-pentanone	< 10		ug/l	10				-		
Acetone	< 20		ug/l	20				-		
Acrylonitrile	< 20		ug/l	20				-		
Benzene	< 1		ug/l	1				-		
Bromobenzene	< 5		ug/l	5				-		
Bromochloromethane	< 5		ug/l	5				-		
Bromodichloromethane	< 1		ug/l	1				-		
Bromoform	< 4		ug/l	4				-		
Ethyl t-butyl ether	< 1		ug/l	1				-		
Carbon Disulfide	< 5		ug/l	5				-		
2-Hexanone	< 10		ug/l	10				-		
Dibromochloromethane	< 1		ug/l	1				-		
Chloroethane	< 1		ug/l	1				-		
Chloroform	< 1		ug/l	1				-		
Chloromethane	< 1		ug/l	1				-		
cis-1,2-Dichloroethene	< 1		ug/l	1				-		
cis-1,3-Dichloropropene	< 1		ug/l	1				-		
Chlorobenzene	< 1		ug/l	1				-		
di-Isopropyl ether	< 1		ug/l	1				-		
Bromomethane	< 1		ug/l	1				-		
Dichlorodifluoromethane	< 1		ug/l	1				-		
Dibromomethane	< 1		ug/l	1				-		
Surrogate: 4-Bromofluorobenzene	47		ug/l		50	47	95	80-120		
Surrogate: Dibromofluoromethane	48		ug/l		50	48	97	80-120		
Surrogate: 1,2-Dichloroethane-d4	51		ug/l		50	51	101	80-120		
Surrogate: Toluene-d8	50		ug/l		50	50	99	80-120		
Batch Y190293AA - SW-846 5030C										
<u>LCS (LCSY62Q)</u>	<u>Prepared & Analyzed: 29-Jan-19</u>									
1,1-Dichloroethene	22		ug/l	1	20		110	80-131		
Chloroethane	16		ug/l	1	20		80	55-123		
Ethylbenzene	21		ug/l	1	20		103	80-120		
Ethyl t-butyl ether	18		ug/l	1	20		91	68-121		
Ethyl ether	20		ug/l	5	20		101	59-141		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW-846 8260C</u>										
Batch Y190293AA - SW-846 5030C										
<u>LCS (LCSY62Q)</u>	<u>Prepared & Analyzed: 29-Jan-19</u>									
di-Isopropyl ether	20		ug/l	1	20		101	70-124		
Dichlorodifluoromethane	15		ug/l	1	20		74	41-127		
Dibromomethane	21		ug/l	1	20		103	80-120		
Dibromochloromethane	18		ug/l	1	20		92	71-120		
cis-1,3-Dichloropropene	19		ug/l	1	20		95	75-120		
cis-1,2-Dichloroethene	21		ug/l	1	20		106	80-120		
Acetone	150		ug/l	20	150		97	54-157		
Chloroform	21		ug/l	1	20		104	80-120		
Isopropylbenzene	21		ug/l	5	20		104	80-120		
Chlorobenzene	21		ug/l	1	20		104	80-120		
Carbon Tetrachloride	20		ug/l	1	20		98	64-134		
Carbon Disulfide	17		ug/l	5	20		85	65-128		
Bromomethane	16		ug/l	1	20		79	53-128		
Bromoform	15		ug/l	4	20		76	51-120		
Bromodichloromethane	19		ug/l	1	20		96	71-120		
Bromochloromethane	19		ug/l	5	20		95	80-120		
Bromobenzene	20		ug/l	5	20		101	80-120		
Benzene	21		ug/l	1	20		105	80-120		
1,1,2-Trichloroethane	21		ug/l	1	20		106	80-120		
Chloromethane	17		ug/l	1	20		85	56-121		
Styrene	20		ug/l	5	20		102	80-120		
Vinyl Chloride	18		ug/l	1	20		90	56-120		
Trichlorofluoromethane	18		ug/l	1	20		89	55-135		
Trichloroethene	21		ug/l	1	20		105	80-120		
trans-1,4-Dichloro-2-butene	57		ug/l	50	100		57	33-143		
trans-1,3-Dichloropropene	18		ug/l	1	20		89	67-120		
trans-1,2-Dichloroethene	21		ug/l	1	20		106	80-120		
Toluene	21		ug/l	1	20		103	80-120		
Tetrahydrofuran	98		ug/l	10	100		98	54-144		
Tetrachloroethene	21		ug/l	1	20		103	80-120		
tert-Butylbenzene	20		ug/l	5	20		101	78-120		
Freon 113	22		ug/l	10	20		109	73-139		
t-Amyl methyl ether	19		ug/l	5	20		93	66-120		
Hexachlorobutadiene	20		ug/l	5	20		99	63-120		
sec-Butylbenzene	21		ug/l	5	20		105	77-120		
p-Isopropyltoluene	21		ug/l	5	20		104	76-120		
o-Xylene	20		ug/l	1	20		102	80-120		
n-Propylbenzene	21		ug/l	5	20		106	79-121		
n-Butylbenzene	20		ug/l	5	20		102	76-120		
Naphthalene	20		ug/l	5	20		100	53-124		
Methylene Chloride	21		ug/l	1	20		104	80-120		
Methyl Tertiary Butyl Ether	19		ug/l	1	20		95	69-122		
m+p-Xylene	42		ug/l	5	40		104	80-120		
4-Methyl-2-pentanone	98		ug/l	10	100		98	62-133		
t-Butyl alcohol	190		ug/l	50	200		97	60-130		
1,1,2,2-Tetrachloroethane	20		ug/l	1	20		99	72-120		
Acrylonitrile	95		ug/l	20	100		95	60-129		
1,1,1-Trichloroethane	20		ug/l	1	20		101	67-126		
4-Chlorotoluene	20		ug/l	5	20		101	80-120		
1,1-Dichloroethane	20		ug/l	1	20		101	80-120		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW-846 8260C</u>										
Batch Y190293AA - SW-846 5030C										
<u>LCS (LCSY62Q)</u>					<u>Prepared & Analyzed: 29-Jan-19</u>					
1,1-Dichloropropene	21		ug/l	5	20		107	78-120		
1,2,3-Trichlorobenzene	20		ug/l	5	20		99	66-120		
1,2,3-Trichloropropane	21		ug/l	5	20		103	75-124		
1,2,4-Trichlorobenzene	20		ug/l	5	20		99	63-120		
1,2,4-Trimethylbenzene	20		ug/l	5	20		102	75-120		
1,2-Dibromo-3-chloropropane	18		ug/l	5	20		89	47-131		
1,2-Dibromoethane	20		ug/l	1	20		101	77-120		
1,2-Dichlorobenzene	20		ug/l	5	20		102	80-120		
1,2-Dichloroethane	21		ug/l	1	20		106	73-124		
2-Hexanone	97		ug/l	10	100		97	56-135		
1,2-Dichloropropane	22		ug/l	1	20		108	80-120		
1,3,5-Trichlorobenzene	20		ug/l	5	20		100	66-123		
1,3,5-Trimethylbenzene	21		ug/l	5	20		103	75-120		
1,3-Dichlorobenzene	20		ug/l	5	20		101	80-120		
1,3-Dichloropropane	21		ug/l	1	20		103	80-120		
1,4-Dichlorobenzene	20		ug/l	5	20		102	80-120		
1,4-Dioxane	510		ug/l	250	500		101	63-146		
2,2-Dichloropropane	19		ug/l	1	20		95	55-142		
2-Butanone	140		ug/l	10	150		95	59-135		
2-Chlorotoluene	20		ug/l	5	20		101	80-120		
1,1,1,2-Tetrachloroethane	19		ug/l	1	20		97	78-120		
Surrogate: Toluene-d8	50		ug/l		50	50	100	80-120		
Surrogate: 1,2-Dichloroethane-d4	51		ug/l		50	51	103	80-120		
Surrogate: 4-Bromofluorobenzene	50		ug/l		50	50	99	80-120		
Surrogate: Dibromofluoromethane	50		ug/l		50	50	99	80-120		
<u>LCSD (LCSY62Y)</u>					<u>Prepared & Analyzed: 29-Jan-19</u>					
p-Isopropyltoluene	21		ug/l	5	20		105	76-120	2	30
Tetrahydrofuran	97		ug/l	10	100		97	54-144	2	30
Tetrachloroethene	21		ug/l	1	20		103	80-120	0	30
tert-Butylbenzene	20		ug/l	5	20		102	78-120	0	30
t-Butyl alcohol	190		ug/l	50	200		95	60-130	2	30
trans-1,2-Dichloroethene	21		ug/l	1	20		107	80-120	2	30
Hexachlorobutadiene	20		ug/l	5	20		99	63-120	1	30
t-Amyl methyl ether	20		ug/l	5	20		98	66-120	4	30
Styrene	20		ug/l	5	20		102	80-120	1	30
sec-Butylbenzene	21		ug/l	5	20		105	77-120	1	30
Vinyl Chloride	18		ug/l	1	20		89	56-120	1	30
o-Xylene	21		ug/l	1	20		103	80-120	1	30
n-Propylbenzene	21		ug/l	5	20		106	79-121	1	30
n-Butylbenzene	21		ug/l	5	20		103	76-120	2	30
Naphthalene	20		ug/l	5	20		101	53-124	1	30
Methylene Chloride	21		ug/l	1	20		104	80-120	0	30
Methyl Tertiary Butyl Ether	19		ug/l	1	20		97	69-122	3	30
Isopropylbenzene	21		ug/l	5	20		105	80-120	0	30
trans-1,3-Dichloropropene	18		ug/l	1	20		90	67-120	1	30
trans-1,4-Dichloro-2-butene	61		ug/l	50	100		61	33-143	7	30
Trichloroethene	21		ug/l	1	20		105	80-120	1	30
Trichlorofluoromethane	17		ug/l	1	20		87	55-135	1	30
Toluene	21		ug/l	1	20		103	80-120	0	30
m+p-Xylene	42		ug/l	5	40		105	80-120	1	30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW-846 8260C</u>										
Batch Y190293AA - SW-846 5030C										
<u>LCSD (LCSY62Y)</u>	<u>Prepared & Analyzed: 29-Jan-19</u>									
Chloroform	21		ug/l	1	20		105	80-120	0	30
2-Chlorotoluene	20		ug/l	5	20		101	80-120	0	30
2-Hexanone	98		ug/l	10	100		98	56-135	0	30
4-Chlorotoluene	21		ug/l	5	20		103	80-120	2	30
Acetone	140		ug/l	20	150		94	54-157	3	30
Benzene	21		ug/l	1	20		105	80-120	0	30
Bromobenzene	20		ug/l	5	20		101	80-120	0	30
Bromochloromethane	19		ug/l	5	20		96	80-120	1	30
Bromodichloromethane	19		ug/l	1	20		96	71-120	0	30
Bromoform	15		ug/l	4	20		76	51-120	0	30
Bromomethane	15		ug/l	1	20		77	53-128	2	30
Carbon Disulfide	17		ug/l	5	20		87	65-128	2	30
2-Butanone	140		ug/l	10	150		95	59-135	0	30
Chloroethane	16		ug/l	1	20		80	55-123	0	30
4-Methyl-2-pentanone	98		ug/l	10	100		98	62-133	0	30
Chloromethane	17		ug/l	1	20		86	56-121	0	30
cis-1,2-Dichloroethene	21		ug/l	1	20		106	80-120	0	30
cis-1,3-Dichloropropene	19		ug/l	1	20		96	75-120	1	30
Dibromochloromethane	18		ug/l	1	20		92	71-120	1	30
Dibromomethane	21		ug/l	1	20		103	80-120	0	30
Dichlorodifluoromethane	15		ug/l	1	20		74	41-127	0	30
di-Isopropyl ether	21		ug/l	1	20		103	70-124	2	30
Ethyl ether	20		ug/l	5	20		102	59-141	0	30
Ethyl t-butyl ether	19		ug/l	1	20		95	68-121	4	30
Ethylbenzene	21		ug/l	1	20		103	80-120	0	30
Freon 113	22		ug/l	10	20		110	73-139	1	30
Carbon Tetrachloride	20		ug/l	1	20		98	64-134	0	30
Chlorobenzene	21		ug/l	1	20		104	80-120	0	30
1,2,3-Trichlorobenzene	20		ug/l	5	20		100	66-120	1	30
1,1,1,2-Tetrachloroethane	20		ug/l	1	20		98	78-120	1	30
1,1,1-Trichloroethane	20		ug/l	1	20		101	67-126	0	30
1,1,2,2-Tetrachloroethane	20		ug/l	1	20		102	72-120	3	30
1,1,2-Trichloroethane	21		ug/l	1	20		107	80-120	0	30
1,1-Dichloroethane	21		ug/l	1	20		103	80-120	2	30
Acrylonitrile	95		ug/l	20	100		95	60-129	0	30
1,1-Dichloropropene	21		ug/l	5	20		106	78-120	0	30
2,2-Dichloropropane	19		ug/l	1	20		96	55-142	1	30
1,2,3-Trichloropropane	21		ug/l	5	20		104	75-124	1	30
1,2,4-Trichlorobenzene	20		ug/l	5	20		99	63-120	1	30
1,2,4-Trimethylbenzene	21		ug/l	5	20		103	75-120	1	30
1,2-Dibromo-3-chloropropane	18		ug/l	5	20		91	47-131	2	30
1,2-Dibromoethane	21		ug/l	1	20		103	77-120	2	30
1,4-Dichlorobenzene	21		ug/l	5	20		103	80-120	1	30
1,1-Dichloroethene	22		ug/l	1	20		112	80-131	2	30
1,4-Dioxane	510		ug/l	250	500		102	63-146	1	30
1,2-Dichlorobenzene	20		ug/l	5	20		102	80-120	1	30
1,3-Dichloropropane	20		ug/l	1	20		102	80-120	1	30
1,3-Dichlorobenzene	20		ug/l	5	20		102	80-120	1	30
1,3,5-Trimethylbenzene	21		ug/l	5	20		104	75-120	0	30
1,3,5-Trichlorobenzene	20		ug/l	5	20		100	66-123	0	30

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<u>SW-846 8260C</u>										
Batch Y190293AA - SW-846 5030C										
<u>LCSD (LCSY62Y)</u>					<u>Prepared & Analyzed: 29-Jan-19</u>					
1,2-Dichloropropane	22		ug/l	1	20		108	80-120	0	30
1,2-Dichloroethane	21		ug/l	1	20		106	73-124	0	30
Surrogate: Dibromofluoromethane	49		ug/l		50	49	99	80-120		
Surrogate: Toluene-d8	50		ug/l		50	50	101	80-120		
Surrogate: 1,2-Dichloroethane-d4	51		ug/l		50	51	102	80-120		
Surrogate: 4-Bromofluorobenzene	50		ug/l		50	50	100	80-120		
<u>LCS (LCSY63Q)</u>					<u>Prepared & Analyzed: 29-Jan-19</u>					
Ethanol	510	J.	ug/l	750	500		101	31-180		
<u>LCSD (LCSY63Y)</u>					<u>Prepared & Analyzed: 29-Jan-19</u>					
Ethanol	520	J.	ug/l	750	500		105	31-180	3	30
<u>Blank (VBLKY62B)</u>					<u>Prepared & Analyzed: 29-Jan-19</u>					
Tetrachloroethene	< 1		ug/l	1				-		
Tetrahydrofuran	< 10		ug/l	10				-		
Toluene	< 1		ug/l	1				-		
trans-1,2-Dichloroethene	< 1		ug/l	1				-		
trans-1,3-Dichloropropene	< 1		ug/l	1				-		
trans-1,4-Dichloro-2-butene	< 50		ug/l	50				-		
Trichloroethene	< 1		ug/l	1				-		
Vinyl Chloride	< 1		ug/l	1				-		
t-Butyl alcohol	< 50		ug/l	50				-		
t-Amyl methyl ether	< 5		ug/l	5				-		
Trichlorofluoromethane	< 1		ug/l	1				-		
1,1,2,2-Tetrachloroethane	< 1		ug/l	1				-		
Acetone	< 20		ug/l	20				-		
1,2,4-Trichlorobenzene	< 5		ug/l	5				-		
1,2,3-Trichloropropane	< 5		ug/l	5				-		
1,2,3-Trichlorobenzene	< 5		ug/l	5				-		
1,1-Dichloropropene	< 5		ug/l	5				-		
1,1-Dichloroethene	< 1		ug/l	1				-		
1,2-Dibromo-3-chloropropane	< 5		ug/l	5				-		
1,1,2-Trichloroethane	< 1		ug/l	1				-		
1,2-Dibromoethane	< 1		ug/l	1				-		
1,1,1-Trichloroethane	< 1		ug/l	1				-		
1,1,1,2-Tetrachloroethane	< 1		ug/l	1				-		
Acrylonitrile	< 20		ug/l	20				-		
Benzene	< 1		ug/l	1				-		
tert-Butylbenzene	< 5		ug/l	5				-		
Bromochloromethane	< 5		ug/l	5				-		
1,1-Dichloroethane	< 1		ug/l	1				-		
1,3-Dichloropropane	< 1		ug/l	1				-		
4-Methyl-2-pentanone	< 10		ug/l	10				-		
4-Chlorotoluene	< 5		ug/l	5				-		
2-Hexanone	< 10		ug/l	10				-		
2-Chlorotoluene	< 5		ug/l	5				-		
2-Butanone	< 10		ug/l	10				-		
2,2-Dichloropropane	< 1		ug/l	1				-		
1,2,4-Trimethylbenzene	< 5		ug/l	5				-		
1,4-Dichlorobenzene	< 5		ug/l	5				-		
Bromodichloromethane	< 1		ug/l	1				-		
1,3-Dichlorobenzene	< 5		ug/l	5				-		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch Y190293AA - SW-846 5030C										
Blank (VBLKY62B)					<u>Prepared & Analyzed: 29-Jan-19</u>					
1,3,5-Trimethylbenzene	< 5		ug/l	5				-		
1,3,5-Trichlorobenzene	< 5		ug/l	5				-		
1,2-Dichloropropane	< 1		ug/l	1				-		
1,2-Dichloroethane	< 1		ug/l	1				-		
1,2-Dichlorobenzene	< 5		ug/l	5				-		
1,4-Dioxane	< 250		ug/l	250				-		
Naphthalene	< 5		ug/l	5				-		
Ethylbenzene	< 1		ug/l	1				-		
Bromobenzene	< 5		ug/l	5				-		
Hexachlorobutadiene	< 5		ug/l	5				-		
Isopropylbenzene	< 5		ug/l	5				-		
m+p-Xylene	< 5		ug/l	5				-		
Bromoform	< 4		ug/l	4				-		
Methylene Chloride	< 1		ug/l	1				-		
Ethyl t-butyl ether	< 1		ug/l	1				-		
n-Butylbenzene	< 5		ug/l	5				-		
n-Propylbenzene	< 5		ug/l	5				-		
o-Xylene	< 1		ug/l	1				-		
p-Isopropyltoluene	< 5		ug/l	5				-		
sec-Butylbenzene	< 5		ug/l	5				-		
Styrene	< 5		ug/l	5				-		
Methyl Tertiary Butyl Ether	< 1		ug/l	1				-		
cis-1,2-Dichloroethene	< 1		ug/l	1				-		
Bromomethane	< 1		ug/l	1				-		
Carbon Disulfide	< 5		ug/l	5				-		
Carbon Tetrachloride	< 1		ug/l	1				-		
Chlorobenzene	< 1		ug/l	1				-		
Chloroethane	< 1		ug/l	1				-		
Freon 113	< 10		ug/l	10				-		
Chloromethane	< 1		ug/l	1				-		
Ethyl ether	< 5		ug/l	5				-		
cis-1,3-Dichloropropene	< 1		ug/l	1				-		
Dibromochloromethane	< 1		ug/l	1				-		
Dibromomethane	< 1		ug/l	1				-		
Dichlorodifluoromethane	< 1		ug/l	1				-		
di-Isopropyl ether	< 1		ug/l	1				-		
Ethanol	< 750		ug/l	750				-		
Chloroform	< 1		ug/l	1				-		
Surrogate: Dibromofluoromethane	48		ug/l		50	48	96	80-120		
Surrogate: Toluene-d8	50		ug/l		50	50	99	80-120		
Surrogate: 1,2-Dichloroethane-d4	50		ug/l		50	50	101	80-120		
Surrogate: 4-Bromofluorobenzene	48		ug/l		50	48	96	80-120		

Notes and Definitions

c1	A Blank spike was performed instead of a matrix spike
J.	Estimated value
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
OG	The required Matrix Spike and Matrix Spike Duplicate (MS/MSD) for Oil & Grease method 1664B can only be analyzed when the client has submitted sufficient sample volume. An extra liter per MS/MSD is required to fulfill the method QC criteria. Please refer to Chain of Custody and QC Summary (MS/MSD) of the Laboratory Report to verify ample sample volume was submitted to fulfill the requirement.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

00081
00100

FedEx Package
Express **US Airbill**

FedEx Tracking Number **8139 4282 5259**

1 From

Date **1-17-19**

Sender's Name **Steve Gray** Phone **518 951-2200**

Company **AECOM TECHNICAL SERVICES**

Address **40 BRITISH AMERICAN BLVD**

City **LATHAM** State **NY** ZIP **12110-1421**

Dept./Floor/Suite/Room

2 Your Internal Billing Reference

60276639-1

3 To

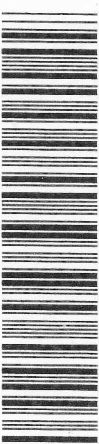
Recipient's Name **Attn: Sample Receipt** Phone **413 789-9012**

Company **Eurofins Spectrum Analytical**

Address **11 Almgren Dr.** Day/Floor/Suite/Room

Address Use this line for the HOLD location address or for combination of your shipping address.

City **Agawam** State **MA** ZIP **01001**



8139 4282 5259

Form ID No. **0215**

4 Express Package Service

* To most locations.

Next Business Day

☐ **FedEx First Overnight**
Earliest next business morning delivery to select locations. Packages must be delivered on Monday unless Saturday delivery is selected.

☒ **FedEx Priority Overnight**
Next business morning, Friday shipments will be delivered on Saturday unless Saturday delivery is selected.

☐ **FedEx Standard Overnight**
Next business afternoon, Saturday delivery NOT available.

2 or 3 Business Days

☐ **FedEx 2Day A.M.**
Second business morning, Saturday delivery NOT available.

☐ **FedEx 2Day**
Second business afternoon, Thursday shipments will be delivered on Monday unless Saturday delivery is selected.

☐ **FedEx Express Saver**
Third business day, Saturday delivery NOT available.

5 Packaging *Declared value limit \$500

☐ **FedEx Envelope***

☐ **FedEx Pak***

☐ **FedEx Box**

☐ **FedEx Tube**

☒ **Other**

6 Special Handling and Delivery Signature Options

Fees may apply. See the FedEx Service Guide.

☐ **Saturday Delivery**
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ **No Signature Required**
Shipper may be held responsible for delivery of goods without signature of recipient.

☐ **Direct Signature**
Someone at recipient's address may sign for delivery.

☐ **Indirect Signature**
If no one is available at recipient's address, someone at neighboring address may sign for delivery for residential deliveries only.

Does this shipment contain dangerous goods?

☒ **No** ☐ **Yes** One box must be checked.

☐ **Yes** Shipper's Declaration not required.

☐ **Dry Ice** Dry Ice 9, UN1845

☐ **Cargo Aircraft Only**

7 Payment Bill to:

☒ **Sender** ☐ **Account No. in Section**

☐ **Recipient**

☐ **Third Party**

☐ **Credit Card**

☐ **Cash/Check**

Total Packages **Total Weight**

lbs.

Credit Card Amt.

Your liability is limited to USD100 unless you declare a higher value. See the current FedEx Service Guide for details.



Batch Summary

1900089

Total Metals by EPA 200/6000 Series Methods

SC53161-01 (EFF 60 011719)

SC53161-02 (INF 011719)

19022102101B

Subcontracted Analyses

P02202ABB

P02202AQQ

P971152D271552B

P971152R271553B

SC53161-01 (EFF 60 011719)

SC53161-02 (INF 011719)

190221404406

Subcontracted Analyses

P02204FBB

P02204FQQ

SC53161-01 (EFF 60 011719)

SC53161-02 (INF 011719)

190230571309

Subcontracted Analyses

P02371IBB

P02371IQQ

P971151D221022

P971151M221031

P971151R221029

SC53161-01 (EFF 60 011719)

SC53161-02 (INF 011719)

464105A

Subcontracted Analyses

CC31274-BLK

CC31274-DUP

CC31274-LCS

SC53161-01 (EFF 60 011719)

SC53161-02 (INF 011719)

464252A

Subcontracted Analyses

CC32008-BLK

CC32008-LCS

CC32008-LCSD

SC53161-01 (EFF 60 011719)

SC53161-02 (INF 011719)

464260A

Subcontracted Analyses

CC32009-BLK

CC32009-DUP

CC32009-LCS

SC53161-01 (EFF 60 011719)

SC53161-02 (INF 011719)

Y190291AA

Subcontracted Analyses

LCSY58Q

LCSY58Y

LCSY59Q

LCSY59Y

SC53161-01 (EFF 60 011719)

SC53161-02 (INF 011719)

SC53161-03 (TW-1 011719)

VBLKY58B

Y190293AA

Subcontracted Analyses

LCSY62Q

LCSY62Y

LCSY63Q

LCSY63Y

SC53161-02 (INF 011719)

SC53161-04 (TW-2A 011719)

SC53161-05 (TW-3 011719)

SC53161-06 (TB 011719)

VBLKY62B