Stantec Consulting Services Inc.
5 Dartmouth Drive, Suite 200, Auburn, NH 03032
Tel: (603) 669-8672, Fax: (603) 669-7636

May 7, 2019
File 191710274

Attention: Ms. April Talon, P.E., Town Engineer
Durham Public Works
100 Stone Quarry Drive
Durham, NH 03824

RE: April 2019 Water Quality Sampling Results
Durham Municipal Landfill, Durham Point Road, Durham, NH
NHDES #199006011, Project #2115

Dear Ms. Talon:

Stantec Consulting Services Inc. (Stantec) is pleased to present the results of the regular sampling and monitoring conducted at the Durham Municipal Landfill (the Site) on April 16, 2019. Groundwater samples were collected in accordance with the New Hampshire Department of Environmental Services (NHDES) Groundwater Management Permit #GWP-199006011-D-005 (the Permit), which was issued on September 28, 2018. In accordance with the Permit, additional samples were collected from two locations at the landfill (surface water location SW-1 and the on-site non-potable bedrock well W-1) and tested for per- and polyfluoroalkyl substances (PFAS). At your request, Stantec also collected samples for PFAS analysis from four private homeowner wells located within 1,000-feet of the landfill. Lastly, one additional surface water sample (identified as SW-4) was collected for PFAS analysis from a downstream location in Horsehide Brook.

Sampling locations at the landfill included seven of the eight Site monitoring wells (MW-1U, MW-1L, MW-3U, MW-3L, MW-4L, MW-4U, and MW-5), one on-site non-potable well (W-1), and three surface water locations (SW-1, SW-2, and SW-3) specified in the Permit. Samples were unable to be collected from well MW-2 due to flooding of the Brook, which prevented safe access to the well.

Analytical tests required by the Permit for April 2019 included landfill indicator constituents (chloride, nitrate, total Kjeldahl nitrogen (TKN), sodium, iron, and manganese) for all sampled locations. Per the Permit, samples were also collected from four wells (MW-3U, MW-3L, MW-5, and W-1) and one surface water location (SW-3) for analysis of the NHDES Waste Management Division Full List of Analytes for volatile organic compounds (VOCs) including low level 1,4-dioxane. The four homeowner wells sampled for PFAS included 84 Durham Point Road, 110 Durham Point Road, 120 Durham Point Road, and 128 Durham Point Road.

The Site location is shown on Figure 1. Locations of the landfill sampling points and private well locations are shown on Figure 2 and 3, respectively. Field collected data for this sampling episode are presented in Table 1. Laboratory results for landfill indicator constituents for this sampling event are presented in Table 2. Laboratory results for VOCs for this sampling event are presented in Table

3. Laboratory results for PFAS for this sampling event are presented in Table 4. The laboratory reports for this event are also attached.

A copy of this report is also being forwarded to the NHDES Groundwater Permits Coordinator via upload to their OneStop database.

SAMPLING AND MONITORING PROCEDURES

Stantec personnel conducted the monitoring and sampling event on April 16, 2019. Water levels were measured in all monitoring wells prior to sampling. All wells, except W-1, were then purged of three times their standing water column volume using either polyethylene tubing and a peristaltic pump or high-density polyethylene tubing and a Delrin® foot valve (inertial pump). At W-1, the well pump was allowed to run at approximately 4 gallons per minute (gpm) for approximately 5 hours. Purge water from W-1 was discharged to a catch basin about one hundred feet from the well head. These purging procedures were employed to ensure that formation water was being sampled, not stagnant water in the well casing. After each well was purged, a sample was collected for field analysis for specific conductance (micromhos per centimeter or µmhos/cm), temperature (degrees Celsius or °C), and pH (standard units or SU). Surface water samples were collected as "grab" samples. Field parameters were also monitored at each surface water location.

Sample aliquots were then collected in laboratory-provided bottles using the dedicated equipment employed to purge the wells. In accordance with the NHDES Standard Operating Procedure (SOP) #HWRB-21, samples for PFAS analysis were collected first from the two landfill locations, SW-1 and W-1. For quality assurance/quality control (QA/QC) purposes, a field blank was also collected (at the W-1 location) and analyzed for PFAS. The PFAS samples were analyzed by modified EPA Method 537 (isotope dilution method). The PFAS isomers reported include the list of nine compounds recommended by the NHDES as the minimum analytes for PFAS investigations.[1]

The Permit-required samples were then collected using the same dedicated tubing. Samples collected for metals analysis from overburden wells (MW-1U, MW-3U, MW-4U, and MW-5) were field-filtered with 0.45-micron filters and were analyzed for dissolved metals. Samples collected for metals analysis from bedrock wells (MW-1L, MW-3L, MW-4L, and W-1) and from the three surface water locations were not field-filtered, and therefore, were analyzed for total metals. Samples for TKN analysis were preserved with sulfuric acid to a pH of less than 2.

[1] List of PFAS isomers analyzed included perfluorononanoic acid (PFNA), perfluorooctanoic acid (PFOA), perfluoroheptanoic acid (PFHpA), perfluorohexanoic acid (PFHxA), perfluoropentanoic acid (PFPeA), perfluorobutanoic acid (PFBA), perfluorooctanesulfonic acid (PFOS), perfluorohexanesulfonic acid (PFHxS), and perfluorobutanesulfonic acid (PFBS)

At the private homeowner well locations, each well was purged by running a spigot for 15-20 minutes prior to collecting the PFAS samples. Stantec was informed by the homeowners at 84, 120, and 128 Durham Point Road that there were water quality filters for each well. So, after purging the plumbing/well system for 15 to 20 minutes, Stantec collected the PFAS samples from spigots located before the filters. The well at 110 Durham Point Road did not have a water quality filter, so samples were collected from an outside spigot after purging for 15 minutes. The homeowner well samples were also collected in accordance with NHDES SOP #HWRB-21.

The PFAS samples and the GMP samples were placed in separate ice chests to maintain a temperature of 4°C and were transported to Eurofins Spectrum Analytical, Inc. in Agawam, Massachusetts, a State of New Hampshire-certified laboratory, for analysis. Chain of custody protocols were maintained, and copies of these forms are provided in the laboratory reports attached to this report.

April 2019 Water Quality Results

Field parameter results are presented in Table 1.

- Relatively low levels of specific conductance (SC) were measured at one upgradient well location, MW-5, at 187 µmhos/cm. At the remaining eight wells SC levels were higher and ranged from 216 µmhos/cm at MW-1L to 3,526 µmhos/cm at W-1. SC levels were measured at the three sampled surface water locations SW-1, SW-2, and SW-3 at 53 µmhos/cm, 148 µmhos/cm, and 263 µmhos/cm, respectively.

Laboratory results for landfill indicator constituents are presented in Table 2 and described below:

- The Secondary Maximum Contaminant Level (SMCL) established by the US Environmental Protection Agency (USEPA) for chloride (250 milligrams per liter or mg/L) was exceeded at three bedrock wells: MW-3L (404 mg/L), MW-4L (332 mg/L), and W-1 (1,000 mg/L).
- The SMCL for iron (0.3 mg/L) was exceeded at three of the four bedrock wells: MW-1L (169 mg/L), MW-3L (14.9 mg/L), and MW-4L (8.53 mg/L). The State of New Hampshire Surface Water Quality Criteria (SWQC) for iron (0.3 mg/L) was exceeded at SW-1 (1.19 mg/L) and SW-2 (1.02 mg/L).
- The State of New Hampshire Ambient Groundwater Quality Standard (AGQS) for nitrate (10 mg/L) was not exceeded at any of well locations. The SWQC for nitrate (10 mg/L) was not exceeded at any of the surface water locations.
- The AGQS for manganese (0.84 mg/L) was exceeded at MW-3L (1.30 mg/L) and W-1 (1.29 mg/L). The SWQC for manganese (0.05 mg/L) was exceeded at SW-1 (0.056 mg/L).

Table 3 presents only the laboratory results for VOCs that were detected during this sampling event and/or during previous events along with 1,4-dioxane. The following is a summary of those results.

- At MW-3U, only tetrachloroethene (aka perchloroethene or PCE) was detected at 1 (microgram per liter or µg/L), which is below the AGQS for PCE of 5 µg/L.
- At MW-5, chloroform was detected at 1 µg/L. This level is well below its AGQS of 70 µg/L.
- All results for methyl tert-butyl ether (MTBE) and 1,4-dioxane were reported below the laboratory reporting limits of 1.0 µg/L and 0.30 µg/L, respectively.

Results from the April 2019 PFAS sampling event are presented in Table 4 and described below.

- At SW-1, concentrations of one of the nine isomers were reported above laboratory reporting limits. Perfluorooctanoic acid (PFOA) was detected at 1.6 nanograms per liter (ng/L).
- At SW-4, concentrations of five of the nine isomers were reported above laboratory reporting limits. PFOS and PFOA were detected at 3.9 ng/L and 5.2 ng/L, respectively.
- At W-1, concentrations of eight of the nine isomers were reported above laboratory reporting limits. PFOS and PFOA were detected below their AGQS of 70 ng/L at 17 ng/L and 16 ng/L, respectively. The total of PFOS + PFOA was detected below its AGQS (also 70 ng/L) at 33 ng/L.
- No PFAS isomers were detected in the private well samples from 84 or 128 Durham Point Road.
- At 110 Durham Point Road, concentrations of three of the nine isomers were reported above laboratory reporting limits. PFOA was detected below AGQS at 4.0 ng/L. The total of PFOS + PFOA was detected below its AGQS at 4.0 ng/L.
- At 120 Durham Point Road, concentrations of seven of the nine isomers were reported above laboratory reporting limits. PFOS and PFOA were detected below AGQS at 1.8 ng/L and 13 ng/L, respectively. The total of PFOS + PFOA was detected below its AGQS at 14.8 ng/L.
- No PFAS isomers were detected in the Field Blank above laboratory reporting limits.

Although levels of PFAS were reported in the sampled locations at relatively low and/or non-detect concentrations, it is recommended that another round of samples be collected from the same locations to confirm concentrations are below AGQS. It is recommended that this confirmatory round for PFAS analysis be conducted with the next GMP sampling event in October 2019.

If you have any questions or comments, please do not hesitate to call the undersigned at (603) 669-8672.

Sincerely,

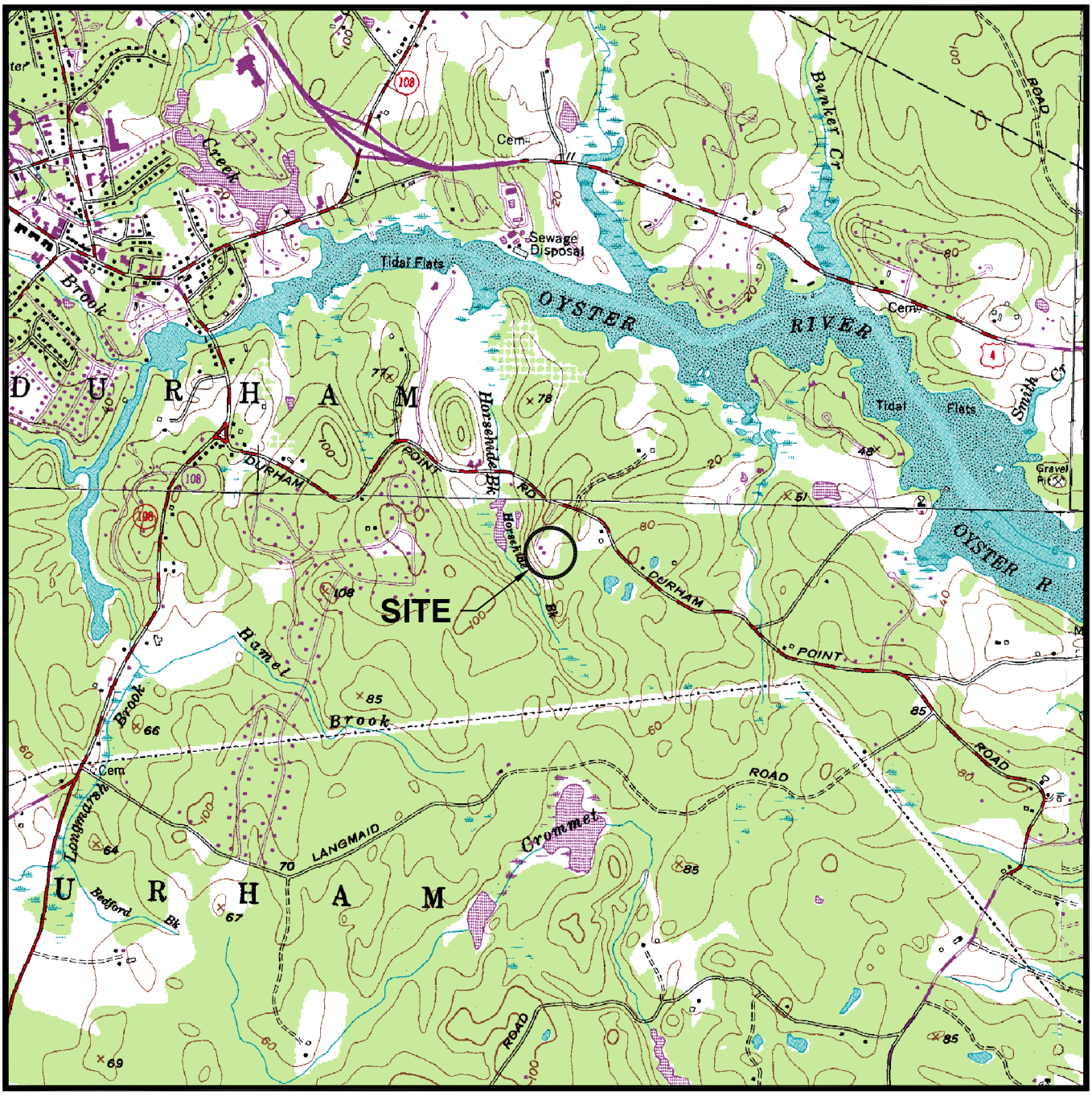
STANTEC CONSULTING SERVICES INC.

Donald F. Moore

Donald F. Moore, P.G.
Associate/Hydrogeologist

c: NHDES Groundwater Permits Coordinator

Attachments: Figures 1, 2, and 3
Tables 1, 2, 3, and 4
Laboratory Analytical Reports
Transmittal Letters to Off-site Residential Well Owners



MAP SOURCE:

TOPOZONE.COM

USGS NEWMARKET [NH] QUAD 1990

NORTH

2000 0 2000

Scale in feet

Stantec Consulting Services, Inc.

Stantec

STANTEC LOCATION:				
AUBURN, NEW HAMPSHIRE				
DATE PREPARED:	DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
6-28-17	DFM	JJW	DFM	DFM
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:

DRAWING TITLE:

SITE LOCATION PLAN

DURHAM LANDFILL
DURHAM, NEW HAMPSHIRE

PROJECT NAME/FILE NAME:	PROJECT NUMBER/PHASE:	SCALE:	PREPARED FOR:	FIGURE NO.
DURHAM/SITE	191710274	1:24000	TOWN OF DURHAM	1

62.09
MW-5
GMW-2
MW-4U
63.26
MW-4L
60
50
40
30
20
GV#6
4" PERF. VENT PIPE
EDGE OF PAVEMENT
91.2
91.1
92
92.0
94
94.6
94.5
95.1
ELEC. MANHOLE
ATTENDENT'S HOUSE
CB 1406
RIM=89.2'
15" RCP W/ FES INV. EL=82.7'
GV#7
4" PERF. VENT PIPE
BURN SITE
RIP-RAP (TYP.)
4' X 4' CONC. BLOCK BARRIERS ON CONC. PAD
12" RCP W/ FES INV. EL.=78.2'
12" RCP W/ FES INV. EL.=79.5'
HOLDING TANKS
94.3
95.5
95.3
PAPER RECYCLING
CONC. HEAD WALL
INCINERATOR BUILDING
FOUNDATION
GMW-1
INV. EL.=82.8'
12" RCP
BOULDER PILE
LEDGE
GATE
GV#4
SP#4
EL 83.93
(10/04)
SP#3
EL. 82.52
(10/04)
EDGE OF PAVEMENT
INV. EL.=82.2'
GRAVEL DRIVE
SP#1
EL. 87.19
(10/04)
GV#2
SP#2
EL. 85.83
(10/04)
4" UNDERDRAIN
GV#1
GV#3
INV. EL.=82.2'
12" RCP
12" PANEL PIPE
GV#5
LEDGE
LEDGE AREA
CHECK DAM
18" PANEL PIPE
4" UNDERDRAIN
INV. EL.=70.6'
CONCRETE HEAD WALL
2" CRUSHED STONE (TYP.)
WOODED VEGETATION
MW-1U
>19.70
MW-1L
CHECK DAM
S.W. 1
SW-3
BEAVER POND WATER EL=9.9
6" CPP INV. EL.=44.5'
MW-3L
MW-3U
10.87
SW-2
MW-2
10.71
HORSEHIDE BROOK

LEGEND

- CATCH BASIN
- x 95.3 — SPOT ELEVATION
- RIP-RAP
- 2" CRUSHED STONE
- PERF. GAS VENT PIPE
- GV3 — GAS VENT
- EDGE OF WATER
- EDGE OF VEGETATION
- CHAINLINK FENCE
- DRAIN LINE
- PAVED ROAD/DRIVE
- GRAVEL ROAD/DRIVE/TRAIL
- 2' CONTOUR LINE
- 10' CONTOUR LINE
- SP — SETTLING MONITORING PLATES
- CAP TYPE 1
- CAP TYPE 2
- CAP TYPE 3
- UNDER DRAIN
- PANEL PIPE
- GMW — GAS MONITORING WELL
- MW — GROUNDWATER MONITORING WELL
- SW — SURFACE WATER
- INDICATES DIRECTION OF FLOW

20 — GROUNDWATER CONTOUR (DASHED WHERE INFERRED)

10.71 — GROUNDWATER ELEVATION (FT NGVD) MEASURED 4/4/18

80 0 80
SCALE IN FEET

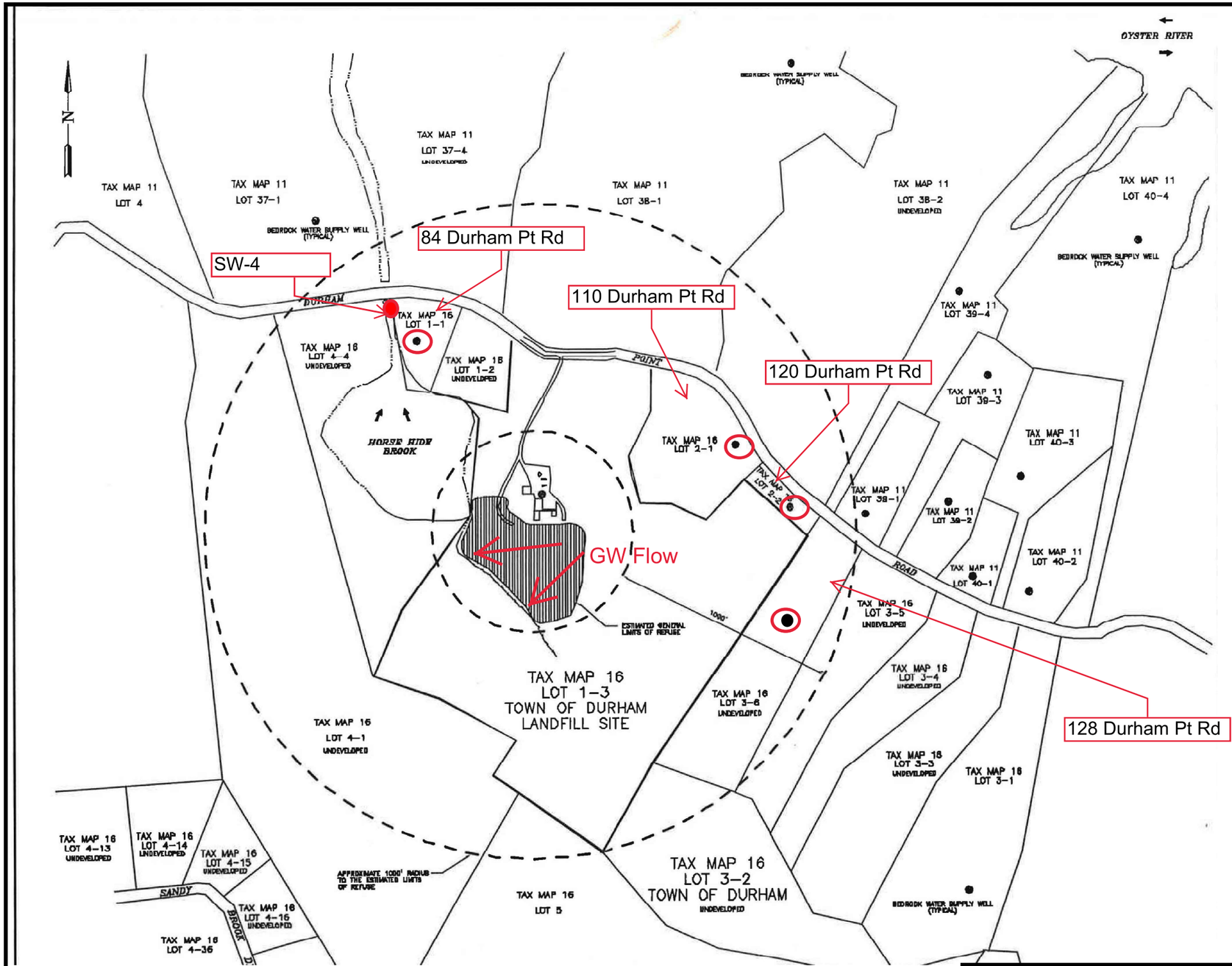
NORTH

Stantec Consulting Services, Inc.

Stantec

STANTEC LOCATION: AUBURN, NEW HAMPSHIRE				DRAWING TITLE: **SITE PLAN** DURHAM LANDFILL DURHAM, NEW HAMPSHIRE
DATE PREPARED: 7-6-18	DESIGNED BY: DFM	DRAWN BY: JJW	CHECKED BY: DFM	REVIEWED BY: DFM
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
PROJECT NAME/FILE NAME: DURHAM/SITE		PROJECT NUMBER/PHASE: 191710274	SCALE: AS SHOWN	PREPARED FOR: TOWN OF DURHAM

FIGURE NO. 2



ABUTTERS LIST
LOT 1-3 TOWN OF DURHAM

Map	Block		Lot	Name and Address
11	37	-	4	Lockhardt Family Trust Madeline Lockhardt Trustee Durham Point Road Durham, NH 03824 (vacant lot)
11	38	-	1	McNitt, Barbara and Robert 101 Durham Point Road Durham, NH 03824
11	38	-	2	Richmond Rev Trust Priscilla Pearmain Tustee Durham Point Road Durham, NH 03824 (vacant lot)
16	1	-	1	Smith Rev Trust Smith, Barry and Denise 84 Durham Point Road Durham, NH 03824
16	1	-	2	Devito, Felix and Susan 1849 State Road Eliot, ME 03903 (vacant lot)
16	2	-	1	Seymour Family 2003 Rev Trust 110 Durham Point Road Durham, NH 03824
16	2	-	2	Garcia, Linda 120 Durham Point Road Durham, NH 03824
16	3	-	6	Mann Trust, Judith Welsh 128 Durham Point Road Durham, NH 03824
16	3	-	2	Town of Durham Durham Point Road Durham, NH 03824 (vacant lot)
16	4	-	1	Lockhardt Family Trust Madeline Lockhardt Trustee Durham Point Road Durham, NH 03824 (vacant lot)
16	4	-	4	Lockhardt Family Trust Madeline Lockhardt Trustee Durham Point Road Durham, NH 03824 (vacant lot)
16	5	-		State of NH Fish & Game Longmarsh Road Durham, NH 03824 (vacant lot)

Private, Residential Well

Surface Water Location

Stantec Consulting Services, Inc.

Stantec

STANTEC LOCATION: AUBURN, NEW HAMPSHIRE				DRAWING TITLE: TAX MAP DURHAM LANDFILL DURHAM, NEW HAMPSHIRE
DATE PREPARED: 7-6-18	DESIGNED BY: DFM	DRAWN BY: JJW	CHECKED BY: DFM	REVIEWED BY: DFM
REVISION DATE:	REVISION NO:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
PROJECT NAME/FILE NAME: DURHAM/SITE		PROJECT NUMBER/PHASE: 191710274	SCALE: AS SHOWN	PREPARED FOR: TOWN OF DURHAM

FIGURE NO. 3

TABLE 1

Field Collected Data
Closed Durham Municipal Landfill
April 16, 2019

SAMPLE ID	DEPTH TO WATER[1]	MEASURING POINT ELEVATION[2]	GROUNDWATER ELEVATION[2]	SPECIFIC CONDUCTANCE[3] (µmhos/cm)	TEMPERATURE °C	pH (SU)
MW-1U	Flowing	19.70	>19.70	312	9.3	6.48
MW-1L	Flowing	19.70	>18.69	216	9.2	6.68
MW-2[4]	NM	12.32	>12.32	NS	NS	NS
MW-3U[4]	1.15	14.93	13.78	1,095	9.6	6.57
MW-3L[4]	1.56	13.55	11.99	1,626	10.1	6.75
MW-4U[1]	3.88	66.81	62.93	377	5.4	5.64
MW-4L[1]	2.66	65.55	62.89	1,180	8.1	5.53
MW-5[4]	4.29	66.30	62.01	187	6.1	6.15
W-1[5]	NM	NA	NA	3,526	11.7	6.57
SW-1	NM	NA	NA	53	11.0	6.37
SW-2	NM	NA	NA	148	8.8	7.02
SW-3	NM	NA	NA	263	11.6	7.36
SW-4	NM	NA	NA	235	10.5	7.76
84 Durham Pt Rd	NM	NA	NA	236	10.3	8.04
110 Durham Pt Rd	NM	NA	NA	1,382	10.5	6.51
120 Durham Pt Rd	NM	NA	NA	227	11.5	6.90
128 Durham Pt Rd	NM	NA	NA	390	10.6	7.40

NOTES:
[1] feet below Top of PVC
[2] feet NGVD (national geodetic vertical datum)
[3] specific conductance compensated to 25 degrees Celsius
[4] depth to water in feet below top of protective casing
[5] manhole cover was covered with landscaping (bark mulch, flowers, etc.) - no depth to water measurement made

µmhos/cm = micromhos per centimeter
^{O}C = degrees Centigrade
SU = standard units

NA: Not Applicable
NM: Not Measured. No surveyed Measuring Point.
NS: Not Sampled. No safe access due to high surface water surrounding well.

Checked by: DFM 5/3/2019

TABLE 2

Summary of Water Quality Results: Landfill Indicator Constituents

Closed Durham Municipal Landfill

GMP #GWP-199006011-D-0005

April 16, 2019

Sample Location	Chloride (mg/L)	Nitrate (mg/L)	TKN (mg/L)	Sodium (mg/L)	Iron (mg/L)	Manganese (mg/L)
AGQS	NRS	10	NRS	NRS	NRS	0.84
SMCL	250	NRS	NRS	250	0.3	NRS
SWQC	230	10	NRS	NRS	0.3	0.05
MW-1U	10.6	0.90	< 0.10	9.08	< 0.011	0.105
MW-1L	16.2	0.08	< 0.10	8.9	**169**	0.281
MW-2	NS	NS	NS	NS	NS	NS
MW-3U	144	2.26	< 0.10	103	< 0.011	< 0.001
MW-3L	**404**	1.45	0.14	184	**14.9**	**1.30**
MW-4U	85.6	0.25	1.01	44.6	0.058	0.083
MW-4L	**332**	0.11	0.36	170	**8.53**	0.388
MW-5	22.8	0.22	0.80	18.6	0.049	0.010
W-1	**1,000**	5.55	0.28	**473**	0.138	**1.29**
SW-1	3.3	< 0.05	0.24	3.40	**1.19**	**0.056**
SW-2	9.3	0.45	0.30	7.20	**1.02**	0.039
SW-3	42.6	< 0.05	0.27	21.5	0.153	0.020

NOTES:

AGQS = Ambient Groundwater Quality Standards, from Env-Or 600 Contaminated Site Management (revised 9/1/18)

SMCL = Secondary Maximum Contaminant Level (SMCL)

SWQC = Surface Water Quality Criteria, from Env-Wq 1700, Surface Water Quality Regulations

NRS = No regulatory standard

mg/L = milligrams per liter

NS = Not sampled

Values in **Bold** exceed Standards

Checked by: DFM 5/3/2019

TABLE 3

Summary of Water Quality Results: Volatile Organic Compounds
Closed Durham Municipal Landfill
GMP #GWP-199006011-D-0005
April 16, 2019

Sample Location	Chlorobenzene (µg/L)	Chloroform (µg/L)	Methyl tert-butyl ether (MTBE) (µg/L)	Tetrachloroethene (PCE) (µg/L)	1,4 Dioxane (µg/L)
AGQS	100	70	13	5	0.32
SWQC	20	5.7	NRS	0.8	NRS
MW-3U	< 1	< 1	< 1	1	< 0.3
MW-3L	< 1	< 1	< 1	< 1	< 0.3
MW-5	< 1	1	< 1	< 1	< 0.3
W-1	< 1	< 1	< 1	< 1	< 0.3
SW-3	< 1	< 1	< 1	< 1	< 0.3
Trip Blank	< 1	< 1	< 1	< 1	< 0.3

NOTES:

AGQS = Ambient Groundwater Quality Standards, from Env-Or 600 Contaminated Site Management (revised 9/1/18)
SWQC = Surface Water Quality Criteria, from Env-Wq 1700 Surface Water Quality Regulations
NRS = No Regulatory Standard
µg/L = micrograms per liter
Values in **Bold** exceed Standards

Checked by: DFM 5/3/2019

TABLE 4
Summary of Groundwater Analytical Results: PFAS Data
Closed Durham Municipal landfill
April 16, 2019

Analyte/Method		Units	NHDES AGQS	Sample ID							
				SW-1	SW-4	W-1	84 Durham Pt Rd	110 Durham Pt Rd	120 Durham Pt Rd	128 Durham Pt Rd	Field Blank
Date				04/16/19	04/16/19	04/16/19	04/16/19	04/16/19	04/16/19	04/16/19	
PFAS By Isotope Dilution											
Cas No											
375-73.5	Perfluorobutanesulfonate (PFBS)	ng/L	NRS	< 0.91	< 0.86	9.8	< 0.87	1.8	0.99	< 0.90	< 0.88
375-22-4	Perfluorobutanoic acid (PFBA)	ng/L	NRS	< 5.5	< 5.2	8.7	< 5.2	< 5.2	< 5.2	< 5.4	< 5.3
375-85-9	Perfluoroheptanoic acid (PFHPA)	ng/L	NRS	< 0.91	1.8	8.4	< 0.87	1.1	5.0	< 0.90	< 0.88
375-46-4	Perfluorohexanesulfonate (PFHXS)	ng/L	NRS	< 1.8	2.1	15	< 1.7	< 1.7	2.7	< 1.8	< 1.8
307-24-4	Perfluorohexanoic acid (PFHXA)	ng/L	NRS	< 1.8	2.3	18	< 1.7	< 1.7	9.3	< 1.8	< 1.8
375-95-1	Perfluorononanoic acid (PFNA)	ng/L	NRS	< 1.8	< 1.7	< 1.8	< 1.7	< 1.7	< 1.7	< 1.8	< 1.8
2706-90-3	Perfluoropentanoic acid (PFPEA)	ng/L	NRS	< 5.5	< 5.2	15	< 5.2	< 5.2	5.6	< 5.4	< 5.3
1763-23-1	Perfluoro-octanesulfonic acid (PFOS)	ng/L	70	< 1.8	3.9	17	< 1.7	< 1.7	1.8	< 1.8	< 1.8
335-67-1	Perfluorooctanoic acid (PFOA)	ng/L	70	1.6	5.2	16	< 0.87	4.0	13	< 0.90	< 0.88
	Total PFOS + PFOA	ng/L	70	1.6	9.1	33	0	4.0	14.8	0	0
	Total PFAS	ng/L	NRS	1.6	15.3	107.9	0	6.9	38.39	0	0

Notes:

PFAS = Per- and Polyfluoroalkyl Substances
ng/L = Nanograms per liter (parts per trillion)
AGQS = Ambient Groundwater Quality Standards, Env-Or 603.03 (eff. 9/1/18)
NRS = No regulatory standard
WQC = Water Quality Criteria for Toxic Substances from Env-Wq 1700 (Table 1703.1)
Bold = Concentration exceeds NHDES AGQS
Checked by: DFM 05-03-2019

SW = Surface Water Location
W-1 = Non-potable bedrock well at landfill Site
Durham Pt Rd = Private, residential water supply well locations

eurofins | Spectrum Analytical

☑ Final Report
☐ Revised Report

Report Date:
30-Apr-19 17:02

Laboratory Report
SC54401

Stantec Consulting Services
5 Dartmouth Drive, Suite 101
Auburn, NH 03032
Attn: Don Moore

Project: Durham Landfill - Durham, NH
Project #: 191710274

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

Dawn E Wojcik

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 36 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.

Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our 'Quality' web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).

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: SC54401

Project: Durham Landfill - Durham, NH

Project Number: 191710274

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC54401-01	MW-5	Ground Water	16-Apr-19 11:25	17-Apr-19 13:58
SC54401-02	MW-4L	Ground Water	16-Apr-19 11:55	17-Apr-19 13:58
SC54401-03	MW-4U	Ground Water	16-Apr-19 12:00	17-Apr-19 13:58
SC54401-04	SW-1	Surface Water	16-Apr-19 12:15	17-Apr-19 13:58
SC54401-05	MW-1U	Ground Water	16-Apr-19 12:20	17-Apr-19 13:58
SC54401-06	MW-1L	Ground Water	16-Apr-19 12:30	17-Apr-19 13:58
SC54401-07	SW-2	Surface Water	16-Apr-19 13:30	17-Apr-19 13:58
SC54401-08	MW-3U	Ground Water	16-Apr-19 13:45	17-Apr-19 13:58
SC54401-09	MW-3L	Ground Water	16-Apr-19 13:55	17-Apr-19 13:58
SC54401-10	SW-3	Surface Water	16-Apr-19 14:05	17-Apr-19 13:58
SC54401-11	W-1	Surface Water	16-Apr-19 14:20	17-Apr-19 13:58
SC54401-12	Trip Blank	Trip Blank	16-Apr-19 00:00	17-Apr-19 13:58

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 1.3 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.

A Method Detection Limit (MDL) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The MDL standard shows adequate sensitivity at or below the reporting limit.

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

E351.1

Blanks:

CC95320-BLK

TKN is reported as Organic Nitrogen in the Blank, LCS, DUP and MS.

Nitrogen Tot Kjeldahl

Laboratory Control Samples:

CC95320-LCS

TKN is reported as Organic Nitrogen in the Blank, LCS, DUP and MS.

Nitrogen Tot Kjeldahl

Sample Acceptance Check Form

Client:	Stantec Consulting Services - Auburn, NH
Project:	Durham Landfill - Durham, NH / 191710274
Work Order:	SC54401
Sample(s) received on:	4/17/2019

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

	Yes	No	N/A
Were custody seals present?	☐	☑	☐
Were custody seals intact?	☐	☐	☑
Were samples received at a temperature of ≤ 6°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: SC54401-01 **Client ID:** MW-5

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron (Dissolved)	0.049		0.011	mg/l	E200.7
Manganese (Dissolved)	0.010		0.001	mg/l	E200.7
Sodium (Dissolved)	18.6		0.11	mg/l	E200.7
Nitrate as Nitrogen	0.22		0.05	mg/l	E300.0
Nitrogen Tot Kjeldahl	0.80		0.10	mg/l	E351.1
Chloride	22.8		3.0	mg/l	SM4500CLE
Chloroform	1		1	ug/l	SW-846 8260C

Lab ID: SC54401-02 **Client ID:** MW-4L

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron	8.53		0.005	mg/l	E200.7
Manganese	0.388		0.001	mg/l	E200.7
Nitrate as Nitrogen	0.11		0.05	mg/l	E300.0
Nitrogen Tot Kjeldahl	0.36		0.10	mg/l	E351.1
Chloride	332		30.0	mg/l	SM4500CLE

Lab ID: SC54401-02RE1 **Client ID:** MW-4L

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Sodium	170		5.0	mg/l	E200.7

Lab ID: SC54401-03 **Client ID:** MW-4U

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron (Dissolved)	0.058		0.011	mg/l	E200.7
Manganese (Dissolved)	0.083		0.001	mg/l	E200.7
Sodium (Dissolved)	44.6		0.11	mg/l	E200.7
Nitrate as Nitrogen	0.25		0.05	mg/l	E300.0
Nitrogen Tot Kjeldahl	1.01		0.10	mg/l	E351.1
Chloride	85.6		6.0	mg/l	SM4500CLE

Lab ID: SC54401-04 **Client ID:** SW-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron	1.19		0.010	mg/l	E200.7
Chloride	3.3		3.0	mg/l	E300.0
Nitrogen Tot Kjeldahl	0.24		0.10	mg/l	E351.1
Manganese	0.056		0.001	mg/l	SW6010D
Sodium	3.40		0.10	mg/l	SW6010D

Lab ID: SC54401-05 **Client ID:** MW-1U

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Manganese (Dissolved)	0.105		0.001	mg/l	E200.7
Sodium (Dissolved)	9.08		0.11	mg/l	E200.7
Nitrate as Nitrogen	0.90		0.05	mg/l	E300.0
Chloride	10.6		3.0	mg/l	SM4500CLE

Lab ID: SC54401-06 **Client ID:** MW-1L

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Manganese	0.281		0.001	mg/l	E200.7
Nitrate as Nitrogen	0.08		0.05	mg/l	E300.0
Chloride	16.2		3.0	mg/l	SM4500CLE

Lab ID: SC54401-06RE1 **Client ID:** MW-1L

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron	169		0.50	mg/l	E200.7
Sodium	8.9		5.0	mg/l	E200.7

Lab ID: SC54401-07 **Client ID:** SW-2

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron	1.02		0.010	mg/l	E200.7
Chloride	9.3		3.0	mg/l	E300.0
Nitrate as Nitrogen	0.45		0.05	mg/l	E300.0
Nitrogen Tot Kjeldahl	0.30		0.10	mg/l	E351.1
Manganese	0.039		0.001	mg/l	SW6010D
Sodium	7.20		0.10	mg/l	SW6010D

Lab ID: SC54401-08 **Client ID:** MW-3U

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Nitrate as Nitrogen	2.26		0.05	mg/l	E300.0
Chloride	144		15.0	mg/l	SM4500CLE
Tetrachloroethene	1		1	ug/l	SW-846 8260C

Lab ID: SC54401-08RE1 **Client ID:** MW-3U

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Sodium (Dissolved)	103		1.1	mg/l	E200.7

Lab ID: SC54401-09 **Client ID:** MW-3L

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron	14.9		0.005	mg/l	E200.7
Nitrate as Nitrogen	1.45		0.05	mg/l	E300.0
Nitrogen Tot Kjeldahl	0.14		0.10	mg/l	E351.1
Chloride	404		30.0	mg/l	SM4500CLE

Lab ID: SC54401-09RE1 **Client ID:** MW-3L

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Manganese	1.30		0.005	mg/l	E200.7
Sodium	184		0.50	mg/l	E200.7

Lab ID: SC54401-10 **Client ID:** SW-3

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron	0.153		0.010	mg/l	E200.7
Chloride	42.6		3.0	mg/l	E300.0
Nitrogen Tot Kjeldahl	0.27		0.10	mg/l	E351.1
Manganese	0.020		0.001	mg/l	SW6010D
Sodium	21.5		0.10	mg/l	SW6010D

Lab ID: SC54401-11 **Client ID:** W-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron	0.138		0.010	mg/l	E200.7
Nitrate as Nitrogen	5.55		0.25	mg/l	E300.0
Nitrogen Tot Kjeldahl	0.28		0.10	mg/l	E351.1
Manganese	1.29		0.001	mg/l	SW6010D

Lab ID: SC54401-11RE1 **Client ID:** W-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Chloride	1000		75.0	mg/l	E300.0
Sodium	473		10	mg/l	SW6010D

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	Client Project #	Matrix	Collection Date/Time	Received
MW-5 SC54401-01	191710274	Ground Water	16-Apr-19 11:25	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-89-6	Iron (Dissolved)	**0.049**		mg/l	0.011	0.011	1	E200.7	17-Apr-19	18-Apr-19 04:30	13693-A,I	475253A	
7439-96-5	Manganese (Dissolved)	**0.010**		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-23-5	Sodium (Dissolved)	**18.6**		mg/l	0.11	0.11	1	"	"	"	"	"	
Prepared by method E300.0													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
14797-55-8	Nitrate as Nitrogen	**0.22**		mg/l	0.05	0.05	1	E300.0	17-Apr-19 20:42	17-Apr-19 20:42	13693-A,I	475444A	
Prepared by method E351.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Nitrogen Tot Kjeldahl	**0.80**		mg/l	0.10	0.10	1	E351.1	19-Apr-19 11:00	19-Apr-19 11:00	13693-A,I	475413A	
Prepared by method SM4500CLE													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
16887-00-6	Chloride	**22.8**		mg/l	3.0	3.0	1	SM4500CLE	17-Apr-19 20:42	17-Apr-19 20:42	13693-A,I	475444B	
Subcontracted Analyses													
Subcontracted Analyses													
Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	27-Apr-19 15:18	27-Apr-19 15:19	273017	191171A/	
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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5	191710274	Ground Water	16-Apr-19 11:25	17-Apr-19
SC54401-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	SW-846 8260C	27-Apr-19 15:18	27-Apr-19 15:19	273017	191171A/	
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	"	"	"	"	"	
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	"	"	"	"	"	
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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5 SC54401-01	191710274	Ground Water	16-Apr-19 11:25	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
108-88-3	Toluene	< 1		ug/l	1	0.2	1	SW-846 8260C	27-Apr-19 15:18	27-Apr-19 15:19	273017	191171A/	
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*	*99*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*98*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*93*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*101*			*80-120 %*			"	"	"	"	"	
Subcontracted Analyses Prepared by method SW-846 3510C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
123-91-1	1,4-Dioxane	< 0.3		ug/l	0.3	0.09	1	SW-846 8270D SIM	19-Apr-19 17:15	22-Apr-19 11:49	273017	109WAD0	
Surrogate recoveries:													
38072-94-5	*1-Methylnaphthalene-d10*	*58*			*33-122 %*			"	"	"	"	"	
63466-71-7	*Benzo(a)pyrene-d12*	*55*			*18-129 %*			"	"	"	"	"	
93951-69-0	*Fluoranthene-d10*	*92*			*40-132 %*			"	"	"	"	"	

Sample Identification
MW-4L
SC54401-02

Client Project # 191710274 | Matrix Ground Water | Collection Date/Time 16-Apr-19 11:55 | Received 17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-89-6	Iron	**8.53**		mg/l	0.005	0.005	1	E200.7	17-Apr-19	18-Apr-19 22:19	13693-A,I475200A		
7439-96-5	Manganese	**0.388**		mg/l	0.001	0.001	1	"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
7440-23-5	Sodium	**170**		mg/l	5.0	5.0	100	E200.7	17-Apr-19	22-Apr-19 15:20	13693-A,I475200A		
Prepared by method E300.0													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
14797-55-8	Nitrate as Nitrogen	**0.11**		mg/l	0.05	0.05	1	E300.0	17-Apr-19 21:07	17-Apr-19 21:07	13693-A,I475443A		
Prepared by method E351.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Nitrogen Tot Kjeldahl	**0.36**		mg/l	0.10	0.10	1	E351.1	19-Apr-19 11:01	19-Apr-19 11:01	13693-A,I475413A		
Prepared by method SM4500CLE													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
16887-00-6	Chloride	**332**		mg/l	30.0	30.0	10	SM4500CLE	18-Apr-19 00:31	18-Apr-19 00:31	13693-A,I475783A		

Sample Identification
MW-4U
SC54401-03

Client Project # 191710274 | Matrix Ground Water | Collection Date/Time 16-Apr-19 12:00 | Received 17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-89-6	Iron (Dissolved)	**0.058**		mg/l	0.011	0.011	1	E200.7	17-Apr-19	18-Apr-19 04:33	13693-A,I475253A		
7439-96-5	Manganese (Dissolved)	**0.083**		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-23-5	Sodium (Dissolved)	**44.6**		mg/l	0.11	0.11	1	"	"	"	"	"	
Prepared by method E300.0													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
14797-55-8	Nitrate as Nitrogen	**0.25**		mg/l	0.05	0.05	1	E300.0	17-Apr-19 21:15	17-Apr-19 21:15	13693-A,I475443A		
Prepared by method E351.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Nitrogen Tot Kjeldahl	**1.01**		mg/l	0.10	0.10	1	E351.1	19-Apr-19 11:02	19-Apr-19 11:02	13693-A,I475413A		
Prepared by method SM4500CLE													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
16887-00-6	Chloride	**85.6**		mg/l	6.0	6.0	2	SM4500CLE	19-Apr-19 04:11	19-Apr-19 04:11	13693-A,I475443B		

Sample Identification
SW-1
SC54401-04

Client Project #	Matrix	Collection Date/Time	Received
191710274	Surface Water	16-Apr-19 12:15	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-89-6	Iron	**1.19**		mg/l	0.010	0.010	1	E200.7	17-Apr-19	18-Apr-19 15:26	13693-A,I	475199A	
Subcontracted Analyses Prepared by method E300.0													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
16887-00-6	Chloride	**3.3**		mg/l	3.0	3.0	1	E300.0	17-Apr-19 21:22	17-Apr-19 21:22	13693-A,I	475443A	
14797-55-8	Nitrate as Nitrogen	< 0.05		mg/l	0.05	0.05	1	"	"	"	"	"	
Prepared by method E351.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Nitrogen Tot Kjeldahl	**0.24**		mg/l	0.10	0.10	1	E351.1	19-Apr-19 11:05	19-Apr-19 11:05	13693-A,I	475413A	
Subcontracted Analyses Prepared by method SW3005A/SW3010A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-96-5	Manganese	**0.056**		mg/l	0.001	0.001	1	SW6010D	17-Apr-19	18-Apr-19 15:26	13693-A,I	475199B	
7440-23-5	Sodium	**3.40**		mg/l	0.10	0.10	1	"	"	"	"	"	

Sample Identification
MW-1U
SC54401-05

Client Project #	Matrix	Collection Date/Time	Received
191710274	Ground Water	16-Apr-19 12:20	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-89-6	Iron (Dissolved)	< 0.011		mg/l	0.011	0.011	1	E200.7	17-Apr-19	18-Apr-19 04:36	13693-A,I	475253A	
7439-96-5	Manganese (Dissolved)	**0.105**		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-23-5	Sodium (Dissolved)	**9.08**		mg/l	0.11	0.11	1	"	"	"	"	"	
Prepared by method E300.0													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
14797-55-8	Nitrate as Nitrogen	**0.90**		mg/l	0.05	0.05	1	E300.0	17-Apr-19 21:38	17-Apr-19 21:38	13693-A,I	475443A	
Prepared by method E351.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Nitrogen Tot Kjeldahl	< 0.10		mg/l	0.10	0.10	1	E351.1	19-Apr-19 11:06	19-Apr-19 11:06	13693-A,I	475413A	
Prepared by method SM4500CLE													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
16887-00-6	Chloride	**10.6**		mg/l	3.0	3.0	1	SM4500CLE	17-Apr-19 21:38	17-Apr-19 21:38	13693-A,I	475443B	

Sample Identification
MW-1L
SC54401-06

Client Project # 191710274 | Matrix: Ground Water | Collection Date/Time: 16-Apr-19 12:30 | Received: 17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-96-5	Manganese	**0.281**		mg/l	0.001	0.001	1	E200.7	17-Apr-19	18-Apr-19 22:21	13693-A,I475200A		
Re-analysis of Subcontracted Analyses													
7439-89-6	Iron	**169**		mg/l	0.50	0.50	100	E200.7	17-Apr-19	22-Apr-19 15:23	13693-A,I475200A		
7440-23-5	Sodium	**8.9**		mg/l	5.0	5.0	100	"	"	"	"	"	
Prepared by method E300.0													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
14797-55-8	Nitrate as Nitrogen	**0.08**		mg/l	0.05	0.05	1	E300.0	17-Apr-19 21:45	17-Apr-19 21:45	13693-A,I475443A		
Prepared by method E351.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Nitrogen Tot Kjeldahl	< 0.10		mg/l	0.10	0.10	1	E351.1	19-Apr-19 11:07	19-Apr-19 11:07	13693-A,I475413A		
Prepared by method SM4500CLE													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
16887-00-6	Chloride	**16.2**		mg/l	3.0	3.0	1	SM4500CLE	17-Apr-19 21:45	17-Apr-19 21:45	13693-A,I475443B		

Sample Identification
SW-2
SC54401-07

Client Project # 191710274 | Matrix: Surface Water | Collection Date/Time: 16-Apr-19 13:30 | Received: 17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-89-6	Iron	**1.02**		mg/l	0.010	0.010	1	E200.7	17-Apr-19	18-Apr-19 15:45	13693-A,I475199A		
Subcontracted Analyses Prepared by method E300.0													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
16887-00-6	Chloride	**9.3**		mg/l	3.0	3.0	1	E300.0	17-Apr-19 21:53	17-Apr-19 21:53	13693-A,I475443A		
14797-55-8	Nitrate as Nitrogen	**0.45**		mg/l	0.05	0.05	1	"	"	"	"	"	
Prepared by method E351.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Nitrogen Tot Kjeldahl	**0.30**		mg/l	0.10	0.10	1	E351.1	19-Apr-19 11:08	19-Apr-19 11:08	13693-A,I475413A		
Subcontracted Analyses Prepared by method SW3005A/SW3010A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-96-5	Manganese	**0.039**		mg/l	0.001	0.001	1	SW6010D	17-Apr-19	18-Apr-19 15:45	13693-A,I475199B		
7440-23-5	Sodium	**7.20**		mg/l	0.10	0.10	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-3U SC54401-08	191710274	Ground Water	16-Apr-19 13:45	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-89-6	Iron (Dissolved)	< 0.011		mg/l	0.011	0.011	1	E200.7	17-Apr-19	18-Apr-19 04:38	13693-A,I	475253A	
7439-96-5	Manganese (Dissolved)	< 0.001		mg/l	0.001	0.001	1	"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
7440-23-5	Sodium (Dissolved)	**103**		mg/l	1.1	1.1	10	E200.7	17-Apr-19	22-Apr-19 13:28	13693-A,I	475253A	
Prepared by method E300.0													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
14797-55-8	Nitrate as Nitrogen	**2.26**		mg/l	0.05	0.05	1	E300.0	17-Apr-19 22:00	17-Apr-19 22:00	13693-A,I	475443A	
Prepared by method E351.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Nitrogen Tot Kjeldahl	< 0.10		mg/l	0.10	0.10	1	E351.1	19-Apr-19 11:09	19-Apr-19 11:09	13693-A,I	475413A	
Prepared by method SM4500CLE													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
16887-00-6	Chloride	**144**		mg/l	15.0	15.0	5	SM4500CLE	19-Apr-19 03:23	19-Apr-19 03:23	13693-A,I	475443B	
Subcontracted Analyses													
Subcontracted Analyses													
Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	27-Apr-19 15:40	27-Apr-19 15:41	273017	191171A/	
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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-3U SC54401-08	191710274	Ground Water	16-Apr-19 13:45	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	SW-846 8260C	27-Apr-19 15:40	27-Apr-19 15:41	273017	191171A/	
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	"	"	"	"	"	
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	"	"	"	"	"	
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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-3U SC54401-08	191710274	Ground Water	16-Apr-19 13:45	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
127-18-4	Tetrachloroethene	1		ug/l	1	0.2	1	SW-846 8260C	27-Apr-19 15:40	27-Apr-19 15:41	273017	191171A/	
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*	*99*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*98*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*93*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*101*			*80-120 %*			"	"	"	"	"	
Subcontracted Analyses Prepared by method SW-846 3510C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
123-91-1	1,4-Dioxane	< 0.3		ug/l	0.3	0.09	1	SW-846 8270D SIM	19-Apr-19 17:15	22-Apr-19 12:18	273017	109WAD0	
Surrogate recoveries:													
38072-94-5	*1-Methylnaphthalene-d10*	*60*			*33-122 %*			"	"	"	"	"	
63466-71-7	*Benzo(a)pyrene-d12*	*73*			*18-129 %*			"	"	"	"	"	
93951-69-0	*Fluoranthene-d10*	*103*			*40-132 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-3L SC54401-09	191710274	Ground Water	16-Apr-19 13:55	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-89-6	Iron	**14.9**		mg/l	0.005	0.005	1	E200.7	17-Apr-19	18-Apr-19 22:24	13693-A,I	475200A	
Re-analysis of Subcontracted Analyses													
7439-96-5	Manganese	**1.30**		mg/l	0.005	0.005	10	E200.7	17-Apr-19	22-Apr-19 15:36	13693-A,I	475200A	
7440-23-5	Sodium	**184**		mg/l	0.50	0.50	10	"	"	"	"	"	
Prepared by method E300.0													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
14797-55-8	Nitrate as Nitrogen	**1.45**		mg/l	0.05	0.05	1	E300.0	17-Apr-19 22:08	17-Apr-19 22:08	13693-A,I	475443A	
Prepared by method E351.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Nitrogen Tot Kjeldahl	**0.14**		mg/l	0.10	0.10	1	E351.1	19-Apr-19 11:10	19-Apr-19 11:10	13693-A,I	475413A	
Prepared by method SM4500CLE													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
16887-00-6	Chloride	**404**		mg/l	30.0	30.0	10	SM4500CLE	19-Apr-19 03:33	19-Apr-19 03:33	13693-A,I	475443B	
Subcontracted Analyses													
Subcontracted Analyses													
Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	27-Apr-19 16:02	27-Apr-19 16:03	273017	191171A/	
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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-3L SC54401-09	191710274	Ground Water	16-Apr-19 13:55	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	SW-846 8260C	27-Apr-19 16:02	27-Apr-19 16:03	273017	191171A/	
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	"	"	"	"	"	
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	"	"	"	"	"	
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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-3L SC54401-09	191710274	Ground Water	16-Apr-19 13:55	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	SW-846 8260C	27-Apr-19 16:02	27-Apr-19 16:03	273017	191171A/	
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*	*97*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*99*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*92*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*101*			*80-120 %*			"	"	"	"	"	
Subcontracted Analyses Prepared by method SW-846 3510C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
123-91-1	1,4-Dioxane	< 0.3		ug/l	0.3	0.09	1	SW-846 8270D SIM	19-Apr-19 17:15	22-Apr-19 12:47	273017	109WAD0	
Surrogate recoveries:													
38072-94-5	*1-Methylnaphthalene-d10*	*61*			*33-122 %*			"	"	"	"	"	
63466-71-7	*Benzo(a)pyrene-d12*	*77*			*18-129 %*			"	"	"	"	"	
93951-69-0	*Fluoranthene-d10*	*102*			*40-132 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SW-3 SC54401-10	191710274	Surface Water	16-Apr-19 14:05	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-89-6	Iron	**0.153**		mg/l	0.010	0.010	1	E200.7	17-Apr-19	18-Apr-19 15:50	13693-A,I	475199A	
Subcontracted Analyses Prepared by method E300.0													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
16887-00-6	Chloride	**42.6**		mg/l	3.0	3.0	1	E300.0	17-Apr-19 22:15	17-Apr-19 22:15	13693-A,I	475443A	
14797-55-8	Nitrate as Nitrogen	< 0.05		mg/l	0.05	0.05	1	"	"	"	"	"	
Prepared by method E351.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Nitrogen Tot Kjeldahl	**0.27**		mg/l	0.10	0.10	1	E351.1	19-Apr-19 11:11	19-Apr-19 11:11	13693-A,I	475413A	
Subcontracted Analyses Prepared by method SW3005A/SW3010A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-96-5	Manganese	**0.020**		mg/l	0.001	0.001	1	SW6010D	17-Apr-19	18-Apr-19 15:50	13693-A,I	475199B	
7440-23-5	Sodium	**21.5**		mg/l	0.10	0.10	1	"	"	"	"	"	
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	27-Apr-19 16:24	27-Apr-19 16:25	273017	191171A/	
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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SW-3	191710274	Surface Water	16-Apr-19 14:05	17-Apr-19
SC54401-10				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	SW-846 8260C	27-Apr-19 16:24	27-Apr-19 16:25	273017	191171A/	
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	"	"	"	"	"	
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	"	"	"	"	"	
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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SW-3 SC54401-10	191710274	Surface Water	16-Apr-19 14:05	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	SW-846 8260C	27-Apr-19 16:24	27-Apr-19 16:25	273017	191171A/	
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*	*98*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*99*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*93*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*101*			*80-120 %*			"	"	"	"	"	
Subcontracted Analyses Prepared by method SW-846 3510C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
123-91-1	1,4-Dioxane	< 0.3		ug/l	0.3	0.09	1	SW-846 8270D SIM	19-Apr-19 17:15	22-Apr-19 13:17	273017	109WAD0	
Surrogate recoveries:													
38072-94-5	*1-Methylnaphthalene-d10*	*59*			*33-122 %*			"	"	"	"	"	
63466-71-7	*Benzo(a)pyrene-d12*	*82*			*18-129 %*			"	"	"	"	"	
93951-69-0	*Fluoranthene-d10*	*99*			*40-132 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
W-1 SC54401-11	191710274	Surface Water	16-Apr-19 14:20	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-89-6	Iron	**0.138**		mg/l	0.010	0.010	1	E200.7	17-Apr-19	18-Apr-19 15:53	13693-A,I	475199A	
Subcontracted Analyses Prepared by method E300.0													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
14797-55-8	Nitrate as Nitrogen	**5.55**		mg/l	0.25	0.25	5	E300.0	18-Apr-19 11:26	18-Apr-19 11:26	13693-A,I	475443A	
Re-analysis of Subcontracted Analyses Prepared by method E300.0													
16887-00-6	Chloride	**1,000**		mg/l	75.0	75.0	25	E300.0	19-Apr-19 03:42	19-Apr-19 03:42	13693-A,I	475443A	
Prepared by method E351.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Nitrogen Tot Kjeldahl	**0.28**		mg/l	0.10	0.10	1	E351.1	19-Apr-19 11:12	19-Apr-19 11:12	13693-A,I	475413A	
Subcontracted Analyses Prepared by method SW3005A/SW3010A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7439-96-5	Manganese	**1.29**		mg/l	0.001	0.001	1	SW6010D	17-Apr-19	18-Apr-19 15:53	13693-A,I	475199B	
Re-analysis of Subcontracted Analyses Prepared by method SW3005A/SW3010A													
7440-23-5	Sodium	**473**		mg/l	10	10	100	SW6010D	17-Apr-19	22-Apr-19 15:15	13693-A,I	475199B	
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	27-Apr-19 16:46	27-Apr-19 16:47	273017	191171A/	
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	"	"	"	"	"	

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	SW-846 8260C	27-Apr-19 16:46	27-Apr-19 16:47	273017	191171A/	
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	"	"	"	"	"	
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	"	"	"	"	"	
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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
W-1	191710274	Surface Water	16-Apr-19 14:20	17-Apr-19
SC54401-11				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
100-42-5	Styrene	< 5		ug/l	5	0.2	1	SW-846 8260C	27-Apr-19 16:46	27-Apr-19 16:47	273017	191171A/	
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*	*98*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*98*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*92*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*100*			*80-120 %*			"	"	"	"	"	
Subcontracted Analyses Prepared by method SW-846 3510C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
123-91-1	1,4-Dioxane	< 0.3		ug/l	0.3	0.1	1	SW-846 8270D SIM	19-Apr-19 17:15	22-Apr-19 13:46	273017	109WAD0	
Surrogate recoveries:													
38072-94-5	*1-Methylnaphthalene-d10*	*47*			*33-122 %*			"	"	"	"	"	
63466-71-7	*Benzo(a)pyrene-d12*	*72*			*18-129 %*			"	"	"	"	"	
93951-69-0	*Fluoranthene-d10*	*90*			*40-132 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank	191710274	Trip Blank	16-Apr-19 00:00	17-Apr-19
SC54401-12				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	27-Apr-19 14:34	27-Apr-19 14:35	273017	191171A/	
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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank SC54401-12	191710274	Trip Blank	16-Apr-19 00:00	17-Apr-19

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	SW-846 8260C	27-Apr-19 14:34	27-Apr-19 14:35	273017	191171A/	
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*	*99*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*98*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*92*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*101*			*80-120 %*			"	"	"	"	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E200.7										
Batch 475199A - SW3005A/SW3010A										
Blank (CC94926-BLK)						Prepared: 17-Apr-19 Analyzed: 18-Apr-19				
Iron	< 0.010		mg/l	0.010			BRL	-		
Manganese	< 0.001		mg/l	0.001			BRL	-		
Sodium	< 0.10		mg/l	0.10			BRL	-		
LCS (CC94926-LCS)						Prepared: 17-Apr-19 Analyzed: 18-Apr-19				
Iron	**1.019**		mg/l	0.010	1		102	75-125		20
Manganese	**1.003**		mg/l	0.001	1		100	75-125		20
Sodium	**1.112**		mg/l	0.10	1		111	75-125		20
Batch 475200A - 200.7										
Blank (CC95287-BLK)						Prepared: 17-Apr-19 Analyzed: 18-Apr-19				
Sodium	< 0.050		mg/l	0.050			BRL	-		
Iron	< 0.0050		mg/l	0.0050			BRL	-		
Manganese	< 0.0005		mg/l	0.0005			BRL	-		
LCS (CC95287-LCS)						Prepared: 17-Apr-19 Analyzed: 18-Apr-19				
Sodium	**1.081**		mg/l	0.050	1		108	75-125		20
Iron	**1.009**		mg/l	0.0050	1		101	75-125		20
Manganese	**0.9585**		mg/l	0.0005	1		95.9	75-125		20
Batch 475253A - SW3005A										
Blank (CC96919-BLK)						Prepared: 17-Apr-19 Analyzed: 18-Apr-19				
Manganese (Dissolved)	< 0.001		mg/l	0.001			BRL	-		
Iron (Dissolved)	< 0.011		mg/l	0.011			BRL	-		
Sodium (Dissolved)	< 0.11		mg/l	0.11			BRL	-		
LCS (CC96919-LCS)						Prepared: 17-Apr-19 Analyzed: 18-Apr-19				
Manganese (Dissolved)	**0.9790**		mg/l	0.001	1.087		90.1	75-125		20
Sodium (Dissolved)	**1.003**		mg/l	0.11	1.087		92.3	75-125		20
Iron (Dissolved)	**0.9802**		mg/l	0.011	1.087		90.2	75-125		20
E300.0										
Batch 475443A - E300.0										
Blank (CC96246-BLK)						Prepared & Analyzed: 17-Apr-19				
Chloride	< 3.0		mg/l	3.0			BRL	-		
Nitrate as Nitrogen	< 0.05		mg/l	0.05			BRL	-		
LCS (CC96246-LCS)						Prepared & Analyzed: 18-Apr-19				
Chloride	**27.52**		mg/l	3.0	).01090512		91.7	90-110		20
Nitrate as Nitrogen	**1.064**		mg/l	0.05	04994686[illegible]		94.1	90-110		20
Batch 475444A - E300.0										
Blank (CC96476-BLK)						Prepared & Analyzed: 17-Apr-19				
Chloride	< 3.0		mg/l	3.0			BRL	-		
Nitrate as Nitrogen	< 0.05		mg/l	0.05			BRL	-		
Duplicate (CC96476-DUP)			**Source: SC54401-01**			Prepared & Analyzed: 17-Apr-19				
Chloride	**25.1**		mg/l	3.0				-	9.6	20
Nitrate as Nitrogen	**0.21**		mg/l	0.05				-		20
LCS (CC96476-LCS)						Prepared & Analyzed: 17-Apr-19				
Nitrate as Nitrogen	**1.052**		mg/l	0.05	297529538		93.1	90-110		20
Chloride	**27.34**		mg/l	3.0	109769484		91.1	90-110		20
Matrix Spike (CC96476-MS)			**Source: SC54401-01**			Prepared & Analyzed: 17-Apr-19				
Nitrate as Nitrogen	**0.8487**		mg/l	0.05	799997329		92.8	90-110		20
Chloride	**73.41**		mg/l	3.0	50		101	90-110		20
E351.1										
Batch 475413A - E351.1										

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E351.1										
Batch 475413A - E351.1										
Blank (CC95320-BLK)						Prepared: 18-Apr-19 Analyzed: 19-Apr-19				
Nitrogen Tot Kjeldahl	< 0.10	c1	mg/l	0.10			BRL	-		
LCS (CC95320-LCS)						Prepared: 18-Apr-19 Analyzed: 19-Apr-19				
Nitrogen Tot Kjeldahl	**4.150**	c1	mg/l	0.10	4.06		102	85-115		20
SM4500CLE										
Batch 475443B - SM4500CLE										
Blank (CC96246-BLK)						Prepared & Analyzed: 17-Apr-19				
Nitrate as Nitrogen	< 0.05		mg/l	0.05			BRL	-		
Chloride	< 3.0		mg/l	3.0			BRL	-		
LCS (CC96246-LCS)						Prepared & Analyzed: 18-Apr-19				
Nitrate as Nitrogen	**1.064**		mg/l	0.05	049946865		94.1	90-110		20
Chloride	**27.52**		mg/l	3.0	109051254		91.7	90-110		20
Batch 475444B - SM4500CLE										
Blank (CC96476-BLK)						Prepared & Analyzed: 17-Apr-19				
Nitrate as Nitrogen	< 0.05		mg/l	0.05			BRL	-		
Chloride	< 3.0		mg/l	3.0			BRL	-		
Duplicate (CC96476-DUP)			**Source: SC54401-01**			Prepared & Analyzed: 17-Apr-19				
Nitrate as Nitrogen	**0.21**		mg/l	0.05				-		20
Chloride	**25.1**		mg/l	3.0				-	9.6	20
LCS (CC96476-LCS)						Prepared & Analyzed: 17-Apr-19				
Nitrate as Nitrogen	**1.052**		mg/l	0.05	297529538		93.1	90-110		20
Chloride	**27.34**		mg/l	3.0	109769484		91.1	90-110		20
Matrix Spike (CC96476-MS)			**Source: SC54401-01**			Prepared & Analyzed: 17-Apr-19				
Nitrate as Nitrogen	**0.8487**		mg/l	0.05	799997329		92.8	90-110		20
Chloride	**73.41**		mg/l	3.0	50		101	90-110		20
Batch 475783A - SM4500CLE										
Blank (CC96477-BLK)						Prepared & Analyzed: 17-Apr-19				
Chloride	< 3.0		mg/l	3.0			BRL	-		
Duplicate (CC96477-DUP)			**Source: SC54401-02**			Prepared & Analyzed: 18-Apr-19				
Chloride	**335**		mg/l	30.0				-	0.9	20
LCS (CC96477-LCS)						Prepared & Analyzed: 17-Apr-19				
Chloride	**28.11**		mg/l	3.0	30		93.7	90-110		20
Matrix Spike (CC96477-MS)			**Source: SC54401-02**			Prepared & Analyzed: 18-Apr-19				
Chloride	**826.2**		mg/l	3.0	500		98.8	90-110		20
SW6010D										
Batch 475199B - SW3005A/SW3010A										
Blank (CC94926-BLK)						Prepared: 17-Apr-19 Analyzed: 18-Apr-19				
Iron	< 0.010		mg/l	0.010			BRL	-		
Manganese	< 0.001		mg/l	0.001			BRL	-		
Sodium	< 0.10		mg/l	0.10			BRL	-		
LCS (CC94926-LCS)						Prepared: 17-Apr-19 Analyzed: 18-Apr-19				
Iron	**1.019**		mg/l	0.010	1		102	75-125		20
Sodium	**1.112**		mg/l	0.10	1		111	75-125		20
Manganese	**1.003**		mg/l	0.001	1		100	75-125		20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L191171AA - SW-846 5030C										
LCS (LCSL19Q)					Prepared & Analyzed: 27-Apr-19					
Dibromomethane	**20**		ug/l	1	20		98	80-120		
m+p-Xylene	**41**		ug/l	5	40		103	80-120		
Isopropylbenzene	**21**		ug/l	5	20		104	80-120		
Hexachlorobutadiene	**20**		ug/l	5	20		98	63-120		
Freon 113	**23**		ug/l	10	20		116	73-139		
Ethylbenzene	**21**		ug/l	1	20		106	80-120		
Ethyl t-butyl ether	**20**		ug/l	1	20		98	68-121		
Ethyl ether	**18**		ug/l	5	20		89	59-141		
Dichlorodifluoromethane	**12**		ug/l	1	20		61	41-127		
Naphthalene	**20**		ug/l	5	20		102	53-124		
Dibromochloromethane	**19**		ug/l	1	20		97	71-120		
cis-1,3-Dichloropropene	**21**		ug/l	1	20		103	75-120		
cis-1,2-Dichloroethene	**23**		ug/l	1	20		117	80-125		
Chloromethane	**16**		ug/l	1	20		80	56-121		
Chloroform	**20**		ug/l	1	20		101	80-120		
Chloroethane	**15**		ug/l	1	20		73	55-123		
Chlorobenzene	**20**		ug/l	1	20		101	80-120		
di-Isopropyl ether	**23**		ug/l	1	20		114	70-124		
t-Butyl alcohol	**180**		ug/l	50	200		92	60-130		
Carbon Tetrachloride	**18**		ug/l	1	20		89	64-134		
1,2,4-Trichlorobenzene	**20**		ug/l	5	20		99	63-120		
Trichlorofluoromethane	**13**		ug/l	1	20		67	55-135		
Trichloroethene	**20**		ug/l	1	20		102	80-120		
trans-1,4-Dichloro-2-butene	**70**		ug/l	50	100		70	33-143		
trans-1,3-Dichloropropene	**20**		ug/l	1	20		98	67-120		
trans-1,2-Dichloroethene	**20**		ug/l	1	20		102	80-126		
Methyl Tertiary Butyl Ether	**19**		ug/l	1	20		94	69-122		
tert-Butylbenzene	**20**		ug/l	5	20		101	78-120		
Methylene Chloride	**22**		ug/l	1	20		112	80-120		
t-Amyl methyl ether	**19**		ug/l	5	20		97	66-120		
Styrene	**21**		ug/l	5	20		103	80-120		
sec-Butylbenzene	**22**		ug/l	5	20		108	77-120		
p-Isopropyltoluene	**21**		ug/l	5	20		103	76-120		
o-Xylene	**21**		ug/l	1	20		103	80-120		
n-Propylbenzene	**23**		ug/l	5	20		113	79-121		
n-Butylbenzene	**20**		ug/l	5	20		100	76-120		
Tetrahydrofuran	**100**		ug/l	10	100		104	54-144		
1,2,3-Trichlorobenzene	**20**		ug/l	5	20		100	66-120		
1,2-Dibromo-3-chloropropane	**20**		ug/l	5	20		100	47-131		
1,2-Dichloropropane	**22**		ug/l	1	20		112	80-120		
1,2-Dichloroethane	**19**		ug/l	1	20		97	73-124		
1,2-Dichlorobenzene	**21**		ug/l	5	20		103	80-120		
1,2-Dibromoethane	**21**		ug/l	1	20		106	77-120		
Vinyl Chloride	**16**		ug/l	1	20		78	56-120		
1,2,4-Trimethylbenzene	**21**		ug/l	5	20		105	75-120		
1,3,5-Trimethylbenzene	**21**		ug/l	5	20		106	75-120		
1,2,3-Trichloropropane	**21**		ug/l	5	20		105	75-124		
1,3-Dichlorobenzene	**21**		ug/l	5	20		103	80-120		
1,1-Dichloropropene	**21**		ug/l	5	20		107	78-120		
1,1-Dichloroethene	**23**		ug/l	1	20		117	80-131		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L191171AA - SW-846 5030C										
LCS (LCSL19Q)					Prepared & Analyzed: 27-Apr-19					
1,1-Dichloroethane	**22**		ug/l	1	20		109	80-120		
1,1,2-Trichloroethane	**23**		ug/l	1	20		114	80-120		
1,1,2,2-Tetrachloroethane	**22**		ug/l	1	20		109	72-120		
1,1,1-Trichloroethane	**19**		ug/l	1	20		94	67-126		
1,1,1,2-Tetrachloroethane	**19**		ug/l	1	20		94	78-120		
Toluene	**22**		ug/l	1	20		109	80-120		
4-Chlorotoluene	**21**		ug/l	5	20		103	80-120		
Bromomethane	**12**		ug/l	1	20		60	53-128		
Bromoform	**18**		ug/l	4	20		90	51-120		
Bromodichloromethane	**20**		ug/l	1	20		99	71-120		
Bromochloromethane	**18**		ug/l	5	20		88	80-120		
Bromobenzene	**21**		ug/l	5	20		106	80-120		
Benzene	**22**		ug/l	1	20		111	80-120		
Acrylonitrile	**100**		ug/l	20	100		103	60-129		
1,3,5-Trichlorobenzene	**20**		ug/l	5	20		100	66-123		
4-Methyl-2-pentanone	**100**		ug/l	10	100		101	62-133		
Carbon Disulfide	**23**		ug/l	5	20		114	65-128		
2-Hexanone	**100**		ug/l	10	100		103	56-135		
2-Chlorotoluene	**21**		ug/l	5	20		106	80-120		
2-Butanone	**150**		ug/l	10	150		102	59-135		
2,2-Dichloropropane	**18**		ug/l	1	20		90	55-142		
1,4-Dioxane	**660**		ug/l	250	500		131	63-146		
1,4-Dichlorobenzene	**21**		ug/l	5	20		103	80-120		
1,3-Dichloropropane	**22**		ug/l	1	20		110	80-120		
Acetone	**150**		ug/l	20	150		102	54-157		
Tetrachloroethene	**21**		ug/l	1	20		104	80-120		
Surrogate: Dibromofluoromethane	*47*		ug/l		*50*		*94*	*80-120*		
Surrogate: 4-Bromofluorobenzene	*49*		ug/l		*50*		*99*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*49*		ug/l		*50*		*98*	*80-120*		
Surrogate: Toluene-d8	*51*		ug/l		*50*		*102*	*80-120*		
LCS Dup (LCSL19Y)					Prepared & Analyzed: 27-Apr-19					
Dichlorodifluoromethane	**12**		ug/l	1	20		60	41-127	0	30
Methylene Chloride	**22**		ug/l	1	20		112	80-120	0	30
Methyl Tertiary Butyl Ether	**19**		ug/l	1	20		94	69-122	1	30
m+p-Xylene	**42**		ug/l	5	40		105	80-120	2	30
Isopropylbenzene	**21**		ug/l	5	20		105	80-120	1	30
Hexachlorobutadiene	**21**		ug/l	5	20		103	63-120	4	30
Freon 113	**23**		ug/l	10	20		115	73-139	1	30
Ethylbenzene	**21**		ug/l	1	20		106	80-120	0	30
Ethyl t-butyl ether	**20**		ug/l	1	20		98	68-121	1	30
Naphthalene	**21**		ug/l	5	20		103	53-124	1	30
di-Isopropyl ether	**23**		ug/l	1	20		115	70-124	1	30
Dibromomethane	**20**		ug/l	1	20		99	80-120	0	30
Dibromochloromethane	**20**		ug/l	1	20		98	71-120	1	30
cis-1,3-Dichloropropene	**21**		ug/l	1	20		103	75-120	0	30
cis-1,2-Dichloroethene	**24**		ug/l	1	20		118	80-125	1	30
Chloromethane	**16**		ug/l	1	20		82	56-121	2	30
Chloroform	**20**		ug/l	1	20		102	80-120	0	30
Ethyl ether	**18**		ug/l	5	20		89	59-141	0	30
tert-Butylbenzene	**20**		ug/l	5	20		102	78-120	1	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L191171AA - SW-846 5030C										
LCS Dup (LCSL19Y)					Prepared & Analyzed: 27-Apr-19					
1,2-Dichlorobenzene	**21**		ug/l	5	20		103	80-120	0	30
Trichlorofluoromethane	**13**		ug/l	1	20		66	55-135	0	30
Trichloroethene	**20**		ug/l	1	20		102	80-120	0	30
trans-1,4-Dichloro-2-butene	**70**		ug/l	50	100		70	33-143	1	30
trans-1,3-Dichloropropene	**20**		ug/l	1	20		98	67-120	0	30
trans-1,2-Dichloroethene	**20**		ug/l	1	20		102	80-126	0	30
Toluene	**22**		ug/l	1	20		110	80-120	1	30
n-Butylbenzene	**20**		ug/l	5	20		102	76-120	1	30
Tetrachloroethene	**21**		ug/l	1	20		103	80-120	1	30
Chloroethane	**13**		ug/l	1	20		66	55-123	10	30
t-Butyl alcohol	**190**		ug/l	50	200		96	60-130	4	30
t-Amyl methyl ether	**19**		ug/l	5	20		97	66-120	1	30
Styrene	**21**		ug/l	5	20		103	80-120	1	30
sec-Butylbenzene	**22**		ug/l	5	20		108	77-120	0	30
p-Isopropyltoluene	**21**		ug/l	5	20		103	76-120	0	30
o-Xylene	**21**		ug/l	1	20		103	80-120	0	30
Vinyl Chloride	**15**		ug/l	1	20		77	56-120	1	30
n-Propylbenzene	**23**		ug/l	5	20		115	79-121	1	30
Tetrahydrofuran	**96**		ug/l	10	100		96	54-144	8	30
1,1,2-Trichloroethane	**22**		ug/l	1	20		112	80-120	2	30
1,3-Dichloropropane	**22**		ug/l	1	20		111	80-120	1	30
1,3-Dichlorobenzene	**21**		ug/l	5	20		103	80-120	0	30
1,3,5-Trimethylbenzene	**21**		ug/l	5	20		107	75-120	0	30
1,3,5-Trichlorobenzene	**20**		ug/l	5	20		101	66-123	1	30
1,2-Dichloropropane	**23**		ug/l	1	20		113	80-120	1	30
1,2-Dichloroethane	**19**		ug/l	1	20		97	73-124	1	30
1,2-Dibromo-3-chloropropane	**20**		ug/l	5	20		101	47-131	2	30
1,4-Dichlorobenzene	**21**		ug/l	5	20		103	80-120	1	30
Chlorobenzene	**20**		ug/l	1	20		102	80-120	1	30
1,1,1,2-Tetrachloroethane	**19**		ug/l	1	20		96	78-120	2	30
1,1-Dichloroethane	**22**		ug/l	1	20		110	80-120	1	30
1,1-Dichloroethene	**23**		ug/l	1	20		116	80-131	0	30
1,1-Dichloropropene	**21**		ug/l	5	20		107	78-120	0	30
1,2,3-Trichlorobenzene	**20**		ug/l	5	20		102	66-120	2	30
1,2,3-Trichloropropane	**21**		ug/l	5	20		104	75-124	1	30
1,2,4-Trichlorobenzene	**20**		ug/l	5	20		102	63-120	2	30
1,2,4-Trimethylbenzene	**21**		ug/l	5	20		105	75-120	1	30
1,2-Dibromoethane	**21**		ug/l	1	20		105	77-120	0	30
1,1,1-Trichloroethane	**19**		ug/l	1	20		96	67-126	2	30
Bromomethane	**11**		ug/l	1	20		56	53-128	7	30
Carbon Tetrachloride	**18**		ug/l	1	20		90	64-134	1	30
1,1,2,2-Tetrachloroethane	**22**		ug/l	1	20		109	72-120	0	30
Carbon Disulfide	**23**		ug/l	5	20		114	65-128	0	30
Bromoform	**18**		ug/l	4	20		89	51-120	1	30
Bromodichloromethane	**20**		ug/l	1	20		98	71-120	1	30
Bromochloromethane	**18**		ug/l	5	20		88	80-120	1	30
Bromobenzene	**21**		ug/l	5	20		104	80-120	1	30
Benzene	**22**		ug/l	1	20		111	80-120	1	30
Acrylonitrile	**100**		ug/l	20	100		103	60-129	0	30
Acetone	**150**		ug/l	20	150		98	54-157	5	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L191171AA - SW-846 5030C										
LCS Dup (LCSL19Y)						Prepared & Analyzed: 27-Apr-19				
2-Butanone	**150**		ug/l	10	150		103	59-135	1	30
4-Methyl-2-pentanone	**100**		ug/l	10	100		101	62-133	0	30
2,2-Dichloropropane	**18**		ug/l	1	20		92	55-142	2	30
1,4-Dioxane	**650**		ug/l	250	500		129	63-146	1	30
2-Chlorotoluene	**21**		ug/l	5	20		105	80-120	1	30
2-Hexanone	**100**		ug/l	10	100		104	56-135	1	30
4-Chlorotoluene	**21**		ug/l	5	20		104	80-120	1	30
Surrogate: 4-Bromofluorobenzene	*50*		ug/l		*50*		*99*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*50*		ug/l		*50*		*99*	*80-120*		
Surrogate: Toluene-d8	*51*		ug/l		*50*		*101*	*80-120*		
Surrogate: Dibromofluoromethane	*47*		ug/l		*50*		*93*	*80-120*		
LCS (LCSL21Q)						Prepared & Analyzed: 27-Apr-19				
Ethanol	**590**		ug/l	750	500		118	31-180		
LCS Dup (LCSL21Y)						Prepared & Analyzed: 27-Apr-19				
Ethanol	**620**		ug/l	750	500		125	31-180	6	30
Blank (VBLKL19B)						Prepared & Analyzed: 27-Apr-19				
Bromochloromethane	< 5		ug/l	5				-		
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				-		
2-Hexanone	< 10		ug/l	10				-		
Bromodichloromethane	< 1		ug/l	1				-		
Bromoform	< 4		ug/l	4				-		
Bromomethane	< 1		ug/l	1				-		
Carbon Disulfide	< 5		ug/l	5				-		
cis-1,2-Dichloroethene	< 1		ug/l	1				-		
Chlorobenzene	< 1		ug/l	1				-		
Chloroethane	< 1		ug/l	1				-		
Chloroform	< 1		ug/l	1				-		
Chloromethane	< 1		ug/l	1				-		
cis-1,3-Dichloropropene	< 1		ug/l	1				-		
Carbon Tetrachloride	< 1		ug/l	1				-		
1,2-Dichloroethane	< 1		ug/l	1				-		
1,1-Dichloroethane	< 1		ug/l	1				-		
t-Amyl methyl ether	< 5		ug/l	5				-		
1,1-Dichloroethene	< 1		ug/l	1				-		
Dibromochloromethane	< 1		ug/l	1				-		
1,2,3-Trichlorobenzene	< 5		ug/l	5				-		
1,2,3-Trichloropropane	< 5		ug/l	5				-		
1,2,4-Trichlorobenzene	< 5		ug/l	5				-		
1,2,4-Trimethylbenzene	< 5		ug/l	5				-		
1,2-Dibromo-3-chloropropane	< 5		ug/l	5				-		
1,1-Dichloropropene	< 5		ug/l	5				-		
1,2-Dichlorobenzene	< 5		ug/l	5				-		
2-Chlorotoluene	< 5		ug/l	5				-		
1,2-Dichloropropane	< 1		ug/l	1				-		
1,3,5-Trichlorobenzene	< 5		ug/l	5				-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L191171AA - SW-846 5030C										
Blank (VBLKL19B)						Prepared & Analyzed: 27-Apr-19				
1,3,5-Trimethylbenzene	< 5		ug/l	5				-		
1,3-Dichlorobenzene	< 5		ug/l	5				-		
1,3-Dichloropropane	< 1		ug/l	1				-		
1,4-Dichlorobenzene	< 5		ug/l	5				-		
1,4-Dioxane	< 250		ug/l	250				-		
2,2-Dichloropropane	< 1		ug/l	1				-		
2-Butanone	< 10		ug/l	10				-		
1,2-Dibromoethane	< 1		ug/l	1				-		
Trichloroethene	< 1		ug/l	1				-		
Styrene	< 5		ug/l	5				-		
tert-Butylbenzene	< 5		ug/l	5				-		
sec-Butylbenzene	< 5		ug/l	5				-		
Tetrahydrofuran	< 10		ug/l	10				-		
Toluene	< 1		ug/l	1				-		
trans-1,2-Dichloroethene	< 1		ug/l	1				-		
p-Isopropyltoluene	< 5		ug/l	5				-		
trans-1,4-Dichloro-2-butene	< 50		ug/l	50				-		
t-Butyl alcohol	< 50		ug/l	50				-		
Trichlorofluoromethane	< 1		ug/l	1				-		
Vinyl Chloride	< 1		ug/l	1				-		
1,1,2,2-Tetrachloroethane	< 1		ug/l	1				-		
1,1,1-Trichloroethane	< 1		ug/l	1				-		
1,1,2-Trichloroethane	< 1		ug/l	1				-		
1,1,1,2-Tetrachloroethane	< 1		ug/l	1				-		
trans-1,3-Dichloropropene	< 1		ug/l	1				-		
Freon 113	< 10		ug/l	10				-		
Dibromomethane	< 1		ug/l	1				-		
Dichlorodifluoromethane	< 1		ug/l	1				-		
di-Isopropyl ether	< 1		ug/l	1				-		
Ethanol	< 750		ug/l	750				-		
Ethyl ether	< 5		ug/l	5				-		
Ethyl t-butyl ether	< 1		ug/l	1				-		
Tetrachloroethene	< 1		ug/l	1				-		
Ethylbenzene	< 1		ug/l	1				-		
o-Xylene	< 1		ug/l	1				-		
Hexachlorobutadiene	< 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-Propylbenzene	< 5		ug/l	5				-		
Isopropylbenzene	< 5		ug/l	5				-		
n-Butylbenzene	< 5		ug/l	5				-		
Surrogate: Toluene-d8	*51*		ug/l		*50*		*101*	*80-120*		
Surrogate: 4-Bromofluorobenzene	*49*		ug/l		*50*		*99*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*49*		ug/l		*50*		*99*	*80-120*		
Surrogate: Dibromofluoromethane	*46*		ug/l		*50*		*93*	*80-120*		
SW-846 8270D SIM										
Batch 19109WAD026 - SW-846 3510C										
LCS (109WDLCSQ)						Prepared: 19-Apr-19 Analyzed: 22-Apr-19				

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8270D SIM										
Batch 19109WAD026 - SW-846 3510C										
LCS (109WDLCSQ)					Prepared: 19-Apr-19 Analyzed: 22-Apr-19					
1,4-Dioxane	**0.6**		ug/l	0.3	1		56	10-118		
Surrogate: Benzo(a)pyrene-d12	*0.9*		ug/l		*1*		*89*	*18-129*		
Surrogate: Fluoranthene-d10	*1*		ug/l		*1*		*101*	*40-132*		
Surrogate: 1-Methylnaphthalene-d10	*0.6*		ug/l		*1*		*57*	*33-122*		
Blank (SBLKWD109B)					Prepared: 19-Apr-19 Analyzed: 22-Apr-19					
1,4-Dioxane	< 0.3		ug/l	0.3				-		
Surrogate: Fluoranthene-d10	*1*		ug/l		*1*		*106*	*40-132*		
Surrogate: 1-Methylnaphthalene-d10	*0.4*		ug/l		*1*		*40*	*33-122*		
Surrogate: Benzo(a)pyrene-d12	*0.9*		ug/l		*1*		*89*	*18-129*		

Notes and Definitions

c1	TKN is reported as Organic Nitrogen in the Blank, LCS, DUP and MS.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

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.

SC54401 Bm

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CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:
- [X] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Stantec
5 Dartmouth Drive
Suite 200
Auburn, NH 03032
Telephone #: 603-669-8672
Project Mgr: Donald Moore

Invoice To: Same
P.O No.: MSA dated 3/1/2017 Quote #:

Project No: 1917102774
Site Name: Durham LF
Location: Durham State: NH
Sampler(s): J. Poirier / J. Ward Stantec

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Compsite

List Preservative Code below: 3 4 2

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? [ ] Yes [ ] No
CT DPH RCP Report? [ ] Yes [ ] No
[X] Standard [ ] No QC [ ] DQA*
[ ] ASP A* [ ] ASP B*
[ ] NJ Reduced* [ ] NJ Full*
[ ] Tier II* [ ] Tier IV*
[X] Other: NHDES
State-specific reporting standards:

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Cl, NO3	Analysis: TKN	Fe, Mn, Na	VOC NHDES Full List	1,4 Dioxane	< 0.25 mg/L reporting limit	Check if chlorinated	QA/QC Reporting Notes
SC54401-01	MW-5	4/16/19	1125	G	GW	3	2		3	X	X	XF	X	X			XF = field filtered
02	MW-4L	4/16/19	1155	G	GW				3	X	X	X					
03	MW-4U	4/16/19	1200	G	GW				3	X	X	XF					
04	SW-1	4/16/19	1215	G	SW				3	X	X	X					
05	MW-1U	4/16/19	1220	G	GW				3	X	X	XF					
06	MW-1L	4/16/19	1230	G	GW				3	X	X	X					
07	SW-2	4/16/19	1330	G	SW				3	X	X	X					
08	MW-3U	4/16/19	1345	G	GW	3	2		3	X	X	XF	X	X			
09	MW-3L	4/16/19	1355	G	GW	3	2		3	X	X	X	X	X			
10	SW-3	4/16/19	1405	G	SW	3	2		3	X	X	X	X	X			

Relinquished by:	Received by:	Date:	Time:
R. Gaglia		4/16/19	11:18
		4/17/19	1358

Temp °C: Observed 1.3; Correction Factor 0; Corrected 1.3; IR ID # 01

[ ] EDD format: _____
[ ] E-mail to: _____

Condition upon receipt: Custody Seals: [ ] Present [ ] Intact [ ] Broken
[ ] Ambient [X] Iced [ ] Refrigerated [ ] DI VOA Frozen [ ] Soil Jar Frozen

SC54401

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CHAIN OF CUSTODY RECORD

Page 2 of 2

Special Handling:
- [X] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Stantec
5 Dartmouth Drive
Suite 200
Auburn, NH 03032
Telephone #: 603-669-8672
Project Mgr: Donald Moore

Invoice To: Same
P.O No.: MSA dated 3/1/2017 Quote #:

Project No: 191710274
Site Name: Durham LF
Location: Durham, NH State: NH
Sampler(s): J. Poirier, J. Ward Stantec

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

List Preservative Code below: 3 4 2

QA/QC Reporting Notes:
* additional charges may appply

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Compsite

MA DEP MCP CAM Report? [ ] Yes [ ] No
CT DPH RCP Report? [ ] Yes [ ] No
[X] Standard [ ] No QC [ ] DQA*
[ ] ASP A* [ ] ASP B*
[ ] NJ Reduced* [ ] NJ Full*
[ ] Tier II* [ ] Tier IV*
[X] Other: NHDES
State-specific reporting standards:

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Cl, NO3	TKN	Fe, Mn, Na	VOC NHDES Full List+ 1,4 Dioxane	→ 0.25 mg/L reporting limit	Check if chlorinated
SC54401-1	W-1	4-16-17	1420	G	GW	3	2		3	X	X	X	X	X	

Relinquished by:	Received by:	Date:	Time:	Temp °C
K. Caplan		4/17/19	1418	Observed 1.3
		4/17/19	1358	Correction Factor 0
				Corrected 1.3
				IR ID # 01

[ ] EDD format:
[ ] E-mail to:

Condition upon receipt: Custody Seals: [ ] Present [ ] Intact [ ] Broken
[ ] Ambient [X] Iced [ ] Refrigerated [ ] DI VOA Frozen [ ] Soil Jar Frozen

Batch Summary

19109WAD026

Subcontracted Analyses

109WDLCSQ
SBLKWD109B
SC54401-01 (MW-5)
SC54401-08 (MW-3U)
SC54401-09 (MW-3L)
SC54401-10 (SW-3)
SC54401-11 (W-1)

475199A

Subcontracted Analyses

CC94926-BLK
CC94926-LCS
SC54401-04 (SW-1)
SC54401-07 (SW-2)
SC54401-10 (SW-3)
SC54401-11 (W-1)

475199B

Subcontracted Analyses

CC94926-BLK
CC94926-LCS
SC54401-04 (SW-1)
SC54401-07 (SW-2)
SC54401-10 (SW-3)
SC54401-11 (W-1)
SC54401-11RE1 (W-1)

475200A

Subcontracted Analyses

CC95287-BLK
CC95287-LCS
SC54401-02 (MW-4L)
SC54401-02RE1 (MW-4L)
SC54401-06 (MW-1L)
SC54401-06RE1 (MW-1L)
SC54401-09 (MW-3L)
SC54401-09RE1 (MW-3L)

475253A

Subcontracted Analyses

CC96919-BLK
CC96919-LCS
SC54401-01 (MW-5)
SC54401-03 (MW-4U)
SC54401-05 (MW-1U)
SC54401-08 (MW-3U)
SC54401-08RE1 (MW-3U)

475413A

Subcontracted Analyses

CC95320-BLK
CC95320-LCS
SC54401-01 (MW-5)
SC54401-02 (MW-4L)
SC54401-03 (MW-4U)
SC54401-04 (SW-1)
SC54401-05 (MW-1U)
SC54401-06 (MW-1L)
SC54401-07 (SW-2)
SC54401-08 (MW-3U)
SC54401-09 (MW-3L)
SC54401-10 (SW-3)
SC54401-11 (W-1)

475443A

Subcontracted Analyses

CC96246-BLK
CC96246-LCS
SC54401-02 (MW-4L)
SC54401-03 (MW-4U)
SC54401-04 (SW-1)
SC54401-05 (MW-1U)
SC54401-06 (MW-1L)
SC54401-07 (SW-2)
SC54401-08 (MW-3U)
SC54401-09 (MW-3L)
SC54401-10 (SW-3)
SC54401-11 (W-1)
SC54401-11RE1 (W-1)

475443B

Subcontracted Analyses

CC96246-BLK
CC96246-LCS
SC54401-03 (MW-4U)
SC54401-05 (MW-1U)
SC54401-06 (MW-1L)
SC54401-08 (MW-3U)
SC54401-09 (MW-3L)

475444A

Subcontracted Analyses

CC96476-BLK
CC96476-DUP
CC96476-LCS
CC96476-MS
SC54401-01 (MW-5)

475444B

Subcontracted Analyses

CC96476-BLK
CC96476-DUP
CC96476-LCS
CC96476-MS
SC54401-01 (MW-5)

475783A

Subcontracted Analyses

CC96477-BLK
CC96477-DUP
CC96477-LCS
CC96477-MS
SC54401-02 (MW-4L)

L191171AA

Subcontracted Analyses

LCSL19Q
LCSL19Y
LCSL21Q
LCSL21Y
SC54401-01 (MW-5)
SC54401-08 (MW-3U)
SC54401-09 (MW-3L)
SC54401-10 (SW-3)
SC54401-11 (W-1)
SC54401-12 (Trip Blank)
VBLKL19B

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☑ Final Report
☐ Revised Report

Report Date:
25-Apr-19 15:54

Laboratory Report
SC54400

Stantec Consulting Services
5 Dartmouth Drive, Suite 101
Auburn, NH 03032
Attn: Don Moore

Project: Durham Landfill - Durham, NH
Project #: 191710274

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:

Erica Troy
Quality Services Manager

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 16 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.

Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our 'Quality' web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).

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: SC54400

Project: Durham Landfill - Durham, NH

Project Number: 191710274

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC54400-01	84 Durham Pt Rd	Ground Water	16-Apr-19 09:15	17-Apr-19 14:03
SC54400-02	SW-4	Surface Water	16-Apr-19 09:35	17-Apr-19 14:03
SC54400-03	110 Durham Pt Rd	Ground Water	16-Apr-19 10:20	17-Apr-19 14:03
SC54400-04	128 Durham Pt Rd	Ground Water	16-Apr-19 10:50	17-Apr-19 14:03
SC54400-05	120 Durham Pt Rd	Ground Water	16-Apr-19 13:05	17-Apr-19 14:03
SC54400-06	SW-1	Surface Water	16-Apr-19 12:15	17-Apr-19 14:03
SC54400-07	W-1	Ground Water	16-Apr-19 14:20	17-Apr-19 14:03
SC54400-08	FB-1	Ground Water	16-Apr-19 14:30	17-Apr-19 14:03

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.

There is no relevant protocol-specific QC and/or performance standards non-conformances to report.

Sample Acceptance Check Form

Client:	Stantec Consulting Services - Auburn, NH
Project:	Durham Landfill - Durham, NH / 191710274
Work Order:	SC54400
Sample(s) received on:	4/17/2019

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

	Yes	No	N/A
Were custody seals present?	☐	☑	☐
Were custody seals intact?	☐	☐	☑
Were samples received at a temperature of ≤ 6°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: SC54400-02 **Client ID:** SW-4

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Perfluoroheptanoic acid	1.8		0.86	ng/l	EPA 537 modified
Perfluorohexanesulfonate	2.1		1.7	ng/l	EPA 537 modified
Perfluorohexanoic acid	2.3		1.7	ng/l	EPA 537 modified
Perfluoro-octanesulfonate	3.9		1.7	ng/l	EPA 537 modified
Perfluorooctanoic acid	5.2		0.86	ng/l	EPA 537 modified

Lab ID: SC54400-03 **Client ID:** 110 Durham Pt Rd

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Perfluorobutanesulfonate	1.8		0.87	ng/l	EPA 537 modified
Perfluoroheptanoic acid	1.1		0.87	ng/l	EPA 537 modified
Perfluorooctanoic acid	4.0		0.87	ng/l	EPA 537 modified

Lab ID: SC54400-05 **Client ID:** 120 Durham Pt Rd

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Perfluorobutanesulfonate	0.99		0.87	ng/l	EPA 537 modified
Perfluoroheptanoic acid	5.0		0.87	ng/l	EPA 537 modified
Perfluorohexanesulfonate	2.7		1.7	ng/l	EPA 537 modified
Perfluorohexanoic acid	9.3		1.7	ng/l	EPA 537 modified
Perfluoro-octanesulfonate	1.8		1.7	ng/l	EPA 537 modified
Perfluorooctanoic acid	13		0.87	ng/l	EPA 537 modified
Perfluoropentanoic acid	5.6		5.2	ng/l	EPA 537 modified

Lab ID: SC54400-06 **Client ID:** SW-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Perfluorooctanoic acid	1.6		0.91	ng/l	EPA 537 modified

Lab ID: SC54400-07 **Client ID:** W-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Perfluorobutanesulfonate	9.8		0.92	ng/l	EPA 537 modified
Perfluorobutanoic acid	8.7		5.5	ng/l	EPA 537 modified
Perfluoroheptanoic acid	8.4		0.92	ng/l	EPA 537 modified
Perfluorohexanesulfonate	15		1.8	ng/l	EPA 537 modified
Perfluorohexanoic acid	18		1.8	ng/l	EPA 537 modified
Perfluoro-octanesulfonate	17		1.8	ng/l	EPA 537 modified
Perfluorooctanoic acid	16		0.92	ng/l	EPA 537 modified
Perfluoropentanoic acid	15		5.5	ng/l	EPA 537 modified

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	Client Project #	Matrix	Collection Date/Time	Received
84 Durham Pt Rd SC54400-01	191710274	Ground Water	16-Apr-19 09:15	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
375-73-5	Perfluorobutanesulfonate	< 0.87		ng/l	0.87	0.26	1	EPA 537 modified	19-Apr-19 13:15	22-Apr-19 22:28	273017	19109010	
375-22-4	Perfluorobutanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	< 0.87		ng/l	0.87	0.35	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	< 0.87		ng/l	0.87	0.26	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
Surrogate recoveries:													
375-73-5LC3	*13C3-PFBS*	*76*			*26-148 %*			"	"	"	"	"	
355-46-4LC3	*13C3-PFHxS*	*58*			*34-126 %*			"	"	"	"	"	
375-22-4LC4	*13C4-PFBA*	*74*			*33-123 %*			"	"	"	"	"	
375-85-9LC4	*13C4-PFHpA*	*52*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*69*			*35-138 %*			"	"	"	"	"	
2706-90-3LC5	*13C5-PFPeA*	*76*			*31-157 %*			"	"	"	"	"	
335-67-1LC8	*13C8-PFOA*	*73*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*74*			*50-121 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*74*			*41-144 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SW-4 SC54400-02	191710274	Surface Water	16-Apr-19 09:35	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
375-73-5	Perfluorobutanesulfonate	< 0.86		ng/l	0.86	0.26	1	EPA 537 modified	19-Apr-19 13:15	22-Apr-19 22:37	273017	19109010	
375-22-4	Perfluorobutanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	**1.8**		ng/l	0.86	0.35	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	**2.1**		ng/l	1.7	0.35	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	**2.3**		ng/l	1.7	0.35	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	**3.9**		ng/l	1.7	0.35	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	**5.2**		ng/l	0.86	0.26	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
Surrogate recoveries:													
375-73-5LC3	*13C3-PFBS*	*87*			*26-148 %*			"	"	"	"	"	
355-46-4LC3	*13C3-PFHxS*	*65*			*34-126 %*			"	"	"	"	"	
375-22-4LC4	*13C4-PFBA*	*70*			*33-123 %*			"	"	"	"	"	
375-85-9LC4	*13C4-PFHpA*	*55*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*66*			*35-138 %*			"	"	"	"	"	
2706-90-3LC5	*13C5-PFPeA*	*81*			*31-157 %*			"	"	"	"	"	
335-67-1LC8	*13C8-PFOA*	*73*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*69*			*50-121 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*64*			*41-144 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
110 Durham Pt Rd SC54400-03	191710274	Ground Water	16-Apr-19 10:20	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
375-73-5	Perfluorobutanesulfonate	**1.8**		ng/l	0.87	0.26	1	EPA 537 modified	19-Apr-19 13:15	22-Apr-19 22:46	273017	19109010	
375-22-4	Perfluorobutanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	**1.1**		ng/l	0.87	0.35	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	**4.0**		ng/l	0.87	0.26	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
Surrogate recoveries:													
375-73-5LC3	*13C3-PFBS*	*96*			*26-148 %*			"	"	"	"	"	
355-46-4LC3	*13C3-PFHxS*	*71*			*34-126 %*			"	"	"	"	"	
375-22-4LC4	*13C4-PFBA*	*80*			*33-123 %*			"	"	"	"	"	
375-85-9LC4	*13C4-PFHpA*	*63*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*76*			*35-138 %*			"	"	"	"	"	
2706-90-3LC5	*13C5-PFPeA*	*84*			*31-157 %*			"	"	"	"	"	
335-67-1LC8	*13C8-PFOA*	*78*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*72*			*50-121 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*74*			*41-144 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
128 Durham Pt Rd SC54400-04	191710274	Ground Water	16-Apr-19 10:50	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
375-73-5	Perfluorobutanesulfonate	< 0.90		ng/l	0.90	0.27	1	EPA 537 modified	19-Apr-19 13:15	22-Apr-19 22:55	273017	19109010	
375-22-4	Perfluorobutanoic acid	< 5.4		ng/l	5.4	1.8	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	< 0.90		ng/l	0.90	0.36	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	< 1.8		ng/l	1.8	0.36	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	< 1.8		ng/l	1.8	0.36	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.8		ng/l	1.8	0.36	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	< 1.8		ng/l	1.8	0.36	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	< 0.90		ng/l	0.90	0.27	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.4		ng/l	5.4	1.8	1	"	"	"	"	"	
Surrogate recoveries:													
375-73-5LC3	*13C3-PFBS*	*80*			*26-148 %*			"	"	"	"	"	
355-46-4LC3	*13C3-PFHxS*	*65*			*34-126 %*			"	"	"	"	"	
375-22-4LC4	*13C4-PFBA*	*75*			*33-123 %*			"	"	"	"	"	
375-85-9LC4	*13C4-PFHpA*	*60*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*71*			*35-138 %*			"	"	"	"	"	
2706-90-3LC5	*13C5-PFPeA*	*77*			*31-157 %*			"	"	"	"	"	
335-67-1LC8	*13C8-PFOA*	*75*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*70*			*50-121 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*68*			*41-144 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
120 Durham Pt Rd SC54400-05	191710274	Ground Water	16-Apr-19 13:05	17-Apr-19

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
375-73-5	Perfluorobutanesulfonate	**0.99**		ng/l	0.87	0.26	1	EPA 537 modified	19-Apr-19 13:15	22-Apr-19 23:04	273017	19109010	
375-22-4	Perfluorobutanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	**5.0**		ng/l	0.87	0.35	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	**2.7**		ng/l	1.7	0.35	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	**9.3**		ng/l	1.7	0.35	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	**1.8**		ng/l	1.7	0.35	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	**13**		ng/l	0.87	0.26	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	**5.6**		ng/l	5.2	1.7	1	"	"	"	"	"	
Surrogate recoveries:													
375-73-5LC3	*13C3-PFBS*	*93*			*26-148 %*			"	"	"	"	"	
355-46-4LC3	*13C3-PFHxS*	*71*			*34-126 %*			"	"	"	"	"	
375-22-4LC4	*13C4-PFBA*	*79*			*33-123 %*			"	"	"	"	"	
375-85-9LC4	*13C4-PFHpA*	*62*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*72*			*35-138 %*			"	"	"	"	"	
2706-90-3LC5	*13C5-PFPeA*	*82*			*31-157 %*			"	"	"	"	"	
335-67-1LC8	*13C8-PFOA*	*81*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*82*			*50-121 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*77*			*41-144 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SW-1 SC54400-06	191710274	Surface Water	16-Apr-19 12:15	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
375-73-5	Perfluorobutanesulfonate	< 0.91		ng/l	0.91	0.27	1	EPA 537 modified	19-Apr-19 13:15	22-Apr-19 23:13	273017	19109010	
375-22-4	Perfluorobutanoic acid	< 5.5		ng/l	5.5	1.8	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	< 0.91		ng/l	0.91	0.37	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	< 1.8		ng/l	1.8	0.37	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	< 1.8		ng/l	1.8	0.37	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.8		ng/l	1.8	0.37	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	< 1.8		ng/l	1.8	0.37	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	**1.6**		ng/l	0.91	0.27	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.5		ng/l	5.5	1.8	1	"	"	"	"	"	
Surrogate recoveries:													
375-73-5LC3	*13C3-PFBS*	*90*			*26-148 %*			"	"	"	"	"	
355-46-4LC3	*13C3-PFHxS*	*63*			*34-126 %*			"	"	"	"	"	
375-22-4LC4	*13C4-PFBA*	*70*			*33-123 %*			"	"	"	"	"	
375-85-9LC4	*13C4-PFHpA*	*56*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*64*			*35-138 %*			"	"	"	"	"	
2706-90-3LC5	*13C5-PFPeA*	*73*			*31-157 %*			"	"	"	"	"	
335-67-1LC8	*13C8-PFOA*	*66*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*71*			*50-121 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*68*			*41-144 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
W-1 SC54400-07	191710274	Ground Water	16-Apr-19 14:20	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
375-73-5	Perfluorobutanesulfonate	**9.8**		ng/l	0.92	0.28	1	EPA 537 modified	19-Apr-19 13:15	22-Apr-19 23:22	273017	19109010	
375-22-4	Perfluorobutanoic acid	**8.7**		ng/l	5.5	1.8	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	**8.4**		ng/l	0.92	0.37	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	**15**		ng/l	1.8	0.37	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	**18**		ng/l	1.8	0.37	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.8		ng/l	1.8	0.37	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	**17**		ng/l	1.8	0.37	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	**16**		ng/l	0.92	0.28	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	**15**		ng/l	5.5	1.8	1	"	"	"	"	"	
Surrogate recoveries:													
375-73-5LC3	*13C3-PFBS*	*106*			*26-148 %*			"	"	"	"	"	
355-46-4LC3	*13C3-PFHxS*	*73*			*34-126 %*			"	"	"	"	"	
375-22-4LC4	*13C4-PFBA*	*77*			*33-123 %*			"	"	"	"	"	
375-85-9LC4	*13C4-PFHpA*	*65*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*71*			*35-138 %*			"	"	"	"	"	
2706-90-3LC5	*13C5-PFPeA*	*96*			*31-157 %*			"	"	"	"	"	
335-67-1LC8	*13C8-PFOA*	*80*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*82*			*50-121 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*78*			*41-144 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
FB-1	191710274	Ground Water	16-Apr-19 14:30	17-Apr-19
SC54400-08				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
375-73-5	Perfluorobutanesulfonate	< 0.88		ng/l	0.88	0.26	1	EPA 537 modified	19-Apr-19 13:15	22-Apr-19 23:31	273017	19109010	
375-22-4	Perfluorobutanoic acid	< 5.3		ng/l	5.3	1.8	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	< 0.88		ng/l	0.88	0.35	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	< 1.8		ng/l	1.8	0.35	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	< 1.8		ng/l	1.8	0.35	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.8		ng/l	1.8	0.35	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	< 1.8		ng/l	1.8	0.35	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	< 0.88		ng/l	0.88	0.26	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.3		ng/l	5.3	1.8	1	"	"	"	"	"	
Surrogate recoveries:													
375-73-5LC3	*13C3-PFBS*	*73*			*26-148 %*			"	"	"	"	"	
355-46-4LC3	*13C3-PFHxS*	*60*			*34-126 %*			"	"	"	"	"	
375-22-4LC4	*13C4-PFBA*	*73*			*33-123 %*			"	"	"	"	"	
375-85-9LC4	*13C4-PFHpA*	*54*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*70*			*35-138 %*			"	"	"	"	"	
2706-90-3LC5	*13C5-PFPeA*	*74*			*31-157 %*			"	"	"	"	"	
335-67-1LC8	*13C8-PFOA*	*74*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*75*			*50-121 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*74*			*41-144 %*			"	"	"	"	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 537 modified										
Batch 19109010 - METHOD										
Blank (BLK109010BB)						Prepared: 19-Apr-19 Analyzed: 22-Apr-19				
Perfluorononanoic acid	< 2.0		ng/l	2.0				-		
Perfluoropentanoic acid	< 6.0		ng/l	6.0				-		
Perfluoro-octanesulfonate	< 2.0		ng/l	2.0				-		
Perfluorohexanoic acid	< 2.0		ng/l	2.0				-		
Perfluorohexanesulfonate	< 2.0		ng/l	2.0				-		
Perfluoroheptanoic acid	< 1.0		ng/l	1.0				-		
Perfluorobutanoic acid	< 6.0		ng/l	6.0				-		
Perfluorobutanesulfonate	< 1.0		ng/l	1.0				-		
Perfluorooctanoic acid	< 1.0		ng/l	1.0				-		
Surrogate: 13C8-PFOS	*15*		ng/l		*19*		*80*	*50-121*		
Surrogate: 13C8-PFOA	*17*		ng/l		*20*		*84*	*48-122*		
Surrogate: 13C5-PFPeA	*18*		ng/l		*20*		*92*	*31-157*		
Surrogate: 13C5-PFHxA	*17*		ng/l		*20*		*86*	*35-138*		
Surrogate: 13C4-PFHpA	*16*		ng/l		*20*		*78*	*35-126*		
Surrogate: 13C3-PFBS	*16*		ng/l		*19*		*88*	*26-148*		
Surrogate: 13C4-PFBA	*17*		ng/l		*20*		*87*	*33-123*		
Surrogate: 13C3-PFHxS	*16*		ng/l		*19*		*86*	*34-126*		
Surrogate: 13C9-PFNA	*17*		ng/l		*20*		*85*	*41-144*		
LCS (LCS109010QQ)						Prepared: 19-Apr-19 Analyzed: 22-Apr-19				
Perfluoropentanoic acid	**5.6**		ng/l	6.0	5.4		102	74-134		
Perfluorobutanoic acid	**6.7**		ng/l	6.0	5.4		124	74-142		
Perfluoroheptanoic acid	**5.9**		ng/l	1.0	5.4		108	76-140		
Perfluorohexanesulfonate	**5.5**		ng/l	2.0	5.1		107	71-131		
Perfluorohexanoic acid	**5.8**		ng/l	2.0	5.4		107	75-135		
Perfluorononanoic acid	**5.9**		ng/l	2.0	5.4		108	72-148		
Perfluorooctanoic acid	**5.9**		ng/l	1.0	5.4		109	72-138		
Perfluorobutanesulfonate	**5.3**		ng/l	1.0	4.8		110	73-128		
Perfluoro-octanesulfonate	**5.2**		ng/l	2.0	5.2		100	67-138		
Surrogate: 13C4-PFHpA	*14*		ng/l		*20*		*69*	*35-126*		
Surrogate: 13C3-PFBS	*13*		ng/l		*19*		*70*	*26-148*		
Surrogate: 13C3-PFHxS	*13*		ng/l		*19*		*71*	*34-126*		
Surrogate: 13C4-PFBA	*15*		ng/l		*20*		*73*	*33-123*		
Surrogate: 13C5-PFPeA	*15*		ng/l		*20*		*74*	*31-157*		
Surrogate: 13C8-PFOA	*14*		ng/l		*20*		*71*	*48-122*		
Surrogate: 13C9-PFNA	*14*		ng/l		*20*		*70*	*41-144*		
Surrogate: 13C5-PFHxA	*14*		ng/l		*20*		*68*	*35-138*		
Surrogate: 13C8-PFOS	*14*		ng/l		*19*		*74*	*50-121*		
LCS Dup (LCS1090Y)						Prepared: 19-Apr-19 Analyzed: 22-Apr-19				
Perfluoropentanoic acid	**5.7**		ng/l	6.0	5.4		104	74-134	2	30
Perfluorooctanoic acid	**6.0**		ng/l	1.0	5.4		110	72-138	1	30
Perfluoro-octanesulfonate	**5.3**		ng/l	2.0	5.2		102	67-138	2	30
Perfluorononanoic acid	**6.0**		ng/l	2.0	5.4		110	72-148	2	30
Perfluorohexanoic acid	**5.8**		ng/l	2.0	5.4		106	75-135	0	30
Perfluorohexanesulfonate	**5.6**		ng/l	2.0	5.1		108	71-131	1	30
Perfluoroheptanoic acid	**5.8**		ng/l	1.0	5.4		106	76-140	1	30
Perfluorobutanoic acid	**6.3**		ng/l	6.0	5.4		116	74-142	6	30
Perfluorobutanesulfonate	**5.4**		ng/l	1.0	4.8		112	73-128	1	30
Surrogate: 13C5-PFPeA	*15*		ng/l		*20*		*75*	*31-157*		
Surrogate: 13C9-PFNA	*15*		ng/l		*20*		*77*	*41-144*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 537 modified										
Batch 19109010 - METHOD										
LCS Dup (LCS1090Y)						Prepared: 19-Apr-19 Analyzed: 22-Apr-19				
Surrogate: 13C8-PFOA	*15*		ng/l		*20*		*74*	*48-122*		
Surrogate: 13C5-PFHxA	*15*		ng/l		*20*		*74*	*35-138*		
Surrogate: 13C4-PFHpA	*15*		ng/l		*20*		*73*	*35-126*		
Surrogate: 13C4-PFBA	*15*		ng/l		*20*		*76*	*33-123*		
Surrogate: 13C3-PFHxS	*15*		ng/l		*19*		*77*	*34-126*		
Surrogate: 13C3-PFBS	*14*		ng/l		*19*		*73*	*26-148*		
Surrogate: 13C8-PFOS	*14*		ng/l		*19*		*75*	*50-121*		

Notes and Definitions

dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

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.

SC54400

eurofins | Spectrum Analytical

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- [X] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Stantec
5 Dartmouth Drive
Suite 200
Auburn, NH 03032
Telephone #: 603-669-8672
Project Mgr: Donald Moose

Invoice To: Same
P.O No.: MSA dated 3/1/17 Quote #:

Project No: 1917102.74
Site Name: Durham LF
Location: Durham State: NH
Sampler(s): J. Poirier / J. Ward
Stantec

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= Trizma 12= _____

List Preservative Code below: 11

QA/QC Reporting Notes:
* additional charges may appply

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= _____ X2= _____ X3= _____

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: PFAS	Analysis: NHDES list 69	Check if chlorinated
SC54400-01	84 Durham Pt Rd	4/16/19	0915	GW	G				2	X		
02	SW-4	4/16/19	0935	SW	G				2	X		
03	110 Durham Pt Rd	4/16/19	1020	GW	G				2	X		
04	128 Durham Pt Rd	4/16/19	1050	GW	G				2	X		
05	120 Durham Pt Rd	4/16/19	1305	GW	G				2	X		
06	SW-1	4/16/19	1215	SW	G				2	X		
07	W-1	4/16/19	1420	GW	G				2	X		
08	FB-1	4/16/19	1430	GW	G				2	X		

MA DEP MCP CAM Report? [ ] Yes [ ] No
CT DPH RCP Report? [ ] Yes [ ] No
[X] Standard [ ] No QC
[ ] DQA*
[ ] ASP A* [ ] ASP B*
[ ] NJ Reduced* [ ] NJ Full*
[ ] Tier II* [ ] Tier IV*
[X] Other: NHDES
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:
L. Caplan		4/17/19	11:18
		4/17/19	1425

Temp °C: Observed 2.4; Correction Factor 0; Corrected 2.4; IR ID # 01

[ ] EDD format: _____
[ ] E-mail to: _____

Condition upon receipt: Custody Seals: [ ] Present [ ] Intact [ ] Broken
[ ] Ambient [X] Iced [ ] Refrigerated [ ] DI VOA Frozen [ ] Soil Jar Frozen

Batch Summary

19109010

Subcontracted Analyses

BLK109010BB
LCS109010QQ
LCS1090Y
SC54400-01 (84 Durham Pt Rd)
SC54400-02 (SW-4)
SC54400-03 (110 Durham Pt Rd)
SC54400-04 (128 Durham Pt Rd)
SC54400-05 (120 Durham Pt Rd)
SC54400-06 (SW-1)
SC54400-07 (W-1)
SC54400-08 (FB-1)

Stantec Consulting Services Inc.
5 Dartmouth Drive, Suite 200, Auburn NH 03032
Tel: (603) 669-8672, Fax: (603) 669-7636

May 7, 2019
File: 191710261

Attention: Mr. Barry Smith
84 Durham Point Road
Durham, NH 03824

Reference: Results of April 2019 PFAS Sampling – 110 Durham Point Road, Durham, NH
Closed Durham Landfill Site, 100 Durham Point Road, Durham, NH
NHDES Site #1990060111

Dear Mr. Smith,

As you know, Stantec Consulting Services Inc. (Stantec) collected a sample of groundwater from your well on April 16, 2019 and had it analyzed for per- and polyfluoroalkyl substances (PFAS). The impetus for this sampling was the detection, in April 2017 and November 2018, of elevated concentrations of various PFAS isomers in monitoring wells at the nearby Durham Landfill (located on Durham Point Road). Based on those results and the general use of water supply wells in the area, the Town of Durham requested that additional sampling of residential water supply wells located within 1000 feet of the landfill be conducted for PFAS to identify impacts to these sensitive receptors, if any.

Based on the results of the analysis of the sample from your well, no PFAS isomers were detected at concentrations exceeding the laboratory's reporting limits (generally 2-10 nanograms per liter or parts per trillion). A copy of the pertinent page from the laboratory report for your well is attached. We will continue to coordinate with the Town and the New Hampshire Department of Environmental Services to determine if and/or when additional PFAS sampling of your well is required.

If you have any questions regarding these results, don't hesitate to call the undersigned.

Sincerely,
STANTEC CONSULTING SERVICES INC.

Donald F. Moore

Donald Moore, P.G.
Associate/Hydrogeologist
Phone: (603) 669-8672
Cell: (603) 498-3244
Donald.moore2@stantec.com

Attachment: Page from Eurofins Laboratory Report

c. Town of Durham w/ attachment
NHDES w/ attachment

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
84 Durham Pt Rd SC54400-01	191710274	Ground Water	16-Apr-19 09:15	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
375-73-5	Perfluorobutanesulfonate	< 0.87		ng/l	0.87	0.26	1	EPA 537 modified	19-Apr-19 13:15	22-Apr-19 22:28	273017	19109010	
375-22-4	Perfluorobutanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	< 0.87		ng/l	0.87	0.35	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	< 0.87		ng/l	0.87	0.26	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
Surrogate recoveries:													
375-73-5LC3	*13C3-PFBS*	*76*			*26-148 %*			"	"	"	"	"	
355-46-4LC3	*13C3-PFHxS*	*58*			*34-126 %*			"	"	"	"	"	
375-22-4LC4	*13C4-PFBA*	*74*			*33-123 %*			"	"	"	"	"	
375-85-9LC4	*13C4-PFHpA*	*52*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*69*			*35-138 %*			"	"	"	"	"	
2706-90-3LC5	*13C5-PFPeA*	*76*			*31-157 %*			"	"	"	"	"	
335-67-1LC8	*13C8-PFOA*	*73*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*74*			*50-121 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*74*			*41-144 %*			"	"	"	"	"	

Stantec Consulting Services Inc.
5 Dartmouth Drive, Suite 200, Auburn NH 03032
Tel: (603) 669-8672, Fax: (603) 669-7636

May 7, 2019
File: 191710261

Attention: Mr. Craig Seymour
110 Durham Point Road
Durham, NH 03824

Reference: Results of April 2019 PFAS Sampling – 110 Durham Point Road, Durham, NH
Closed Durham Landfill Site, 100 Durham Point Road, Durham, NH
NHDES Site #1990060111

Dear Mr. Seymour,

As you know, Stantec Consulting Services Inc. (Stantec) collected a sample of groundwater from your well on April 16, 2019 and had it analyzed for per- and polyfluoroalkyl substances (PFAS). The impetus for this sampling was the detection, in April 2017 and November 2018, of elevated concentrations of various PFAS isomers in monitoring wells at the nearby Durham Landfill (located on Durham Point Road). Based on those results and the general use of water supply wells in the area, the Town of Durham requested that additional sampling of residential water supply wells located within 1000 feet of the landfill be conducted for PFAS to identify impacts to these sensitive receptors, if any.

Based on the results of the analysis of the sample from your well, three of the nine PFAS isomers were detected at low concentrations generally below 4.0 nanograms per liter (ng/L) or parts per trillion. There are no Ambient Groundwater Quality Standards (AGQS) for two of the detected isomers. The reported concentration of the third isomer (perfluorooctanoic acid or PFOA at 4.0 ng/L) is well below the AGQS of 70 ng/L. No other PFAS isomers were detected at concentrations exceeding the laboratory's reporting limits (generally 2-10 ng/L). A copy of the pertinent page from the laboratory report for your well is attached. We will continue to coordinate with the Town and the New Hampshire Department of Environmental Services to determine if and/or when additional PFAS sampling of your well is required.

If you have any questions regarding these results, don't hesitate to call the undersigned.

Sincerely,
STANTEC CONSULTING SERVICES INC.

Donald F. Moore

Donald Moore, P.G.
Associate/Hydrogeologist
Phone: (603) 669-8672
Cell: (603) 498-3244
Donald.moore2@stantec.com

Attachment: Page from Eurofins Laboratory Report

c. Town of Durham w/ attachment
NHDES w/ attachment

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
110 Durham Pt Rd SC54400-03	191710274	Ground Water	16-Apr-19 10:20	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
375-73-5	Perfluorobutanesulfonate	**1.8**		ng/l	0.87	0.26	1	EPA 537 modified	19-Apr-19 13:15	22-Apr-19 22:46	273017	19109010	
375-22-4	Perfluorobutanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	**1.1**		ng/l	0.87	0.35	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	**4.0**		ng/l	0.87	0.26	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
Surrogate recoveries:													
375-73-5LC3	*13C3-PFBS*	*96*			*26-148 %*			"	"	"	"	"	
355-46-4LC3	*13C3-PFHxS*	*71*			*34-126 %*			"	"	"	"	"	
375-22-4LC4	*13C4-PFBA*	*80*			*33-123 %*			"	"	"	"	"	
375-85-9LC4	*13C4-PFHpA*	*63*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*76*			*35-138 %*			"	"	"	"	"	
2706-90-3LC5	*13C5-PFPeA*	*84*			*31-157 %*			"	"	"	"	"	
335-67-1LC8	*13C8-PFOA*	*78*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*72*			*50-121 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*74*			*41-144 %*			"	"	"	"	"	

Stantec Consulting Services Inc.
5 Dartmouth Drive, Suite 200, Auburn NH 03032
Tel: (603) 669-8672, Fax: (603) 669-7636

May 7, 2019
File: 191710261

Attention: Ms. Linda Garcia
120 Durham Point Road
Durham, NH 03824

Reference: Results of April 2019 PFAS Sampling – 120 Durham Point Road, Durham, NH
Closed Durham Landfill Site, 100 Durham Point Road, Durham, NH
NHDES Site #1990060111

Dear Ms. Garcia,

As you know, Stantec Consulting Services Inc. (Stantec) collected a sample of groundwater from your well on April 16, 2019 and had it analyzed for per- and polyfluoroalkyl substances (PFAS). The impetus for this sampling was the detection, in April 2017 and November 2018, of elevated concentrations of various PFAS isomers in monitoring wells at the nearby Durham Landfill (located on Durham Point Road). Based on those results and the general use of water supply wells in the area, the Town of Durham requested that additional sampling of residential water supply wells located within 1000 feet of the landfill be conducted for PFAS to identify impacts to these sensitive receptors, if any.

Based on the results of the analysis of the sample from your well, seven of the nine PFAS isomers were detected at relatively low levels. Concentrations of the two isomers (Perfluoro-octanesulfonate or PFOS and Perfluoroctanoic acid or PFOA) for which there are Ambient Groundwater Quality Standards (AGQS) were reported at 1.8 and 13 ng/L, well below the AGQS of 70 nanograms per liter (ng/L). The remaining five detected isomers, which were reported at concentrations below 10 ng/L, have no AGQS. A copy of the pertinent page from the laboratory report for your well is attached. We will continue to coordinate with the Town and the New Hampshire Department of Environmental Services to determine if and/or when additional PFAS sampling of your well is required.

If you have any questions regarding these results, don't hesitate to call the undersigned.

Sincerely,
STANTEC CONSULTING SERVICES INC.

Donald F. Moore

Donald Moore, P.G.
Associate/Hydrogeologist
Phone: (603) 669-8672
Cell: (603) 498-3244
Donald.moore2@stantec.com

Attachment: Page from Eurofins Laboratory Report

c. Town of Durham w/ attachment
NHDES w/ attachment

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
120 Durham Pt Rd SC54400-05	191710274	Ground Water	16-Apr-19 13:05	17-Apr-19

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
375-73-5	Perfluorobutanesulfonate	**0.99**		ng/l	0.87	0.26	1	EPA 537 modified	19-Apr-19 13:15	22-Apr-19 23:04	273017	19109010	
375-22-4	Perfluorobutanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	**5.0**		ng/l	0.87	0.35	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	**2.7**		ng/l	1.7	0.35	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	**9.3**		ng/l	1.7	0.35	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	**1.8**		ng/l	1.7	0.35	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	**13**		ng/l	0.87	0.26	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	**5.6**		ng/l	5.2	1.7	1	"	"	"	"	"	
Surrogate recoveries:													
375-73-5LC3	*13C3-PFBS*	*93*			*26-148 %*			"	"	"	"	"	
355-46-4LC3	*13C3-PFHxS*	*71*			*34-126 %*			"	"	"	"	"	
375-22-4LC4	*13C4-PFBA*	*79*			*33-123 %*			"	"	"	"	"	
375-85-9LC4	*13C4-PFHpA*	*62*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*72*			*35-138 %*			"	"	"	"	"	
2706-90-3LC5	*13C5-PFPeA*	*82*			*31-157 %*			"	"	"	"	"	
335-67-1LC8	*13C8-PFOA*	*81*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*82*			*50-121 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*77*			*41-144 %*			"	"	"	"	"	

Stantec Consulting Services Inc.
5 Dartmouth Drive, Suite 200, Auburn NH 03032
Tel: (603) 669-8672, Fax: (603) 669-7636

May 7, 2019
File: 191710261

Attention: Ms. Judith Mann
128 Durham Point Road
Durham, NH 03824

Reference: Results of April 2019 PFAS Sampling – 128 Durham Point Road, Durham, NH
Closed Durham Landfill Site, 100 Durham Point Road, Durham, NH
NHDES Site #1990060111

Dear Ms. Mann,

As you know, Stantec Consulting Services Inc. (Stantec) collected a sample of groundwater from your well on April 16, 2019 and had it analyzed for per- and polyfluoroalkyl substances (PFAS). The impetus for this sampling was the detection, in April 2017 and November 2018, of elevated concentrations of various PFAS isomers in monitoring wells at the nearby Durham Landfill (located on Durham Point Road). Based on those results and the general use of water supply wells in the area, the Town of Durham requested that additional sampling of residential water supply wells located within 1000 feet of the landfill be conducted for PFAS to identify impacts to these sensitive receptors, if any.

Based on the results of the analysis of the sample from your well, no PFAS isomers were detected at concentrations exceeding the laboratory's reporting limits (generally 2-10 nanograms per liter or parts per trillion). A copy of the pertinent page from the laboratory report for your well is attached. We will continue to coordinate with the Town and the New Hampshire Department of Environmental Services to determine if and/or when additional PFAS sampling of your well is required.

If you have any questions regarding these results, don't hesitate to call the undersigned.

Sincerely,
STANTEC CONSULTING SERVICES INC.

Donald F. Moore

Donald Moore, P.G.
Associate/Hydrogeologist
Phone: (603) 669-8672
Cell: (603) 498-3244
Donald.moore2@stantec.com

Attachment: Page from Eurofins Laboratory Report

c. Town of Durham w/ attachment
NHDES w/ attachment

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
128 Durham Pt Rd SC54400-04	191710274	Ground Water	16-Apr-19 10:50	17-Apr-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 273017													
375-73-5	Perfluorobutanesulfonate	< 0.90		ng/l	0.90	0.27	1	EPA 537 modified	19-Apr-19 13:15	22-Apr-19 22:55	273017	19109010	
375-22-4	Perfluorobutanoic acid	< 5.4		ng/l	5.4	1.8	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	< 0.90		ng/l	0.90	0.36	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	< 1.8		ng/l	1.8	0.36	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	< 1.8		ng/l	1.8	0.36	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.8		ng/l	1.8	0.36	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	< 1.8		ng/l	1.8	0.36	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	< 0.90		ng/l	0.90	0.27	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.4		ng/l	5.4	1.8	1	"	"	"	"	"	
Surrogate recoveries:													
375-73-5LC3	*13C3-PFBS*	*80*			*26-148 %*			"	"	"	"	"	
355-46-4LC3	*13C3-PFHxS*	*65*			*34-126 %*			"	"	"	"	"	
375-22-4LC4	*13C4-PFBA*	*75*			*33-123 %*			"	"	"	"	"	
375-85-9LC4	*13C4-PFHpA*	*60*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*71*			*35-138 %*			"	"	"	"	"	
2706-90-3LC5	*13C5-PFPeA*	*77*			*31-157 %*			"	"	"	"	"	
335-67-1LC8	*13C8-PFOA*	*75*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*70*			*50-121 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*68*			*41-144 %*			"	"	"	"	"	