ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

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May 1, 2018
Project Number 03-224773

Ms. Shelley Puleo
U.S. Environmental Protection Agency
Office of Ecosystem Processing
RGP Applications Coordinator (OEP06-1)
5 Post Office Square, Suite 100
Boston, MA 02109-3912

RE: Notice of Intent for Remediation General Permit
Undeveloped Lot/Adjacent to Cell Tower
Proposed Cumberland Farms Property #MA8474
135 E. Washington Street, Lot 3
North Attleboro, MA 02760

Dear Ms. Puleo:

ATC Group Services LLC (ATC) is pleased to provide supporting documentation for the Notice of Intent (NOI) for the Remediation General Permit (RGP) on behalf of Cumberland Farms, Inc. (CFI), for the above-referenced property (the "Site"). This NOI is being submitted in order to obtain approval for the discharge of treated groundwater at the Site. The discharge and dewatering is necessary to allow for the installation of gasoline USTs and other subsurface structures at the Site. A Site Locus is provided as Figure 1 and a Site Plan is provided as Figure 2. A copy of the NOI form is provided as Attachment I.

Background

The subject property is a one acre lot located at 135 East Washington Street in North Attleborough, MA improved with some pavement, but in poor condition. The property was a yard for an adjacent construction facility (Westcott Construction) from 1964 through 2016, when it was demolished. The former Westcott property was split into 3 lots for development, one lot having an O'Reilly Auto Parts store, another in the rear of the site undeveloped, and the lot for the proposed CFI at the front along East Washington Street (Lot 3). Prior to 1964, the site was undeveloped. The Site is not located within a current or potential groundwater protection area. Catch basins are located along the front of the Site and are connected to the MassDOT stormwater drainage system that runs along E. Washington Street (Route 1).

Pretreatment

The excavation will be dewatered by installing recovery wells using slotted pipe and well gravel around the screen to reduce solids. Pumps will be used so that collected groundwater from the excavation area will be pumped into 20,000 gallon frac tank(s) to settle out solids. An aerator will be used prior to the frac tank, as needed, to aid in the settling of solids and heavy metals, as well as a flocculant sock. The flocculant material to be used is called HaloKlear DMP-2100 (Socks) and

is manufactured by HaloSource, INc. in Bothell, Washington. The HaloKlear material specifications and safety data sheet are included in Attachment II. The floc socks will be used as needed, depending on the solid content of the influent raw water and initial sampling results. The floc socks will be installed in line with the influent hose and used intermittently during dewatering activities. The floc socks are commonly used in discharge treatment and have previously been authorized in general permit activities. The flocculant additive will not add any pollutant in concentrations which will exceed permit effluent limitations, will not exceed any applicable water quality standard, and will not add any pollutants that would justify the application of permit conditions that are different from or absent in the permit.

The water in the frac tank will then be pumped through bag filters to remove solids and then discharged to a catch basin/storm drain manhole located along the front of the site. The catch basins are connected to the MassDOT storm water drainage system, which is connected to an outfall located along the bank of the Falls Pond located 0.25 miles northeast of the Site. A discharge permit application through MassDOT will be submitted by May 3, 2018 and is expected to be approved by May 10, 2018. Please refer to Figure 1 for a depiction of the outfall location, Figure 2 for the Site Plan depicting the catch basins, and Figure 3 for the Treatment System Schematic.

Average flow rate of discharge of treated groundwater from the Site to the storm drainage line is expected to be approximately 200 gallons per minute (gpm). The maximum flow rate and design capacity of the groundwater treatment system is 250 gpm based the raw water data collection and upon data collected from comparable sites operated/designed by ATC.

Influent Sample Analysis

Groundwater samples were collected from the raw water/influent location (ATC-1) on March 22, 2018 and were submitted to Spectrum/Eurofins Analytical, Inc. of Agawam, Massachusetts for laboratory analysis for the following parameters:

- Total Petroleum Hydrocarbons (TPH) by EPA method 1664,
- Volatile Organic Compounds (VOCs) by EPA Method 8260/624/524.2,
- Semi-Volatile Organic Compounds (SVOCs) by EPA method 625,
- PCBs by EPA method 8082,
- Total metals by EPA Method 200.7,
- Cyanide,
- Ammonia,
- Flashpoint,
- pH,
- Salinity,
- Hardness, and,
- Total Suspended Solids (TSS).

Also, a sample of the receiving water (Falls Pond) was collected on this date for laboratory analysis of pH, Hardness, Ammonia, and Metals. A summary of the sampling data is provided on Table 1 and a copy of the laboratory report is included in Attachment VI. Based on the location of the

outfall and receiving waters and the proposed design discharge flow, the seven day-ten year low flow (7Q10) of the receiving waters was determined to be 0.20 MGD and the calculated dilution factor was determined to be 1.55. MassDEP reviewed and approved the 7Q10 low flow determination and the calculated dilution factor (Attachment III).

Groundwater analytical results were compared to the Appendix III effluent limitations (www.epa.gov/region1/npdes/rgp.html). These results indicate that various parameters were detected in the samples and the following parameters were detected at concentrations that exceed the applicable EPA Appendix III effluent limitations:

- TSS
- Iron
- Copper

Total suspended solids and metals are expected to be reduced by pretreatment with settling and filtration.

Evaluation of Threatened or Endangered Species or Critical Habitat Located within Receiving Waters

According to Massachusetts Geographic Information Systems (MassGIS) online maps for the Natural Heritage Endangered Species Program (NHESP) (2008), no Priority Habitat of Rare Species or Estimated Habitats of Rare Wildlife are located within the work area. No NHESP Estimated Habitats of Rare Wildlife in Wetland Areas Protected Open Spaces are located within 500 feet of the Site. Based on this information, the potential discharge will not have an adverse effect on the NHESP Estimated Habitats of Rare Wildlife. A copy of the MassGIS Resource Priority and NHESP Maps of the Site area is included in Attachment IV.

Review of National Register of Historic Places

Listings of Historic Places within the Town of North Attleboro were obtained from the Massachusetts Cultural Resources Information System (MACRIS) online database at http://mhc-macris.net/towns.aspx (accessed April 12, 2018). A copy of the MACRIS report is provided as Attachment V. The database indicated that there are no historic places located in close proximity to the Site and proposed discharge area. This project does not involve the demolition or rehabilitation of historic properties.

The proposed redevelopment project is scheduled to start on May 10, 2018 and last for approximately 6 months. The duration of the dewatering aspect of the project is only expected to be for 2-3 months. Should you have any questions or concerns regarding the contents of this letter or the NOI for the RGP, please do not hesitate to contact the undersigned at (508) 756-0151.

Sincerely,
ATC GROUP SERVICES LLC

Matthew J. Lyne
Senior Project Manager

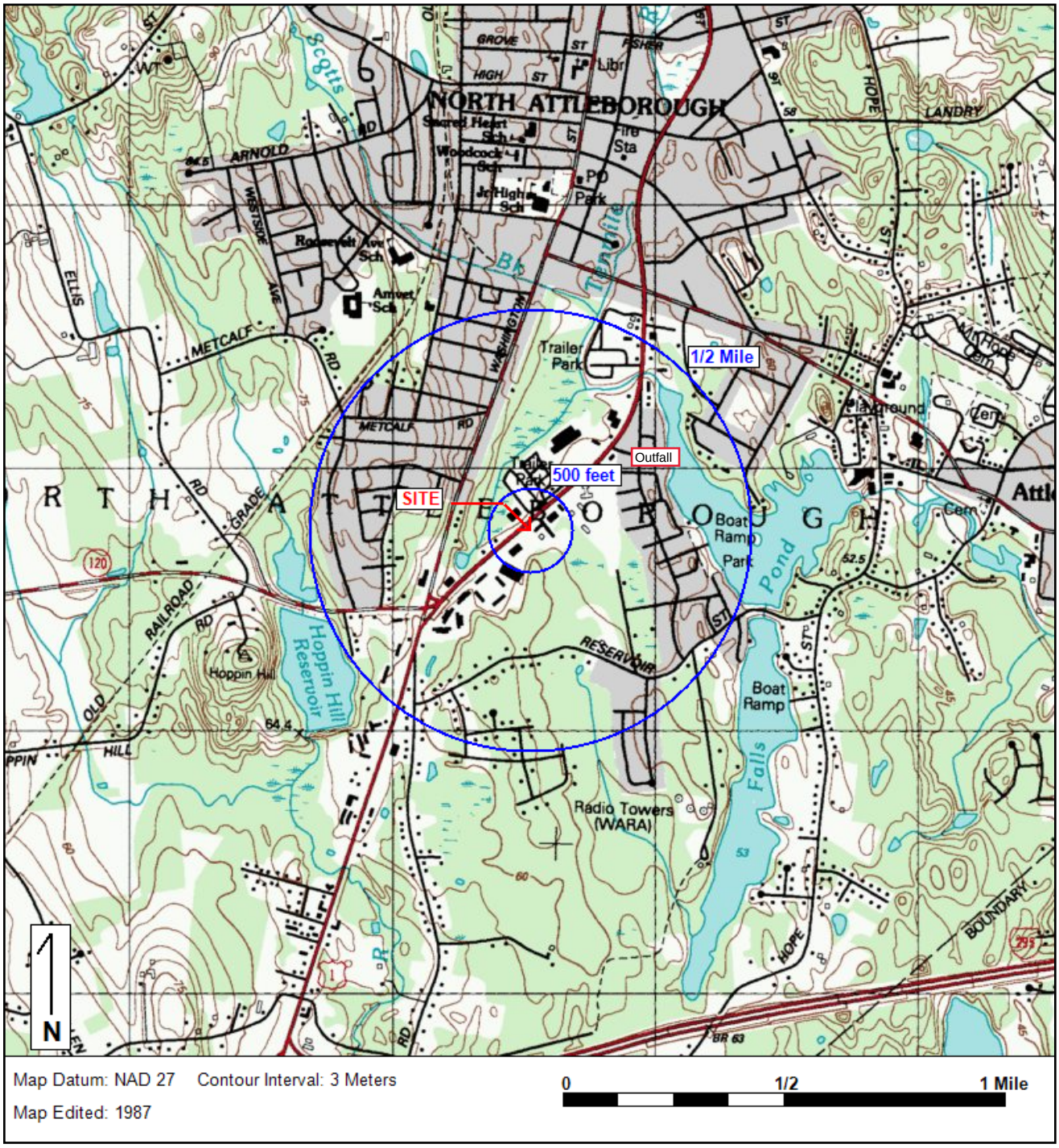
cc: Matthew Young, Cumberland Farms, Inc., 165 Flanders Road, Westborough, MA
Cathy Vakalopoulus, MassDEP, Surface Water Discharge Permit Program, One Winter Street, 5th Floor, Boston, MA 02108
Town of North Attleboro Department of Public Works-49 Whiting Street, North Attleboro, MA 02760

Attachments
Figure 1: Site Locus
Figure 2: Site Plan
Figure 3: Treatment System Schematic
Table 1: Summary of Influent Sampling Data
Attachment I: NOI for the RGP, along with Maps/Plans showing outfall location and WQBEL calculations
Attachment II: Flocculant Material-Product Specification and Safety Data Sheet
Attachment III: MassDEP Approval of 7Q10 Low Flow Determination & Dilution Factor Calculation
Attachment IV: MassGIS Resource Priority and NHESP Map
Attachment V: MACRIS Database Search Results, PNF
Attachment VI: Laboratory Analytical Report

FIGURES

N. Attleboro -Potential Acquisition-135 W. Washington St
135 W. Washington Street
N. Attleboro, MA

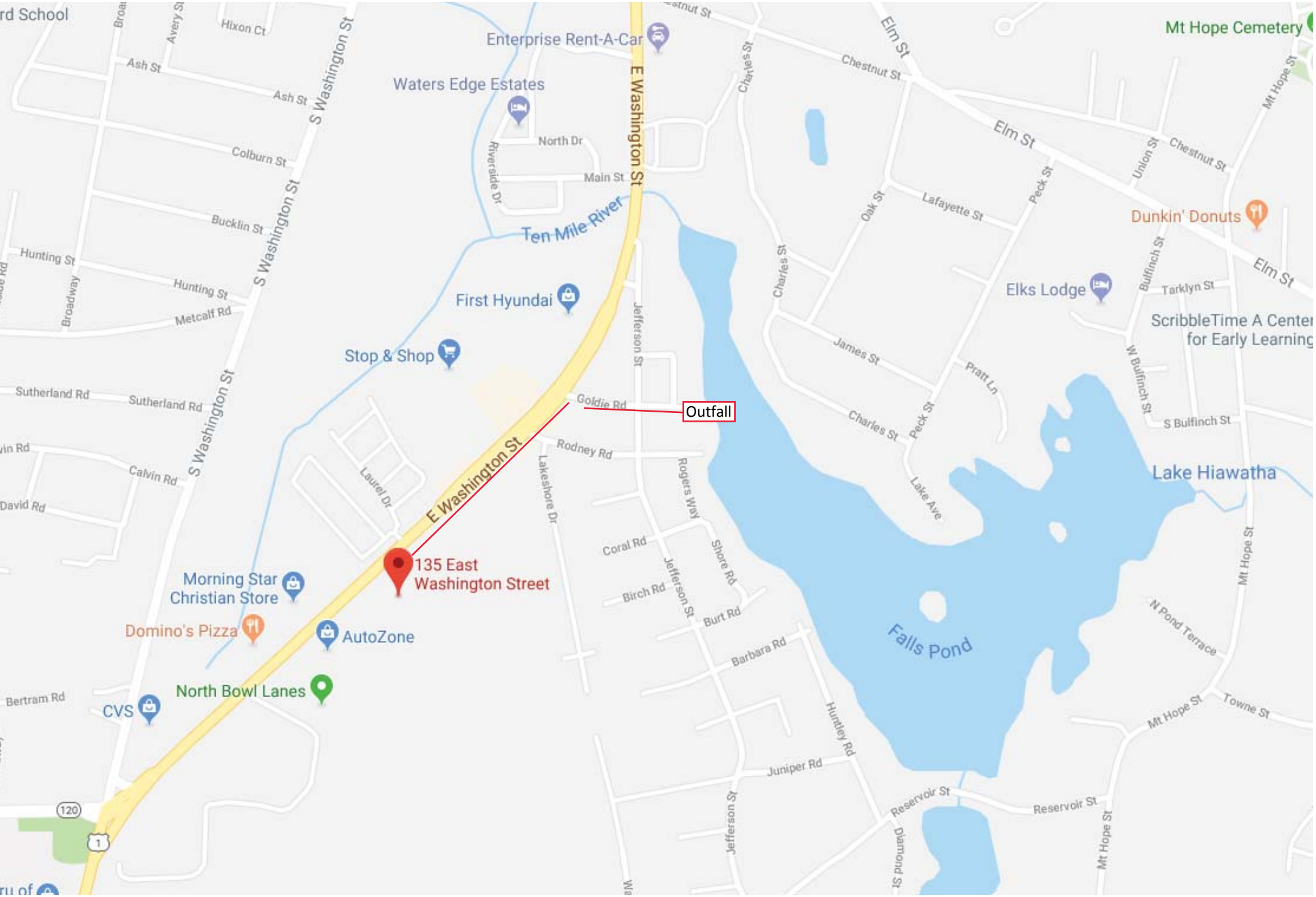
Figure 1: SITE LOCUS

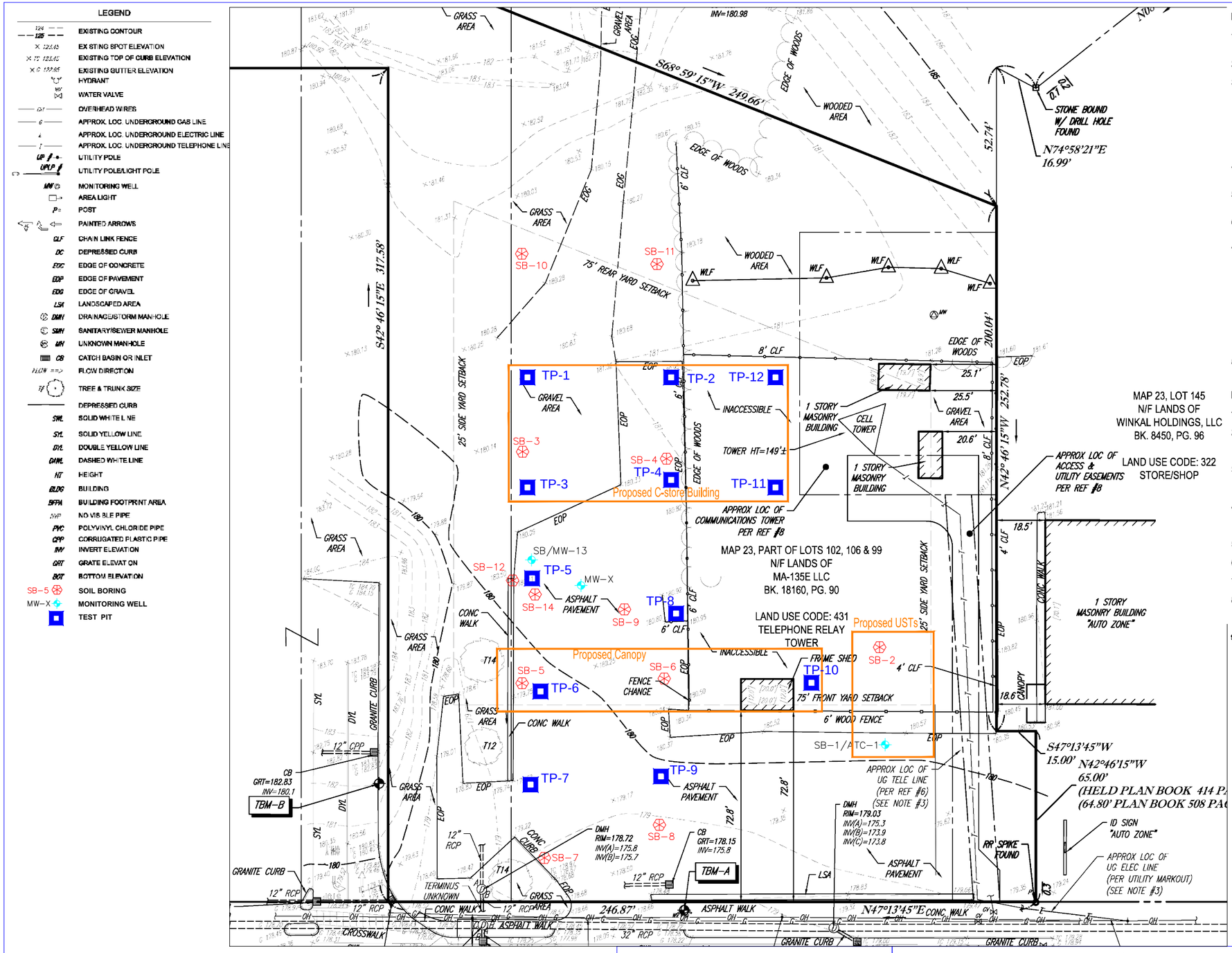


Base Map: U.S. Geological Survey; Quadrangle Location: Attleboro, MA

Lat/Lon: 41 58' 9" NORTH, 71 20' 4" WEST - UTM Coordinates: 19 306617.4 EAST / 4650808.6 NORTH

Generated By: Carol Farrington


Outfall
135 East Washington Street
E Washington St
S Washington St
Ten Mile River
Lake Hiawatha
Falls Pond
Enterprise Rent-A-Car
Waters Edge Estates
First Hyundai
Stop & Shop
Morning Star Christian Store
Domino's Pizza
AutoZone
North Bowl Lanes
CVS
Elks Lodge
Dunkin' Donuts
Mt Hope Cemetery
ScribbleTime A Center for Early Learning
Goldie Rd
Rodney Rd
Coral Rd
Birch Rd
Burt Rd
Barbara Rd
Juniper Rd
Reservoir St
Chestnut St
Elm St
Main St
North Dr
Hixon Ct
Ash St
Colburn St
Bucklin St
Hunting St
Metcalf Rd
Sutherland Rd
Calvin Rd
David Rd
Bertram Rd
Broadway
Avery St
Riverside Dr
Laurel Dr
Lakeshore Dr
Jefferson St
Rogers Way
Shore Rd
Huntley Rd
Diamond St
Oak St
Lafayette St
Peck St
Union St
Charles St
Pratt Ln
Lake Ave
James St
Tarklyn St
Bulfinch St
W Bulfinch St
S Bulfinch St
Mt Hope St
Towne St
N Pond Terrace
120
1



NOTES:

1. PROPERTY KNOWN AS PART OF LOTS 102, 106 & 99 AS SHOWN ON THE TOWN OF NORTH ATTLEBOROUGH, BRISTOL COUNTY, COMMONWEALTH OF MASSACHUSETTS MAP NO. 23.
2. AREA = 86,166 SQUARE FEET OR 1.978 ACRES
3. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES. CONTROL POINT ASSOCIATES, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED.
4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
5. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO THE RESTRICTIONS, COVENANTS AND/OR EASEMENTS THAT MAY BE CONTAINED THEREIN.
6. BY GRAPHIC PLOTTING ONLY PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER REF. #2 & 3
7. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS NETWORK (KEYNETGPS).

   TEMPORARY BENCH MARKS SET:
   TBM-A: X-CUT IN BONNET BOLT OF FIRE HYDRANT. ELEVATION = 180.67'
   TBM-B: MAG NAIL SET IN GRANITE CURB. ELEVATION = 182.82'

   PRIOR TO CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE BENCHMARKS ILLUSTRATED ON THIS SKETCH HAVE NOT BEEN DISTURBED AND THEIR ELEVATIONS HAVE BEEN CONFIRMED. ANY CONFLICTS MUST BE REPORTED PRIOR TO CONSTRUCTION.
8. THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMANENT ADDITION, ETC.

REFERENCES:

1. THE TAX ASSESSOR'S MAP OF NORTH ATTLEBOROUGH, BRISTOL COUNTY, MASSACHUSETTS, SHEET #231.
2. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, BRISTOL COUNTY, MASSACHUSETTS (ALL JURISDICTIONS), PANEL 104 OF 550," MAP NUMBER 25005C0104G, MAP REVISED: JULY 16, 2015.
3. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, BRISTOL COUNTY, MASSACHUSETTS (ALL JURISDICTIONS), PANEL 102 OF 550," MAP NUMBER 25005C0102G, MAP REVISED: JULY 16, 2015.
4. MAP ENTITLED "PLAN OF LAND IN NORTH ATTLEBORO, MA." PREPARED BY RISSER ENGINEERING COMPANY, DATED MARCH 18, 2003, RECORDED IN THE BRISTOL COUNTY NORTHERN DISTRICT REGISTRY OF DEEDS IN PLAN BOOK 414, PAGE 69.
5. MAP ENTITLED "NORTH ATTLEBOROUGH - 1930 LAYOUT," SHEET 2 OF 10 SHEETS, LAYOUT NO. 2895.
6. UNDERGROUND TELEPHONE MAPPING PROVIDED BY COMCAST.
7. UNDERGROUND GAS MAPPING PROVIDED BY LIBERTY UTILITIES.
8. MAP ENTITLED "PLAN OF LAND IN 103/105 & 135 EAST WASHINGTON STREET IN NORTH ATTLEBOROUGH, BRISTOL COUNTY, MASSACHUSETTS, PREPARED FOR MA-135E," PREPARED BY TILTON AND ASSOCIATES, INC., DATED JANUARY 12, 2016
9. MAP ENTITLED "BOUNDARY & PARTIAL TOPOGRAPHIC SURVEY" BY BOHLER ENGINEERING MA AND CONTROL POINT ASSOCIATES DATED JUNE 5, 2017.

Cadfile: Site Plan with Borings and Well.dwg

997 Millbury Street
Worcester, Massachusetts 01607
(508) 756-0151

DRAWN BY: BOHLER/CPA/AR

CHECKED BY: ML

135 East Washington Street
Part of Lots 102, 106, & 99, Map 23
North Attleboro, Massachusetts

Site Plan

PROJECT NO.: 03-225434.03

0 Approximate Feet 40

DATE: 8/11/2017

FIGURE NO.: 2

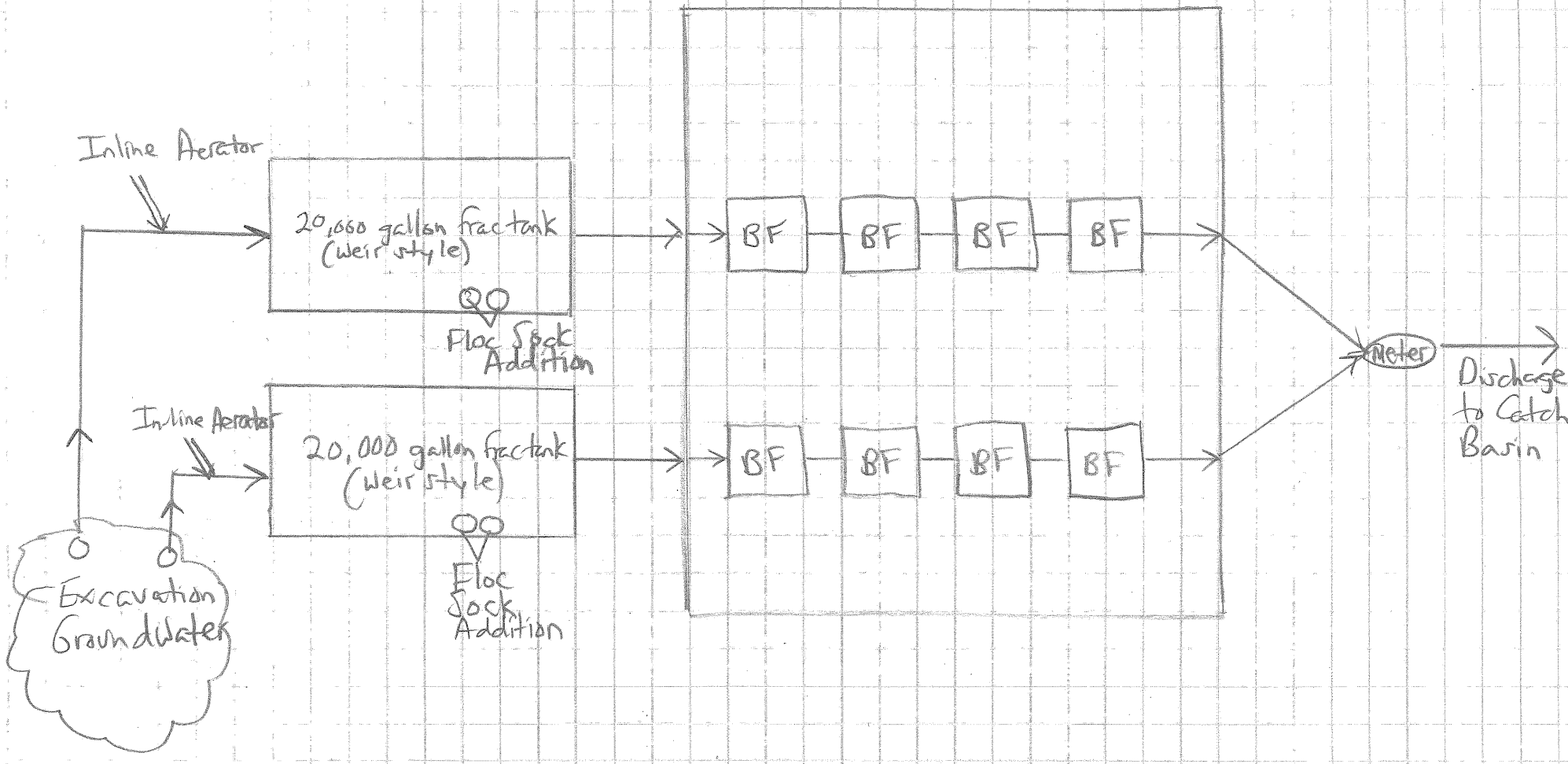


Figure 3: Treatment System Schematic
N. Attleboro - 135 E. Washington St.

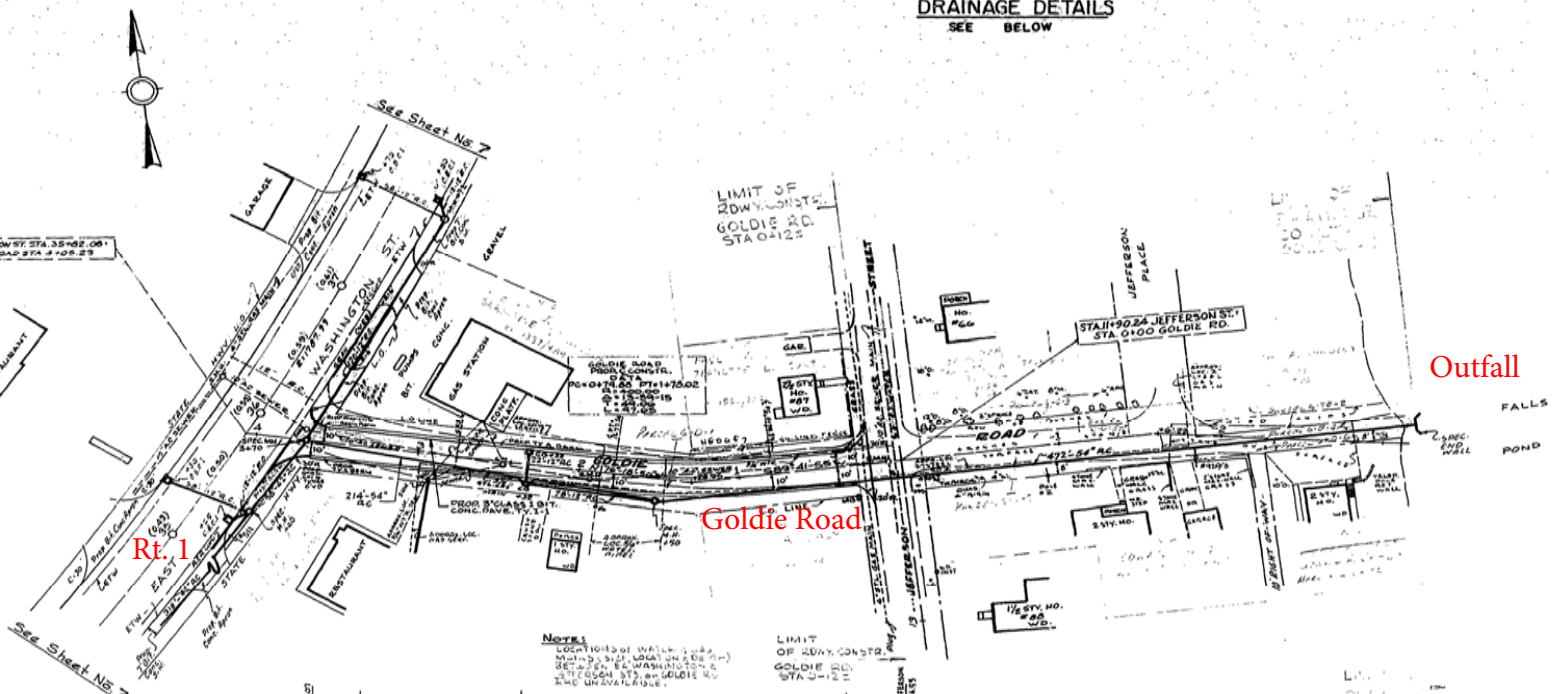
SHEET 11 OF 16 SHEETS

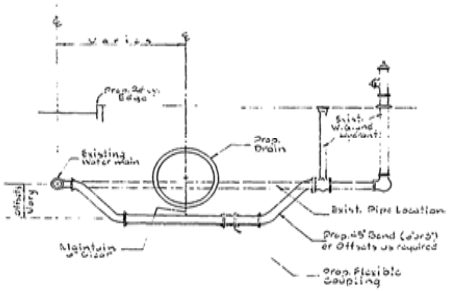
NORTH ATTLEBOROUGH
EAST WASHINGTON STREET
ROUTE 1

FED. AID PROJ. NO.	STATE	FED. AID PROJ. NO.				SHEETS	SHEET NO.
1	MASS.	U-212(001)					

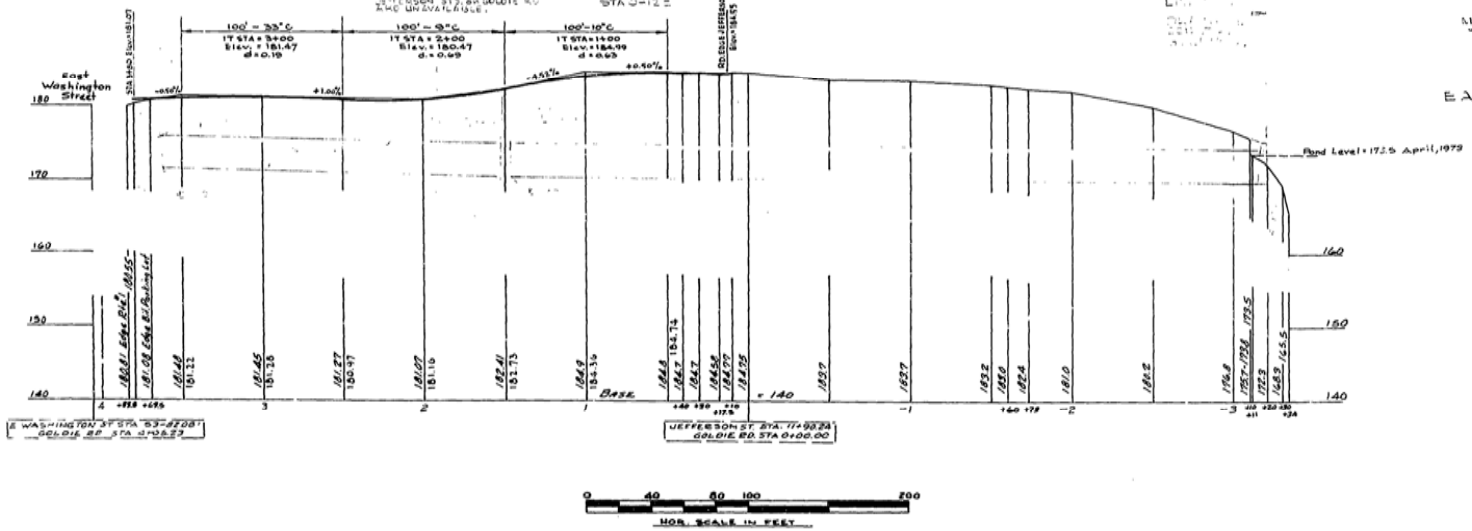
DRAINAGE DETAILS
SEE BELOW

GOLDIE ROAD DETAIL





WATER ALTERATIONS on EAST WASHINGTON ST.



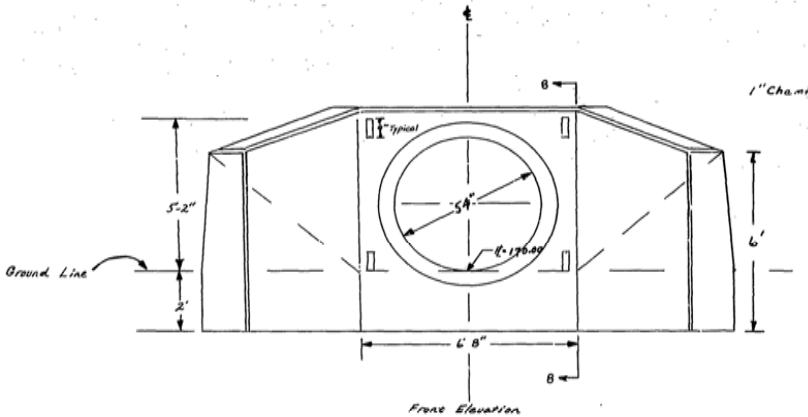
NORTH ATTLEBOROUGH
EAST WASHINGTON ST.
ROUTE 1

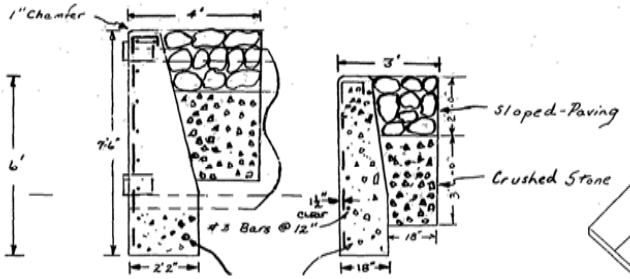
1		U-212(001)			78

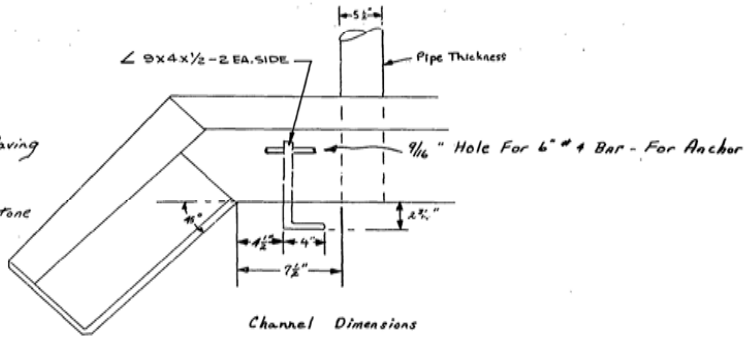
DRAINAGE DETAILS

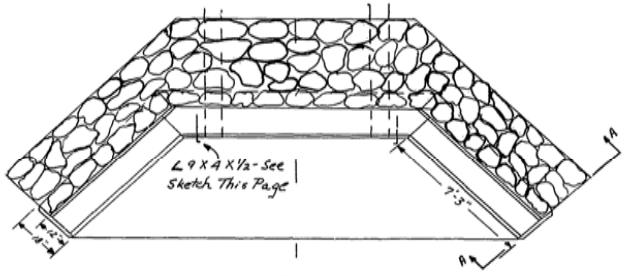
THE SPECIAL ENDWALL & GRATE AT FALLS POND

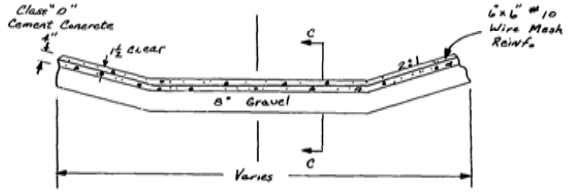
APPROX. = STA. -3+20 LT. GOLDIE ROAD BASELINE



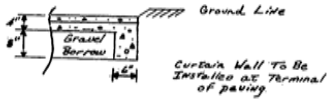


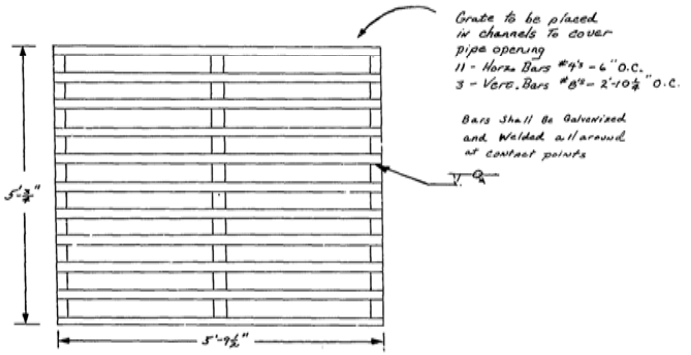






Width of Waterway
@ Endwall = 6'-8"
@ End Wingwall = 16'-11"





Drainage Grate
TRASH RACK

NOT TO SCALE

TABLES

Table 1
Summary of Groundwater Analytical Data
Vacant Lot/Proposed CFI #MA8474
135 E. Washington Street
N. Attleboro, MA

	ATC-1	MW-X	MW-13	ATC-1	Pond	MassDEP RCGW-2	EPA RGP Discharge Limit-TBEL	EPA RGP Discharge Limit-WQBEL
Sampling Date	7/7/17	8/9/17	8/9/17	3/22/18	3/22/18			
Depth to Groundwater (ft)	3.60	4.06	4.09	2.94				
VOCs by 624/8260/524 (µg/L)								
Benzene	< 1.0	< 1.0	NS	< 0.50		1,000	5	
Total BTEX	< 1.0	< 1.0	NS	< 0.50		NS	100	
MTBE	< 1.0	< 1.0	NS	< 0.50		50,000	70	
Acetone	< 14.0	< 14.0	NS	< 0.50		50,000	7,970	
Tert-amyl methyl ether (TAME)	< 1.0	< 1.0	NS	< 0.50		NS	90	
Tert Butyl Alcohol (TBA)	< 10.0	< 10.0	NS	< 10.0		NS	120	
Ethanol	< 200	< 200	NS	< 200		NS	NS	
1,4 Dioxane	< 20.0	< 20.0	NS	< 20.0		6,000	200	
VPH by MassDEP Method VPH (ug/L)	NS	< 25	< 25	NS		5,000	NS	
EPH by MassDEP Method VPH (ug/L)	NS	< 99	NS	NS		5,000	NS	
SVOCs by 625 SIM (µg/L)								
Naphthalene	< 0.05	NS	NS	< 0.05		700	20	
2-Methylnaphthalene	< 0.05	NS	NS	< 0.05		2,000	NS	
Acenaphthene	< 0.05	NS	NS	< 0.05		10,000	NS	
Fluorene	< 0.05	NS	NS	< 0.05		40	NS	
Phenathrene	< 0.05	NS	NS	< 0.05		10,000	NS	
Total Group 1 PAHs	< 0.05	NS	NS	< 0.05		NS	1.0	
Total Group 1I PAHs	< 0.05	NS	NS	< 0.05		NS	100	
Pentachlorophenol	< 1.0	NS	NS	< 1.0		200	1.0	
TPH by EPA 8100M (mg/L)	< 1.1	NS	NS	< 1.0		5	5	
PCBs by EPA 608 (mg/L)	< 0.0002	NS	NS	< 0.00019		0.005	0.064	
PP13 Metals by 6010 (mg/L)								
Arsenic (Total)	0.007	NS	NS	< 0.004	< 0.004	0.9	0.104	
Beryllium (Total)	0.002	NS	NS	< 0.002	< 0.002	0.2	NS	
Calcium (Total)				14.5	22.0			
Chromium (Total)	0.0354	NS	NS	0.008	< 0.005	0.3	0.323	
Chromium (Hex)	< 0.005	NS	NS	< 0.025	NS	0.3	0.323	
Copper (Total)	0.049	NS	NS	0.0114	0.0064	NS	0.242	0.006
Copper (Dissolved)	0.0076	NS	NS	NS	NS	100	NS	
Iron (Total)	32.0	NS	NS	7.56	NS	NS	5	1.55
Iron (Dissolved)	4.71	NS	NS	NS	NS	NS	NS	
Magnesium (Total)	NS	NS	NS	3.81	4.74	NS	NS	
Nickel (Total)	0.031	NS	NS	0.007	< 0.005	NS	1.45	
Nickel (dissolved)	< 0.005	NS	NS	NS	NS	0.2	NS	
Lead (Total)	0.0337	NS	NS	< 0.0075	< 0.0075	NS	0.160	
Lead (dissolved)	< 0.0075	NS	NS	NS	NS	0.01	NS	
Zinc (Total)	0.0856	NS	NS	0.022	0.0303	NS	0.420	
Zinc (Dissolved)	0.0176	NS	NS	NS	ND	0.90	NS	
Hardness (mg/L)	NS	NS	NS	51.9	74.5			
Chloride (mg/L)	NS	NS	NS	19.5				
Cyanide (mg/L)	< 0.01	NS	NS	< 0.005		0.03	178	
Ammonia (mg/L)	0.37	NS	NS	< 1.00	0.08	10	NS	
Flashpoint	> 150 F	NS	NS	NS		No Flash	NS	
pH	6.44	NS	NS	6.38	6.82	0-4, 10-14	6.3-8.5	
Total Dissolved Solids (mg/L)	158	NS	NS	85		NS	NS	
Total Suspended Solids (mg/L)	988	NS	NS	150		NS	30	
Total Residual Chlorine (mg/L)	NS	NS	NS	< 0.02		NS	0.2	0.017

NOTE NA = Not Applicable. NS = No Sampled

RCGW-2: Reportable Concentration for groundwater classified as RCGW-2, promulgated June 20, 2014.

EPA RGP Discharge Limit: Discharge Limits promulgated in 2017 RGP effective April 10, 2017.

BOLD: Concentration exceeds RCGW-2.

Underline: Exceeds EPA RGP Discharge Limits

\

Dilution Factor	1.6					
	TBEL applies if bolded		WQBEL applies if bolded		Compliance Level applies if shown	
A. Inorganics						
Ammonia	**Report**	mg/L	---			
Chloride	**Report**	µg/L	---			
Total Residual Chlorine	0.2	mg/L	**17**	µg/L	50	µg/L
Total Suspended Solids	**30**	mg/L	---			
Antimony	**206**	µg/L	996	µg/L		
Arsenic	**104**	µg/L	16	µg/L		
Cadmium	**10.2**	µg/L	0.2882	µg/L		
Chromium III	**323**	µg/L	88.2	µg/L		
Chromium VI	**323**	µg/L	17.8	µg/L		
Copper	242	µg/L	**6.0**	µg/L		
Iron	5000	µg/L	**1556**	µg/L		
Lead	**160**	µg/L	2.58	µg/L		
Mercury	**0.739**	µg/L	1.41	µg/L		
Nickel	**1450**	µg/L	52.6	µg/L		
Selenium	**235.8**	µg/L	7.8	µg/L		
Silver	**35.1**	µg/L	2.4	µg/L		
Zinc	**420**	µg/L	104.0	µg/L		
Cyanide	**178**	mg/L	8.1	µg/L	---	µg/L
B. Non-Halogenated VOCs						
Total BTEX	**100**	µg/L	---			
Benzene	**5.0**	µg/L	---			
1,4 Dioxane	**200**	µg/L	---			
Acetone	**7970**	µg/L	---			
Phenol	**1,080**	µg/L	467	µg/L		
C. Halogenated VOCs						
Carbon Tetrachloride	**4.4**	µg/L	2.5	µg/L		
1,2 Dichlorobenzene	**600**	µg/L	---			
1,3 Dichlorobenzene	**320**	µg/L	---			
1,4 Dichlorobenzene	**5.0**	µg/L	---			
Total dichlorobenzene	**---**	µg/L	---			
1,1 Dichloroethane	**70**	µg/L	---			
1,2 Dichloroethane	**5.0**	µg/L	---			
1,1 Dichloroethylene	**3.2**	µg/L	---			
Ethylene Dibromide	**0.05**	µg/L	---			
Methylene Chloride	**4.6**	µg/L	---			
1,1,1 Trichloroethane	**200**	µg/L	---			
1,1,2 Trichloroethane	**5.0**	µg/L	---			
Trichloroethylene	**5.0**	µg/L	---			
Tetrachloroethylene	**5.0**	µg/L	5.1	µg/L		
cis-1,2 Dichloroethylene	**70**	µg/L	---			
Vinyl Chloride	**2.0**	µg/L	---			

D. Non-Halogenated SVOCs						
Total Phthalates	**190**	µg/L	---	µg/L		
Diethylhexyl phthalate	**101**	µg/L	3.4	µg/L		
Total Group I Polycyclic Aromatic Hydrocarbons	**1.0**	µg/L	---			
Benzo(a)anthracene	**1.0**	µg/L	0.0059	µg/L	---	µg/L
Benzo(a)pyrene	**1.0**	µg/L	0.0059	µg/L	---	µg/L
Benzo(b)fluoranthene	**1.0**	µg/L	0.0059	µg/L	---	µg/L
Benzo(k)fluoranthene	**1.0**	µg/L	0.0059	µg/L	---	µg/L
Chrysene	**1.0**	µg/L	0.0059	µg/L	---	µg/L
Dibenzo(a,h)anthracene	**1.0**	µg/L	0.0059	µg/L	---	µg/L
Indeno(1,2,3-cd)pyrene	**1.0**	µg/L	0.0059	µg/L	---	µg/L
Total Group II Polycyclic Aromatic Hydrocarbons	**100**	µg/L	---			
Naphthalene	**20**	µg/L	---			
E. Halogenated SVOCs						
Total Polychlorinated Biphenyls	**0.000064**	µg/L	---		0.5	µg/L
Pentachlorophenol	**1.0**	µg/L	---			
F. Fuels Parameters						
Total Petroleum Hydrocarbons	**5.0**	mg/L	---			
Ethanol	**Report**	mg/L	---			
Methyl-tert-Butyl Ether	**70**	µg/L	31	µg/L		
tert-Butyl Alcohol	**120**	µg/L	---			
tert-Amyl Methyl Ether	**90**	µg/L	---			

ATTACHMENT I

II. Suggested Format for the Remediation General Permit Notice of Intent (NOI)

A. General site information:

<table>
<tr><td rowspan="2">1. Name of site:
Undeveloped Land/Adjacent to Cell Tower</td><td colspan="3">Site address: 135 East Washington Street (Lot 3)
Street:</td></tr>
<tr><td>City: North Attleboro</td><td>State: MA</td><td>Zip: 02760</td></tr>
<tr><td rowspan="4">2. Site owner
MA-135E, LLC

Owner is (check one): ☐ Federal ☐ State/Tribal ■ Private
☐ Other; if so, specify:</td><td colspan="3">Contact Person: Sam Mermelstein</td></tr>
<tr><td colspan="2">Telephone: 617-227-4497</td><td>Email: smermelstein@enclaveequities.co</td></tr>
<tr><td colspan="3">Mailing address: 2975 Westchester Avenue, Suite 100
Street:</td></tr>
<tr><td>City: Purchase</td><td>State: NY</td><td>Zip: 10577</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner
Cumberland Farms, Inc.</td><td colspan="3">Contact Person: Matthew Young</td></tr>
<tr><td colspan="2">Telephone: 508-270-4477</td><td>Email: myoung@cumberlandfarms.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 165 Flanders Road</td></tr>
<tr><td>City: Westborough</td><td>State: MA</td><td>Zip: 01581</td></tr>
<tr><td>4. NPDES permit number assigned by EPA:

NPDES permit is (check all that apply: ☐ RGP ☐ DGP ☐ CGP
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:</td><td colspan="3">5. Other regulatory program(s) that apply to the site (check all that apply):
☐ MA Chapter 21e; list RTN(s):
☐ NH Groundwater Management Permit or Groundwater Release Detection Permit:
☐ CERCLA
☐ UIC Program
☐ POTW Pretreatment
☐ CWA Section 404</td></tr>
</table>

B. Receiving water information:

1. Name of receiving water(s):	Waterbody identification of receiving water(s):	Classification of receiving water(s):
Falls Pond	MA52013	B

Receiving water is (check any that apply): ☐ Outstanding Resource Water ☐ Ocean Sanctuary ☐ territorial sea ☐ Wild and Scenic River

2. Has the operator attached a location map in accordance with the instructions in B, above? (check one): ■ Yes ☐ No

Are sensitive receptors present near the site? (check one): ☐ Yes ■ No
If yes, specify:

3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. For more information, contact the appropriate State as noted in Part 4.6 of the RGP.

4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.	0.31 cfs/0.20 MGD
5. Indicate the requested dilution factor for the calculation of water quality-based effluent limitations (WQBELs) determined in accordance with the instructions in Appendix V for sites in Massachusetts and Appendix VI for sites in New Hampshire.	1.55

6. Has the operator received confirmation from the appropriate State for the 7Q10and dilution factor indicated? (check one): ■ Yes ☐ No
If yes, indicate date confirmation received: 4-13-18

7. Has the operator attached a summary of receiving water sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No

C. Source water information:

1. Source water(s) is (check any that apply):

■ Contaminated groundwater Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No	☐ Contaminated surface water Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ☐ Yes ☐ No	☐ The receiving water ☐ A surface water other than the receiving water; if so, indicate waterbody:	☐ Potable water; if so, indicate municipality or origin: ☐ Other; if so, specify:

2. Source water contaminants: Naturally occurring metals and sediment	
a. For source waters that are contaminated groundwater or contaminated surface water, indicate are any contaminants present that are not included in the RGP? (check one): ☐ Yes ■ No If yes, indicate the contaminant(s) and the maximum concentration present in accordance with the instructions in Appendix VIII.	b. For a source water that is a surface water other than the receiving water, potable water or other, indicate any contaminants present at the maximum concentration in accordance with the instructions in Appendix VIII? (check one): ☐ Yes ☐ No
3. Has the source water been previously chlorinated or otherwise contains residual chlorine? (check one): ☐ Yes ■ No	

D. Discharge information

1.The discharge(s) is a(n) (check any that apply): ☐ Existing discharge ■ New discharge ☐ New source	
Outfall(s): Outfall 001: "Goldie Road Outfall"-see MassDOT Plans Bank of Falls Pond, located 0.25 miles northeast of site.	Outfall location(s): (Latitude, Longitude) Lat: 41.97183 Long: 71.32832
Discharges enter the receiving water(s) via (check any that apply): ☐ Direct discharge to the receiving water ■ Indirect discharge, if so, specify: Discharge to enter the receiving water via on-site storm drainage system that drains to Route 1 (MassDOT) system via 32" pipe and discharges to Falls P ☐ A private storm sewer system ■ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ■ Yes ☐ No Has the operator has received permission from the owner to use such system for discharges? (check one): ☐ Yes ■ No, if so, explain, with an estimated timeframe for obtaining permission: MassDOT permit application to be submitted by 5-3-18. Approval expected by 5-10-18. Has the operator attached a summary of any additional requirements the owner of this system has specified? (check one): ☐ Yes ■ No	
Provide the expected start and end dates of discharge(s) (month/year): May 15, 2018 to September 30, 2018 (intermittently) Indicate if the discharge is expected to occur over a duration of: ■ less than 12 months ☐ 12 months or more ☐ is an emergency discharge	
Has the operator attached a site plan in accordance with the instructions in D, above? (check one): ■ Yes ☐ No	

<table>
<tr><td>2. Activity Category: (check all that apply)</td><td colspan="2">3. Contamination Type Category: (check all that apply)</td></tr>
<tr><td rowspan="4">☐ I – Petroleum-Related Site Remediation
☐ II – Non-Petroleum-Related Site Remediation
■ III – Contaminated Site Dewatering
☐ IV – Dewatering of Pipelines and Tanks
☐ V – Aquifer Pump Testing
☐ VI – Well Development/Rehabilitation
☐ VII – Collection Structure Dewatering/Remediation
☐ VIII – Dredge-Related Dewatering</td><td colspan="2">a. If Activity Category I or II: (check all that apply)

☐ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td></tr>
<tr><td colspan="2">b. If Activity Category III, IV, V, VI, VII or VIII: (check either G or H)</td></tr>
<tr><td>■ G. Sites with Known Contamination</td><td>☐ H. Sites with Unknown Contamination</td></tr>
<tr><td>c. If Category III-G, IV-G, V-G, VI-G, VII-G or VIII-G: (check all that apply)

■ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td><td>d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply</td></tr>
</table>

4. Influent and Effluent Characteristics

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
A. Inorganics									
Ammonia	✔		1	350.1	1.0	< 1.0	< 1.0	Report mg/L	---
Chloride		✔	1	300.0	19,500	19,500	19,500	Report µg/l	---
Total Residual Chlorine	✔		1	SM4500	0.020	< 0.020	< 0.020	0.2 mg/L	0.017 mg/L
Total Suspended Solids		✔	1	2540	2.5	150	150	30 mg/L	---
Antimony	✔		1	6010	6	< 6	< 6	206 µg/L	
Arsenic	✔		1	6010	4	< 4	< 4	104 µg/L	
Cadmium	✔		1	6010	2.5	< 2.5	< 2.5	10.2 µg/L	
Chromium III		✔	1	6010	5	8	8	323 µg/L	
Chromium VI	✔		1	7196A	25	< 25	< 25	323 µg/L	
Copper		✔	1	6010	5	11.4	11.4	242 µg/L	6 ug/L
Iron		✔	1	6010	15	7,560	7,560	5,000 µg/L	1,556 ug/L
Lead	✔		1	6010	7.5	< 7.5	< 7.5	160 µg/L	
Mercury	✔		1	7470	0.2	< 0.2	< 0.2	0.739 µg/L	
Nickel		✔	1	6010	1	7	7	1,450 µg/L	
Selenium	✔		1	6010	15	< 15	< 15	235.8 µg/L	
Silver	✔		1	6010	5	< 5	< 5	35.1 µg/L	
Zinc		✔	1	6010	5	22	22	420 µg/L	
Cyanide	✔		1	335.4	0.005	< 0.005	< 0.005	178 mg/L	
B. Non-Halogenated VOCs									
Total BTEX	✔		1	524.2	0.50	< 0.50	< 0.50	100 µg/L	---
Benzene	✔		1	524.2	0.50	< 0.50	< 0.50	5.0 µg/L	---
1,4 Dioxane	✔		1	624	20	< 20	< 20	200 µg/L	---
Acetone	✔		1	524.2	0.010	< 0.010	< 0.010	7.97 mg/L	---
Phenol	✔		1	625	5	< 5	< 5	1,080 µg/L	

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
C. Halogenated VOCs									
Carbon Tetrachloride	✔		1	624	0.50	< 0.50	< 0.50	4.4 µg/L	
1,2 Dichlorobenzene	✔		1	624	0.50	< 0.50	< 0.50	600 µg/L	---
1,3 Dichlorobenzene	✔		1	624	0.50	< 0.50	< 0.50	320 µg/L	---
1,4 Dichlorobenzene	✔		1	624	0.50	< 0.50	< 0.50	5.0 µg/L	---
Total dichlorobenzene	✔		1	624	0.50	< 0.50	< 0.50	763 µg/L in NH	---
1,1 Dichloroethane	✔		1	624	0.50	< 0.50	< 0.50	70 µg/L	---
1,2 Dichloroethane	✔		1	624	0.50	< 0.50	< 0.50	5.0 µg/L	---
1,1 Dichloroethylene	✔		1	624	0.50	< 0.50	< 0.50	3.2 µg/L	---
Ethylene Dibromide	✔		1	624	0.50	< 0.50	< 0.50	0.05 µg/L	---
Methylene Chloride	✔		1	624	0.50	< 0.50	< 0.50	4.6 µg/L	---
1,1,1 Trichloroethane	✔		1	624	0.50	< 0.50	< 0.50	200 µg/L	---
1,1,2 Trichloroethane	✔		1	624	0.50	< 0.50	< 0.50	5.0 µg/L	---
Trichloroethylene	✔		1	624	0.50	< 0.50	< 0.50	5.0 µg/L	---
Tetrachloroethylene	✔		1	624	0.50	< 0.50	< 0.50	5.0 µg/L	
cis-1,2 Dichloroethylene	✔		1	624	0.50	< 0.50	< 0.50	70 µg/L	---
Vinyl Chloride	✔		1	624	0.50	< 0.50	< 0.50	2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates	✔		1	625	5.0	< 5.0	< 5.0	190 µg/L	
Diethylhexyl phthalate	✔		1	625	5.0	< 5.0	< 5.0	101 µg/L	
Total Group I PAHs	✔		1	625	0.05	< 0.05	< 0.05	1.0 µg/L	---
Benzo(a)anthracene	✔		1	625	0.05	< 0.05	< 0.05	As Total PAHs	
Benzo(a)pyrene	✔		1	625	0.05	< 0.05	< 0.05		
Benzo(b)fluoranthene	✔		1	625	0.05	< 0.05	< 0.05		
Benzo(k)fluoranthene	✔		1	625	0.05	< 0.05	< 0.05		
Chrysene	✔		1	625	0.05	< 0.05	< 0.05		
Dibenzo(a,h)anthracene	✔		1	625	0.05	< 0.05	< 0.05		
Indeno(1,2,3-cd)pyrene	✔		1	625	0.05	< 0.05	< 0.05		

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
Total Group II PAHs	✔		1	625	0.05	< 0.05	< 0.05	100 µg/L	---
Naphthalene	✔		1	625	0.05	< 0.05	< 0.05	20 µg/L	---
E. Halogenated SVOCs									
Total PCBs	✔		1	608	0.19	< 0.19	< 0.19	0.000064 µg/L	---
Pentachlorophenol	✔		1	625	4.81	< 4.81	< 4.81	1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons	✔		1	1664	1.0	< 1.0	< 1.0	5.0 mg/L	---
Ethanol	✔		1	8260	0.200	< 0.200	< 0.200	Report mg/L	---
Methyl-tert-Butyl Ether	✔		1	524.2	0.50	< 0.50	< 0.50	70 µg/L	
tert-Butyl Alcohol	✔		1	524.2	10.0	< 10.0	< 10.0	120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	✔		1	524.2	0.50	< 0.50	< 0.50	90 µg/L in MA 140 µg/L in NH	---
Other (i.e., pH, temperature, hardness, salinity, LC_{50}, additional pollutants present); if so, specify:									
pH		✔	1	1293	NA	6.38	6.38		
Hardness		✔	1	E200.7	0.291	51.9	51.9		

E. Treatment system information

1. Indicate the type(s) of treatment that will be applied to effluent prior to discharge: (check all that apply)

☐ Adsorption/Absorption ☐ Advanced Oxidation Processes ☐ Air Stripping ☐ Granulated Activated Carbon ("GAC")/Liquid Phase Carbon Adsorption

☐ Ion Exchange ■ Precipitation/Coagulation/Flocculation ■ Separation/Filtration ■ Other; if so, specify:

Aeration of frac tank to aid in precipitation of metals.

2. Provide a written description of all treatment system(s) or processes that will be applied to the effluent prior to discharge.
See cover letter supplied with this notice of intent.

Identify each major treatment component (check any that apply):

■ Fractionation tanks☐ Equalization tank ☐ Oil/water separator ☐ Mechanical filter ☐ Media filter

☐ Chemical feed tank ☐ Air stripping unit ■ Bag filter ☐ Other; if so, specify:

Indicate if either of the following will occur (check any that apply):

☐ Chlorination ☐ De-chlorination

3. Provide the **design flow capacity** in gallons per minute (gpm) of the most limiting component. Indicate the most limiting component: 250 gpm Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	250 gpm
Provide the proposed maximum effluent flow in gpm.	250 gpm
Provide the average effluent flow in gpm.	200 gpm
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	

4. Has the operator attached a schematic of flow in accordance with the instructions in E, above? (check one): ■ Yes ☐ No

F. Chemical and additive information

1. Indicate the type(s) of chemical or additive that will be applied to effluent prior to discharge or that may otherwise be present in the discharge(s): (check all that apply)

☐ Algaecides/biocides ☐ Antifoams ☐ Coagulants ☐ Corrosion/scale inhibitors ☐ Disinfectants ■ Flocculants ☐ Neutralizing agents ☐ Oxidants ☐ Oxygen ☐ scavengers ☐ pH conditioners ☐ Bioremedial agents, including microbes ☐ Chlorine or chemicals containing chlorine ☐ Other; if so, specify:

2. Provide the following information for each chemical/additive, using attachments, if necessary:
See cover letter supplied with the notice of intent for this information.
a. Product name, chemical formula, and manufacturer of the chemical/additive;
b. Purpose or use of the chemical/additive or remedial agent;
c. Material Safety Data Sheet (MSDS) and Chemical Abstracts Service (CAS) Registry number for each chemical/additive;
d. The frequency (hourly, daily, etc.), duration (hours, days), quantity (maximum and average), and method of application for the chemical/additive;
e. Any material compatibility risks for storage and/or use including the control measures used to minimize such risks; and
f. If available, the vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)).

3. Has the operator attached an explanation which demonstrates that the addition of such chemicals/additives may be authorized under this general permit in accordance with the instructions in F, above? (check one): ■ Yes ☐ No; if no, has the operator attached data that demonstrates each of the 126 priority pollutants in CWA Section 307(a) and 40 CFR Part 423.15(j)(1) are non-detect in discharges with the addition of the proposed chemical/additive?
(check one): ☐ Yes ☐ No See attached narrative.

G. Endangered Species Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

■ **FWS Criterion A**: No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the "action area".

☐ **FWS Criterion B**: Formal or informal consultation with the FWS under section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by FWS on a finding that the discharges and related activities are "not likely to adversely affect" listed species or critical habitat (informal consultation). Has the operator completed consultation with FWS? (check one): ☐ Yes ☐ No; if no, is consultation underway? (check one): ☐ Yes ☐ No

☐ **FWS Criterion C**: Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the discharges and related activities will have "no effect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the FWS. This determination was made by: (check one) ☐ the operator ☐ EPA ☐ Other; if so, specify:

☐ **NMFS Criterion**: A determination made by EPA is affirmed by the operator that the discharges and related activities will have "no effect" or are "not likely to adversely affect" any federally threatened or endangered listed species or critical habitat under the jurisdiction of NMFS and will not result in any take of listed species. Has the operator previously completed consultation with NMFS? (check one): ☐ Yes ☐ No

2. Has the operator attached supporting documentation of ESA eligibility in accordance with the instructions in Appendix I, and G, above? (check one): ■ Yes ☐ No

Does the supporting documentation include any written concurrence or finding provided by the Services? (check one): ☐ Yes ■ No; if yes, attach.

H. National Historic Preservation Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

■ **Criterion A**: No historic properties are present. The discharges and discharge-related activities (e.g., BMPs) do not have the potential to cause effects on historic properties.

☐ **Criterion B**: Historic properties are present. Discharges and discharge related activities do not have the potential to cause effects on historic properties.

☐ **Criterion C**: Historic properties are present. The discharges and discharge-related activities have the potential to have an effect or will have an adverse effect on historic properties.

2. Has the operator attached supporting documentation of NHPA eligibility in accordance with the instructions in H, above? (check one): ■ Yes ☐ No

Does the supporting documentation include any written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (TPHO), or other tribal representative that outlines measures the operator will carry out to mitigate or prevent any adverse effects on historic properties? (check one): ☐ Yes ■ No

I. Supplemental information

Describe any supplemental information being provided with the NOI. Include attachments if required or otherwise necessary.

Has the operator attached data, including any laboratory case narrative and chain of custody used to support the application? (check one): ■ Yes ☐ No

Has the operator attached the certification requirement for the Best Management Practices Plan (BMPP)? (check one): ■ Yes ☐ No

J. Certification requirement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

BMPP certification statement: A BMPP meeting the requirements of the general permit will be developed and implemented upon initiation of discharge.	
Notification provided to the appropriate State, including a copy of this NOI, if required.	Check one: Yes ■ No ☐
Notification provided to the municipality in which the discharge is located, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐
Notification provided to the owner of a private or municipal storm sewer system, if such system is used for site discharges, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐ NA ☐
Permission obtained from the owner of a private or municipal storm sewer system, if such system is used for site discharges. If yes, attach additional conditions. If no, attach explanation and timeframe for obtaining permission.	Check one: Yes ☐ No ■ NA ☐
Notification provided to the owner/operator of the area associated with activities covered by an additional discharge permit(s). Additional discharge permit is (check one): ☐ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:	Check one: Yes ☐ No ☐ NA ■
Signature: Matthew D Young	Date: 04/30/208
Print Name and Title: Matthew Young, Sr. Project Manager	

ATTACHMENT II

DBP-2100™

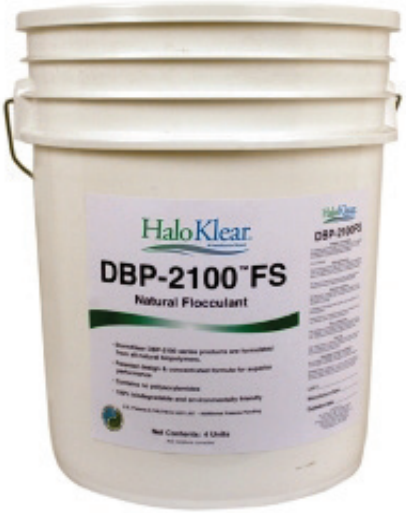
HaloKlear™ DBP-2100 is formulated from natural biopolymers and is 100% biodegradeable through enzymatic activity thus preventing bioaccumulation. The patented design & concentrated formula delivers cost effective, superior and consistent performance. It is used in conjunction with HaloKlear LiquiFloc™ or GelFloc™ as part of the Dual Polymer System. The DBP-2100 series of products act as a charging agent when deployed in contaminant laden water enabling it to form highly stable strong bonds with the chitosan products.

SPECIFICATIONS

Appearance:	Off-white to tan, odorless powder
pH:	6.0 - 8.0 (as 1% solution)
Bulk Density:	0.338 g/ml (freely settled)
Tap Density:	0.383 g/ml

Works well for contaminant removal applications including:

- Sediment
- Hydrocarbons
- Fats, oils or grease (FOG),
- Heavy metals



DELIVERY METHOD

DBP-2100 may be applied using several delivery methods:

- passive systems
- semi-passive systems
- active treatment systems.

For more information, please contact a qualified HaloKlear sales representative at 1-888-282-6766 or visit the HaloKlear website at www.haloklear.com.

Deployment Method: A 6-foot segmented black sock with a green handle at one end.

Packaging Details: Product is sold as sets of 4 individually wrapped socks packaged within a 5 gallon pail.

U.S. Patent No. 6,749,748
U.S. Patent No. 6,821,427
****additional patent pending***

Distributed By:

HaloKlear™
A HaloSource Brand

HaloSource, Inc.
1631 220th St. SE, Suite 100, Bothell, WA 98021
Phone: 425-881-6464 Fax: 425-556-4120

www.halosource.com • www.haloklear.com

HaloKlear DBP-2100 Socks

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 03/24/2016 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	:	Substance
Substance name	:	HaloKlear DBP-2100 Socks
Chemical name	:	Xanthan Gum
CAS No	:	11138-66-2
Product code	:	210014

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	:	Flocculant

1.3. Details of the supplier of the safety data sheet

Dober Chemical Corp.
11230 Katherine's Crossing
Suite 100
Woodridge, IL 60517 - USA
T 630-410-7300 - F 630-410-7444
regulatory@dobergroup.com - www.dober.com

1.4. Emergency telephone number

Emergency number	:	1-800-255-3924 / 1-813-248-0585 ChemTel

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. Label elements

GHS-US labelling

No labelling applicable

2.3. Other hazards

Other hazards not contributing to the classification	:	May form combustible dust concentrations in air. May cause eye irritation.

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance type	:	Mono-constituent
Name	:	HaloKlear DBP-2100 Socks
CAS No	:	11138-66-2

Full text of H-statements: see section 16

3.2. Mixture

Not applicable

4.1. Description of first aid measures

First-aid measures general	:	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	:	Allow breathing of fresh air. Allow the victim to rest.
First-aid measures after skin contact	:	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	:	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	:	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Eliminate all ignition sources if safe to do so. Use water spray or fog for cooling exposed containers.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Spills produce extremely slippery surfaces. Avoid dust formation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

None known.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well-ventilated place. Keep container closed when not in use.

Incompatible products : Oxidizing agent.

Incompatible materials : Sources of ignition.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

HaloKlear DBP-2100 Socks (11138-66-2)	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls

Personal protective equipment	:	Avoid all unnecessary exposure.
Hand protection	:	Wear protective gloves/protective clothing/eye protection/face protection protective gloves.
Eye protection	:	Chemical goggles or safety glasses.
Respiratory protection	:	Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Other information	:	Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Colour	:	White to tan
Odour	:	odourless
Odour threshold	:	No data available
pH	:	approximately neutral (1% solution)
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Solubility	:	Water: 100 %
Log Pow	:	No data available
Log Kow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid dust formation.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon dioxide. Carbon monoxide. Fume.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	:	Not classified
Skin corrosion/irritation	:	Not classified pH: approximately neutral (1% solution)
Serious eye damage/irritation	:	Not classified pH: approximately neutral (1% solution)
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified
Potential adverse human health effects and symptoms	:	Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

HaloKlear DBP-2100 Socks (11138-66-2)	
LC50 fish 1	491 mg/l Rainbow Trout; 96 hour

12.2. Persistence and degradability

HaloKlear DBP-2100 Socks (11138-66-2)	
Persistence and degradability	This product is biodegradable.

12.3. Bioaccumulative potential

HaloKlear DBP-2100 Socks (11138-66-2)	
Bioaccumulative potential	Inherently biodegradable.

12.4. Mobility in soil

HaloKlear DBP-2100 Socks (11138-66-2)	
Mobility in soil	Not available

12.5. Other adverse effects

Effect on the global warming	:	No known ecological damage caused by this product.
Other information	:	No other effects known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	:	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Ecology - waste materials	:	None known.

SECTION 14: Transport information

UN-No.(DOT)	:	Non Regulated
UN-No. (IMDG)	:	Non Regulated
UN-No. (IATA)	:	Non Regulated

14.2. UN proper shipping name

Proper Shipping Name (DOT)	:	Not applicable

Proper Shipping Name (IMDG) : Not applicable

Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

Transport hazard class(es) (DOT) : Not applicable

:

Transport hazard class(es) (IMDG) : Not applicable

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

14.5. Environmental hazards

Marine pollutant(IMDG) : No

Marine pollutant(IATA) : No

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

CANADA
No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

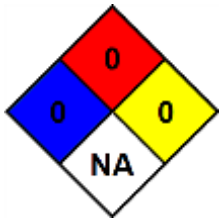
Other information : None.

NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

NFPA specific hazard : NA - Not Applicable



HMIS III Rating	
Health	: 0 - No significant risk to health
Flammability	: 0
Physical	: 0
Personal Protection	: B

Dober SDS US

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

ATTACHMENT III

Matthew Lyne

From: Vakalopoulos, Catherine (DEP) <Catherine.Vakalopoulos@MassMail.State.MA.US>
Sent: Friday, April 13, 2018 10:58 AM
To: Matthew Lyne
Cc: Ruan, Xiaodan (DEP)
Subject: RE: RGP NOI: Request for Dilution Factor Approval

Yes, your DF calculation is correct. Have a nice vacation.
Cathy

Cathy Vakalopoulos, Massachusetts Department of Environmental Protection
1 Winter St., Boston, MA 02108, 617-348-4026

Please consider the environment before printing this e-mail

From: Matthew Lyne [mailto:Matthew.Lyne@atcgs.com]
Sent: Wednesday, April 11, 2018 6:02 PM
To: Vakalopoulos, Catherine (DEP)
Cc: Ruan, Xiaodan (DEP)
Subject: RGP NOI: Request for Dilution Factor Approval

Cathy, for site at 135 Washington Street, North Attleboro that we spoke about last week, attached is the 7Q10 report which calculates 7Q10 to be 0.309 cfs, which equals 0.20 MGD.
I also attached the flow lines you sent me.

Our discharge flow is going to be 250 gpm, which converts to 0.36 MGD.

DF = (0.20 + 0.36)/0.36

DF= 1.55

Can you review and approve this on Thursday. I'd like to submit RGP NOI on Friday before I leave for vacation. Construction job starts 5/15. Please let me know. Thanks.

Matt

Matt Lyne | SENIOR PROJECT MANAGER | **ATC Group Services LLC**
+1 508 641 0476 mobile

997 Millbury Street, Worcester, MA 01607
+1 508 756 0151 phone | matthew.lyne@atcgs.com | www.atcgroupservices.com

ATTACHMENT IV

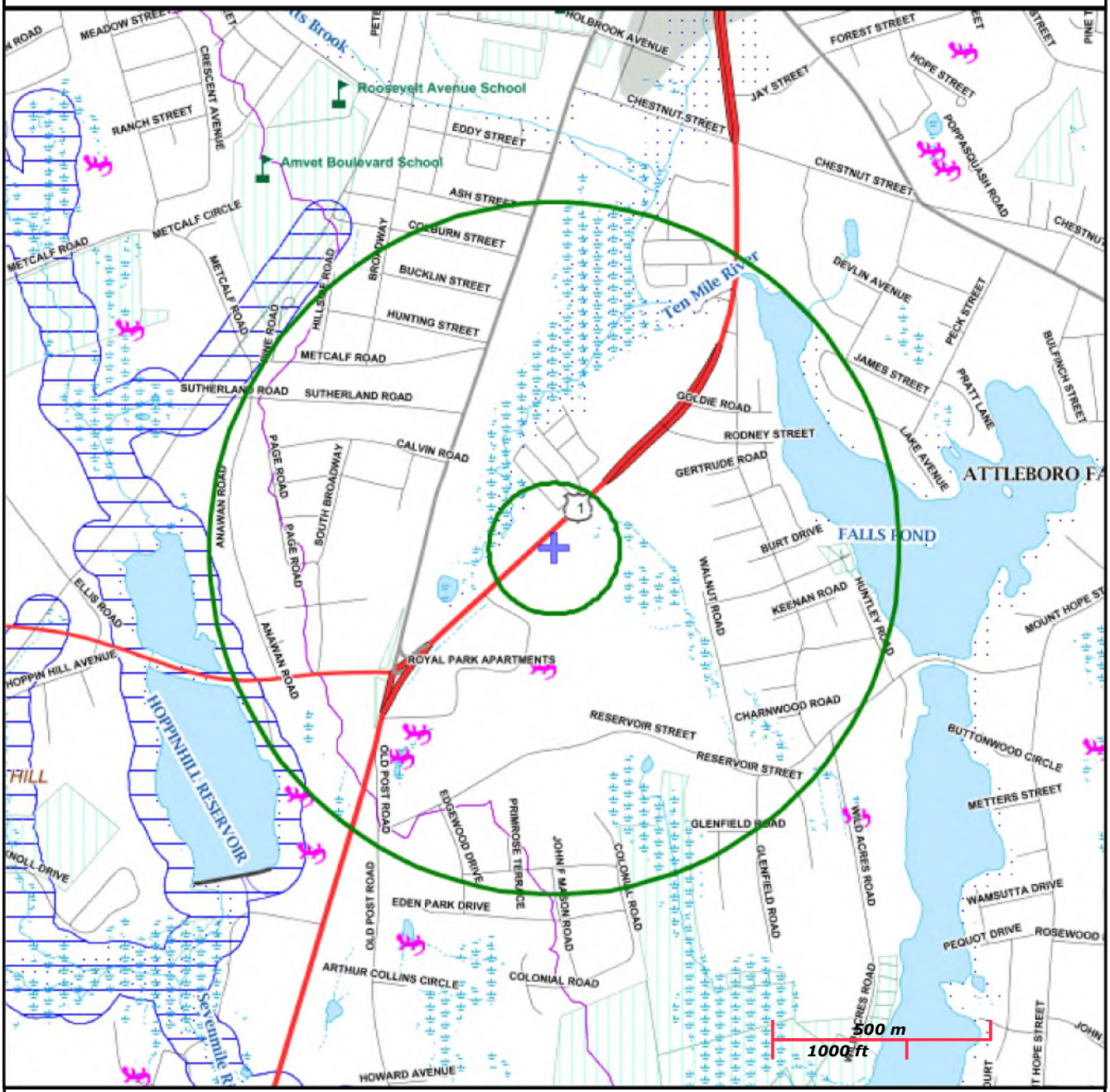
MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:
135 EAST WASHINGTON STREET NORTH ATTLEBOROUGH, MA
NAD83 UTM Meters:
5156333mN , -7940925mE (Zone: 18)
July 25, 2017

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: http://www.mass.gov/mgis/.

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection

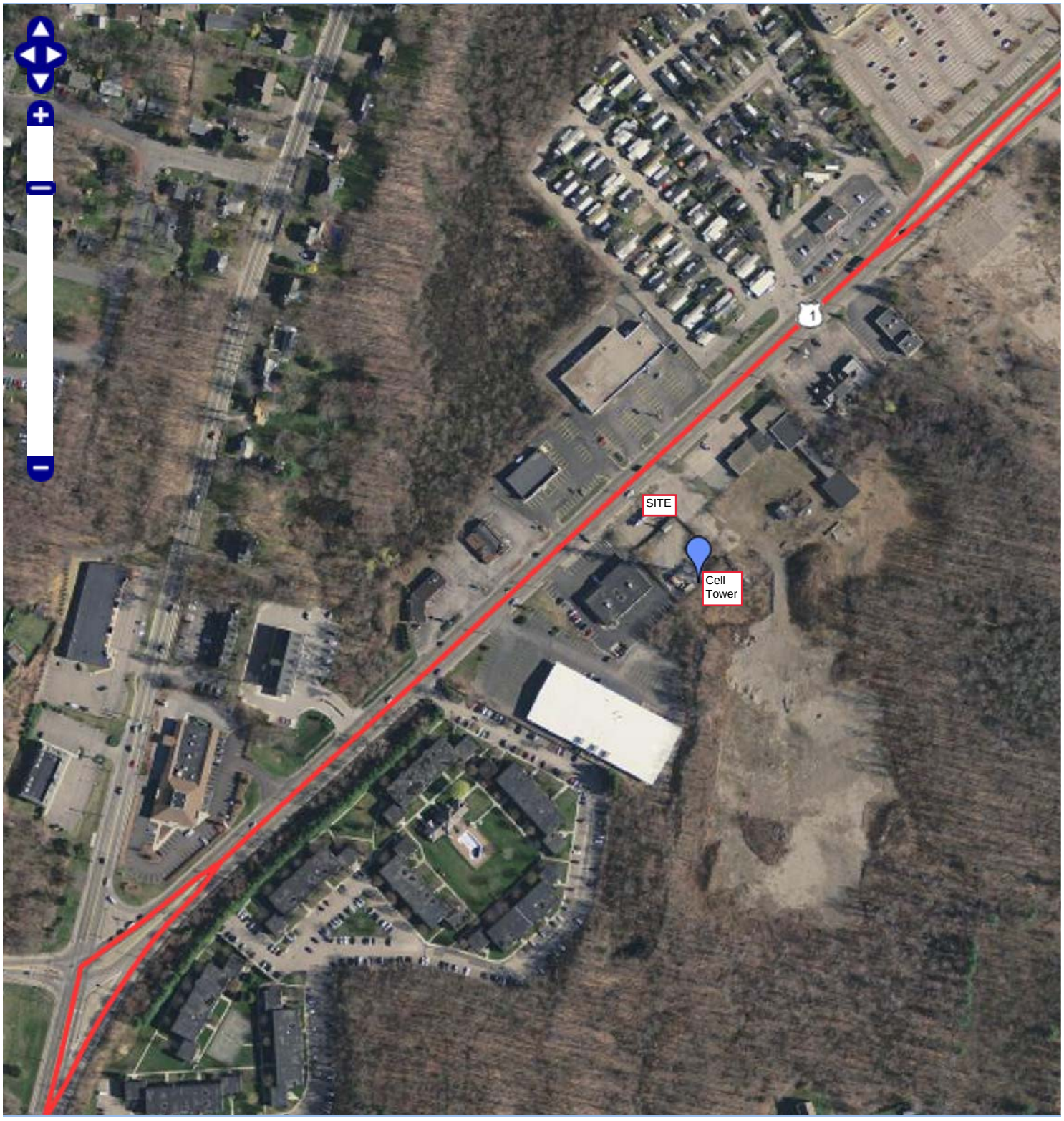


Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct
Basins: Major,PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam
Aquifers: Medium Yield, High Yield, EPA Sole Source
Non Potential Drinking Water Source Area: Medium, High (Yield)
PWS Protection Areas: Zone II, IWPA, Zone A
Hydrography: Open Water, PWS Reservoir, Tidal Flat
Wetlands: Freshwater, Saltwater, Cranberry Bog
FEMA 100yr Floodplain; Protected Open Space; ACEC
Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential
Solid Waste Landfill; PWS: Com.GW,SW, Emerg.,Non-Com.

OLIVER: MassGIS's Online Mapping Tool [OLIVER Updates]

NESHAP Map-103-135 East Washington Street, N. Attleboro

Zoom to a town



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ATTACHMENT V

Massachusetts Cultural Resource Information Sy
MACRIS

Results

Get Results in Report Format
PDF Spreadsheet

Below are the results of your search, using the following search criteria:
Town(s): North Attleborough
Street No: 135
Street Name: East Washington St
Resource Type(s): Area, Building, Burial Ground, Object, Structure

For more information about this page and how to use it, click here

No Results Found.

New Search | New Search – Same Town(s) | Previous

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

997 Millbury Street, Unit 6
Worcester, MA 01607
Telephone 508-756-0151
Fax 508-757-7063
www.atcgroupservices.com

April 14, 2018
File No. 03-225434

Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125

RE: **Project Notification Form**
Undeveloped Lot/Adjacent to Cell Tower
Proposed Cumberland Farms Property #MA3163
135 East Washington Street (Lot 3)
North Attleboro, Massachusetts 02760

To whom it may concern:

On behalf of Cumberland Farms, Inc. (CFI), ATC Group Services LLC (ATC), is submitting this Project Notification Form (PNF) for the above referenced facility (i.e., the "Site"). CFI is proposing to redevelop the property in May 2018. Approval for dewatering through EPA is necessary and this PNF is required as part of the Notice of Intent process. A Site Locus map is included as Figure 1.

The subject property currently undeveloped and is adjacent to an active cell tower. The property was a yard for an adjacent construction facility (Westcott Construction) from 1964 through 2016, when it was demolished. The former Westcott property was split into 3 lots for development, one lot having an O'Reilly Auto Parts store, another in the rear of the site undeveloped, and the lot for the proposed CFI at the front along East Washington Street (Lot 3). Prior to 1964, the site was undeveloped. A Site Plan depicting the current setting of the property and surrounding area is included as Figure 2.

If there are any questions regarding this submittal, please do not hesitate to contact the undersigned or Mr. Matthew Young of Cumberland Farms, Inc. at (508) 270-1400.

Sincerely,
ATC Group Services LLC

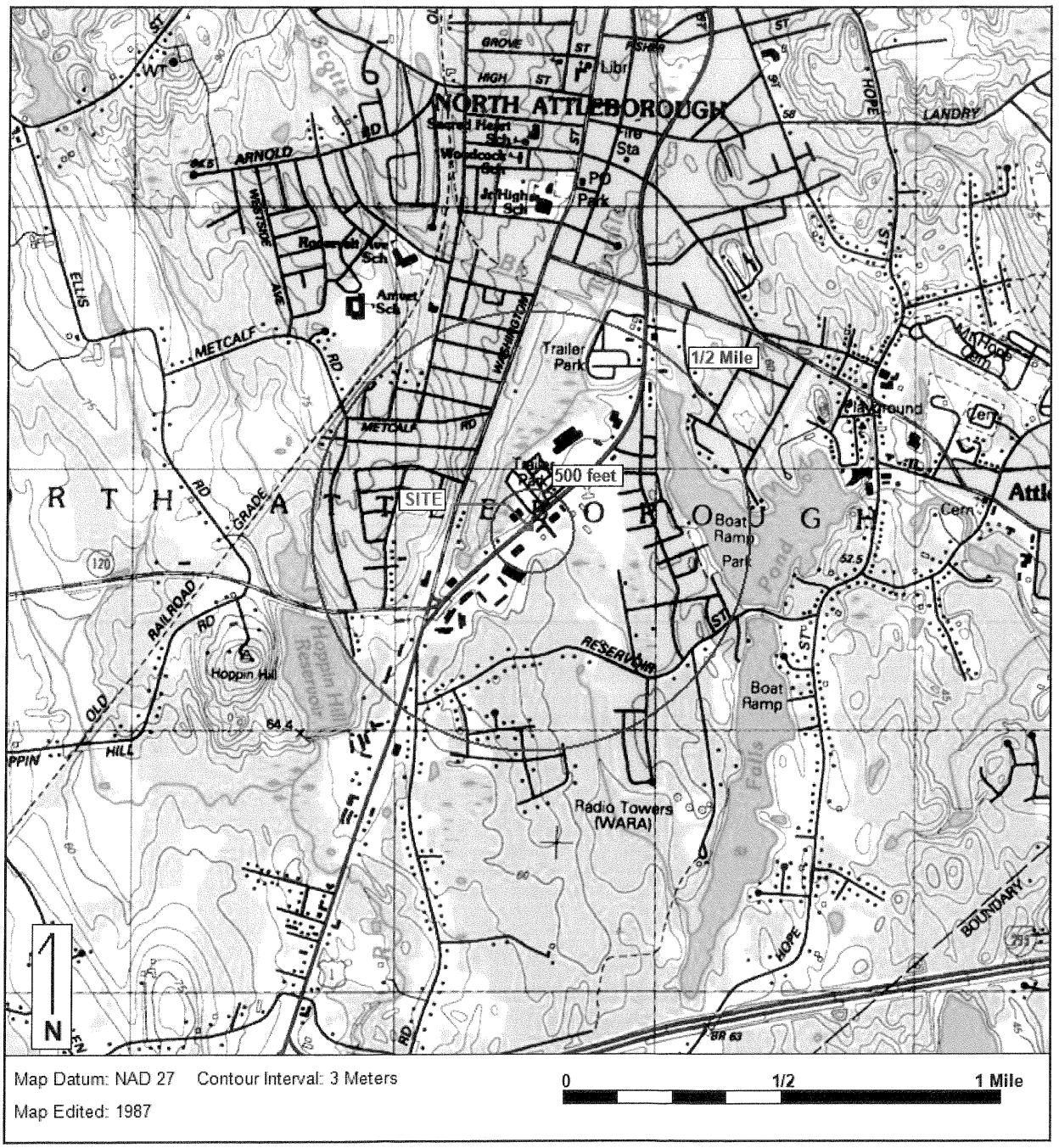
Matthew Lyne
Senior Project Manager

cc: Matt Young, Cumberland Farms Inc, 165 Flanders Road, Westborough, MA 01581

Figure 1- Site Locus
Figure 2- Site Plan

N. Attleboro -Potential Acquisition-135 W. Washington St
135 W. Washington Street
N. Attleboro, MA

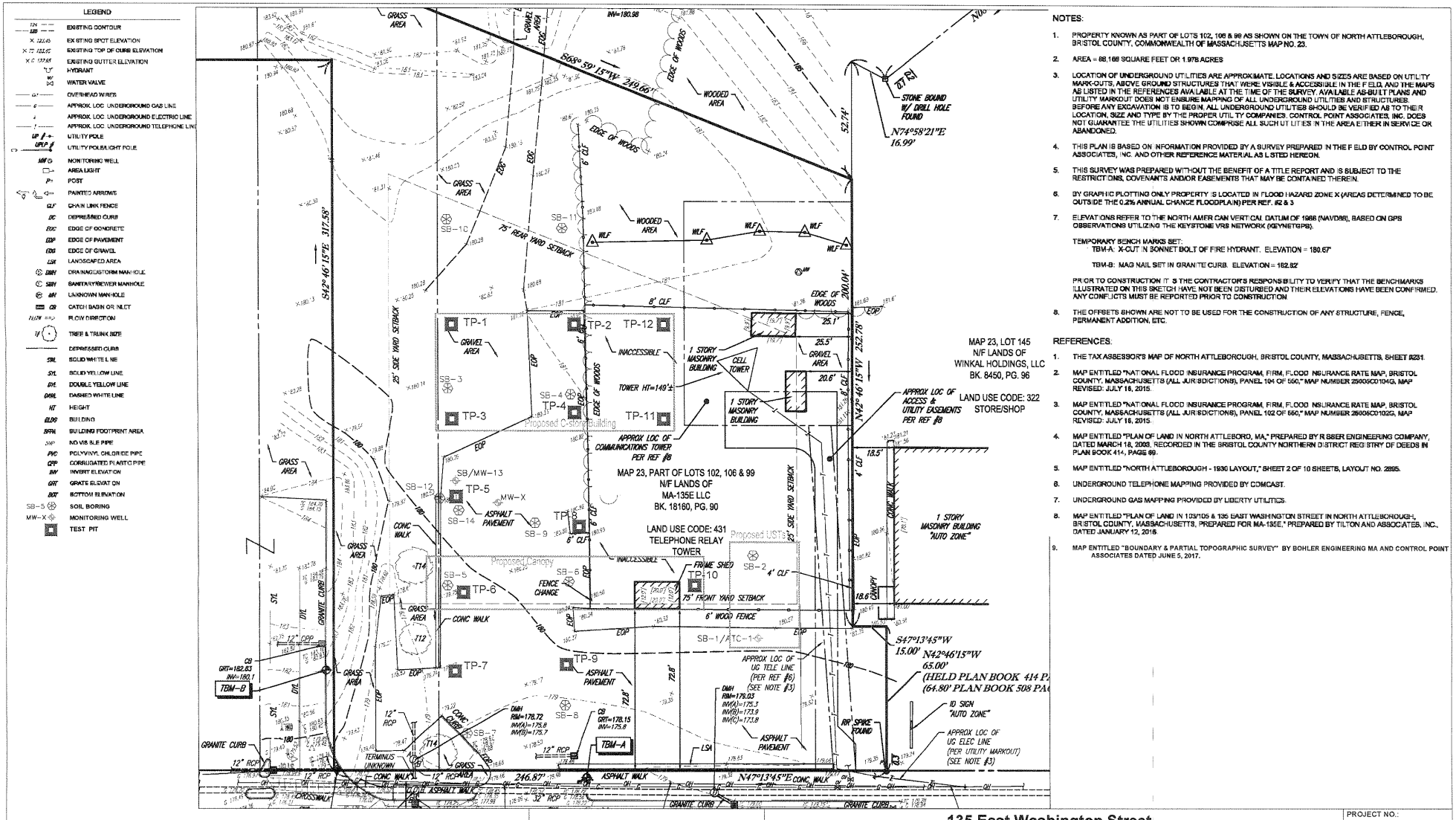
Figure 1: SITE LOCUS



Base Map: U.S. Geological Survey; Quadrangle Location: Attleboro, MA

Lat/Lon: 41 58' 9" NORTH, 71 20' 4" WEST - UTM Coordinates: 19 306617.4 EAST / 4650808.6 NORTH

Generated By: Carol Farrington



NOTES:

1. PROPERTY KNOWN AS PART OF LOTS 102, 106 & 99 AS SHOWN ON THE TOWN OF NORTH ATTLEBOROUGH, BRISTOL COUNTY, COMMONWEALTH OF MASSACHUSETTS MAP NO. 23.
2. AREA = 86,166 SQUARE FEET OR 1.978 ACRES
3. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE F ELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTIL TY COMPANIES. CONTROL POINT ASSOCIATES, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UT LITIES IN THE AREA EITHER IN SERVICE OR ABANDONED.
4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE F ELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS L STED HEREON.
5. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO THE RESTRICTIONS, COVENANTS AND/OR EASEMENTS THAT MAY BE CONTAINED THEREIN.
6. BY GRAPHIC PLOTTING ONLY PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER REF. #2 & 3
7. ELEVATIONS REFER TO THE NORTH AMER CAN VERTICAL DATUM OF 1988 (NAVD88), BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS NETWORK (KEYNETGPS).

   TEMPORARY BENCH MARKS SET:
   TBM-A: X-CUT IN BONNET BOLT OF FIRE HYDRANT. ELEVATION = 180.67'
   TBM-B: MAG NAIL SET IN GRANITE CURB. ELEVATION = 182.82'

   PRIOR TO CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE BENCHMARKS ILLUSTRATED ON THIS SKETCH HAVE NOT BEEN DISTURBED AND THEIR ELEVATIONS HAVE BEEN CONFIRMED. ANY CONFLICTS MUST BE REPORTED PRIOR TO CONSTRUCTION.
8. THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMANENT ADDITION, ETC.

REFERENCES:

1. THE TAX ASSESSOR'S MAP OF NORTH ATTLEBOROUGH, BRISTOL COUNTY, MASSACHUSETTS, SHEET #231.
2. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, BRISTOL COUNTY, MASSACHUSETTS (ALL JURISDICTIONS), PANEL 104 OF 550," MAP NUMBER 25005C0104G, MAP REVISED: JULY 16, 2015.
3. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, BRISTOL COUNTY, MASSACHUSETTS (ALL JURISDICTIONS), PANEL 102 OF 550," MAP NUMBER 25005C0102G, MAP REVISED: JULY 16, 2015.
4. MAP ENTITLED "PLAN OF LAND IN NORTH ATTLEBORO, MA," PREPARED BY RUBBER ENGINEERING COMPANY, DATED MARCH 18, 2003, RECORDED IN THE BRISTOL COUNTY NORTHERN DISTRICT REGISTRY OF DEEDS IN PLAN BOOK 414, PAGE 69.
5. MAP ENTITLED "NORTH ATTLEBOROUGH - 1930 LAYOUT," SHEET 2 OF 10 SHEETS, LAYOUT NO. 2895.
6. UNDERGROUND TELEPHONE MAPPING PROVIDED BY COMCAST.
7. UNDERGROUND GAS MAPPING PROVIDED BY LIBERTY UTILITIES.
8. MAP ENTITLED "PLAN OF LAND IN 103/105 & 135 EAST WASHINGTON STREET IN NORTH ATTLEBOROUGH, BRISTOL COUNTY, MASSACHUSETTS, PREPARED FOR MA-135E," PREPARED BY TILTON AND ASSOCIATES, INC., DATED JANUARY 12, 2016.
9. MAP ENTITLED "BOUNDARY & PARTIAL TOPOGRAPHIC SURVEY" BY BOHLER ENGINEERING MA AND CONTROL POINT ASSOCIATES DATED JUNE 5, 2017.

Cadfile: Site Plan with Borings and Well.dwg

ATC
997 Millbury Street
Worcester, Massachusetts 01607
(508) 756-0151

DRAWN BY: BOHLER/CPA/AR
CHECKED BY: ML

135 East Washington Street
Part of Lots 102, 106, & 99, Map 23
North Attleboro, Massachusetts

Site Plan

PROJECT NO.: 03-225434.03
0 Approximate Feet 40
DATE: 8/11/2017
FIGURE NO.: 2

LEGEND:

- Monitoring Well
- MW-5 Monitoring Well ID
- Soil Boring
- SB-7 Soil Boring ID

NOTES:

Map "Existing Lot Overlay" by Bohler Engineering dated 8-1-2016 used as base map.
Locations are approximate. This plan should not be used for construction or land conveyance purposes.

ATC
997 Millbury Street, Unit G
Worcester, MA 01607
Phone 508-759-0151
Fax 508-757-7063

NAME/ADDRESS:

Cumberland Farms, Inc.
East Washington Street
North Attleborough, Massachusetts

DRAWING TITLE:

Site Plan

0 Approximate Feet 60

PROJECT #:	03-225434.00
CHECKED BY:	ML
DRAWN BY:	BOHLER/AR
DATE:	JUNE 2017
APPENDIX	B

ATC
ENVIRONMENTAL • GEOTECHNICAL
DING SCIENCES • MATERIALS TESTING
997 Millbury Street • Unit 6
Worcester, MA 01607

4-14-18

Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA ~~02125~~ 02125

ATTACHMENT VI

eurofins | Spectrum Analytical

☑ Final Report
☐ Revised Report

Report Date:
03-Apr-18 16:53

Laboratory Report
SC45049

ATC Group Services, LLC
997 Millbury Street, Unit G
Worcester, MA 01607
Attn: Matt Lyne

Project: CFI #8474 - N. Attleboro, MA
Project #: 03-225434

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

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

Authorized by:

Dawn Wojcik
Laboratory Director

Eurofins Spectrum Analytical holds primary certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts 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 55 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: SC45049

Project: CFI #8474 - N. Attleboro, MA

Project Number: 03-225434

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC45049-01	Pond-1	Ground Water	22-Mar-18 17:00	23-Mar-18 17:05
SC45049-02	ATC-1	Ground Water	22-Mar-18 17:00	23-Mar-18 17:05

MassDEP Analytical Protocol Certification Form

Laboratory Name: Eurofins Spectrum Analytical, Inc.	**Project #:** 03-225434
Project Location: CFI #8474 - N. Attleboro, MA	**RTN:**
This form provides certifications for the following data set:	SC45049-01 through SC45049-02
Matrices: Ground Water	

CAM Protocol

✓ 8260 VOC CAM II A	✓ 7470/7471 Hg CAM III B	MassDEP VPH CAM IV A	8081 Pesticides CAM V B	✓ 7196 Hex Cr CAM VI B	MassDEP APH CAM IX A
✓ 8270 SVOC CAM II B	7010 Metals CAM III C	MassDEP EPH CAM IV B	8151 Herbicides CAM V C	8330 Explosives CAM VIII A	TO-15 VOC CAM IX B
6010 Metals CAM III A	6020 Metals CAM III D	8082 PCB CAM V A	✓ 9012 Total Cyanide/PAC CAM VI A	9014 Total Cyanide/PAC CAM VI A	6860 Perchlorate CAM VIII B

Affirmative responses to questions A through F are required for Presumptive Certainty status

A	Were all samples received in a condition consistent with those described on the Chain of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	Yes ✓ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	✓ Yes No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	✓ Yes No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	✓ Yes No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes No Yes No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to questions A through E)?	✓ Yes No

Responses to questions G, H and I below are required for Presumptive Certainty status

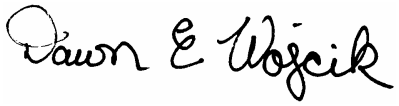
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes ✓ No

***Data User Note:* Data that achieve Presumptive Certainty status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	Yes ✓ No
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes ✓ No

All negative responses are addressed in a case narrative on the cover page of this report.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.



Dawn E. Wojcik
Laboratory Director
Date: 4/3/2018

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 4.0 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.

MADEP has published a list of analytical methods (CAM) which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of MCP decisions. "Presumptive Certainty" can be established only for those methods published by the MADEP in the MCP CAM. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

According to WSC-CAM 5/2009 Rev.1, Table 11 A-1, recovery for some VOC analytes have been deemed potentially difficult. Although they may still be within the recommended recovery range, a range has been set based on historical control limits.

Some target analytes which are not listed as exceptions in the Summary of CAM Reporting Limits may exceed the recommended RL based on sample initial volume or weight provided, % moisture content, or responsiveness of a particular analyte to purge and trap instrumentation.

Analyses for Total Hardness, pH, and Total Residual Chlorine fall under the state of Pennsylvania code Chapter 252.6 accreditation by rule.

Reactivity (40 CFR 261.23) Case Narrative:

These samples do not exhibit the characteristics of reactivity as defined in 40 CFR 261.23, sections (1), (2) and (4); however, Eurofins Spectrum Analytical, Inc. does not test for detonation, explosive reaction or potential, or forbidden explosives as defined in 40 CFR 261.23, sections (3), (6), (7) and (8).

Reactive sulfide and cyanide are tested at a pH of 2 and not tested at all conditions between pH 2 and12.5 as stated in 40 CFR 261.23, section (5); thus reactive cyanide and sulfide results as reported in this document can not be used to support the nonreactive properties of these samples.

The responsibility falls on the generator to use knowledge of the waste to determine if the waste meets or does not meet the descriptive, prose definition of reactivity.

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

EPA 200.7

Laboratory Control Samples:

1804084 BS

Beryllium percent recovery 116 (85-115) is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

ATC-1
Pond-1

EPA 524.2

Calibration:

1802088

EPA 524.2

Calibration:

1802088

Analyte quantified by quadratic equation type calibration.

Bromoform
Carbon tetrachloride

This affected the following samples:

1804029-BLK1
1804029-BS1
ATC-1
S817144-ICV1
S817980-CCV1

Laboratory Control Samples:

1804029 BS

Chloromethane percent recovery 74 (80-120) is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

ATC-1

Naphthalene percent recovery 126 (80-120) is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

ATC-1

EPA 608

Samples:

S818176-CCV3

Analyte percent difference is outside individual acceptance criteria (15), but within overall method allowances.

Aroclor-1260 (3) (16.0%)
Aroclor-1260 (4) (24.3%)
Aroclor-1260 (5) (20.5%)

This affected the following samples:

1804228-BLK1
1804228-BS1
1804228-BSD1
ATC-1

EPA 624

Calibration:

1802088

Analyte quantified by quadratic equation type calibration.

Bromoform
Carbon tetrachloride

EPA 624

Calibration:

1802088

This affected the following samples:

1804029-BLK1
1804029-BS1
1804029-BSD1
ATC-1
S817144-ICV1
S817980-CCV1

EPA 625

Calibration:

1801047

Analyte quantified by quadratic equation type calibration.

2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
4,6-Dinitro-2-methylphenol
4-Nitrophenol
Benzidine
Pentachlorophenol

This affected the following samples:

1804230-BLK1
1804230-BS1
1804230-BSD1
ATC-1
S815859-ICV1
S818148-CCV1

Laboratory Control Samples:

1804230 BS/BSD

Fluorene percent recoveries (51/56) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

ATC-1

N-Nitrosodimethylamine percent recoveries (38/41) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

ATC-1

1804230 BSD

Bis(2-ethylhexyl)phthalate RPD 23% (20%) is outside individual acceptance criteria.

1804230-BS1

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

Fluorene
N-Nitrosodimethylamine

1804230-BSD1

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

Fluorene

EPA 625

Laboratory Control Samples:

1804230-BSD1

RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.

Bis(2-ethylhexyl)phthalate

Samples:

S818148-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

3,3´-Dichlorobenzidine (-22.9%)
Di-n-octyl phthalate (20.4%)
N-Nitrosodiphenylamine (-21.1%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

2,4-Dinitrophenol (23.6%)
4,6-Dinitro-2-methylphenol (24.9%)

This affected the following samples:

1804230-BLK1
1804230-BS1
1804230-BSD1
ATC-1

SM3500-Cr-B (11)/7196A

Spikes:

1804006-MS1 *Source: SC45049-02*

The spike recovery was outside acceptance limits for the MS, MSD and/or PS due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

Hexavalent Chromium

1804006-MSD1 *Source: SC45049-02*

The spike recovery was outside acceptance limits for the MS, MSD and/or PS due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

Hexavalent Chromium

Samples:

SC45049-02 *ATC-1*

The Reporting Limit has been raised to account for matrix interference.

Hexavalent Chromium

This sample was analyzed outside the EPA recommended holding time per client request.

Hexavalent Chromium

SW846 8260C

Calibration:

1802088

Analyte quantified by quadratic equation type calibration.

Bromoform
Carbon tetrachloride

SW846 8260C

Calibration:

1802088

This affected the following samples:

1804029-BLK1
1804029-BS1
1804029-BSD1
ATC-1
S817144-ICV1
S817980-CCV1

Samples:

S817980-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Dichlorodifluoromethane (Freon12) (-20.1%)
Naphthalene (25.3%)
Tetrahydrofuran (-23.0%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Chloromethane (-28.3%)

This affected the following samples:

1804029-BLK1
1804029-BS1
1804029-BSD1
ATC-1

SW846 8270D

Calibration:

1801047

Analyte quantified by quadratic equation type calibration.

2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Nitrophenol
Benzidine
Benzoic acid
Carbazole
Pentachlorophenol

This affected the following samples:

1804230-BLK1
1804230-BS1
1804230-BSD1
ATC-1
S815859-ICV1
S818148-CCV1

Laboratory Control Samples:

1804230 BS/BSD

SW846 8270D

Laboratory Control Samples:

1804230 BS/BSD

Aniline percent recoveries (36/39) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

ATC-1

N-Nitrosodimethylamine percent recoveries (38/41) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

ATC-1

Phenol percent recoveries (25/27) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

ATC-1

Pyridine percent recoveries (28/31) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

ATC-1

1804230 BSD

Bis(2-ethylhexyl)phthalate RPD 23% (20%) is outside individual acceptance criteria.

1804230-BS1

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

Aniline
N-Nitrosodimethylamine
Phenol
Pyridine

1804230-BSD1

Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.

Aniline
Phenol
Pyridine

RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.

Bis(2-ethylhexyl)phthalate

Samples:

S818148-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

3,3´-Dichlorobenzidine (-22.9%)
4-Chloroaniline (-44.9%)
Aniline (-75.9%)
Di-n-octyl phthalate (20.4%)
N-Nitrosodiphenylamine (-21.1%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

2,4-Dinitrophenol (23.6%)
3-Nitroaniline (-32.4%)
4,6-Dinitro-2-methylphenol (24.9%)
Carbazole (-20.1%)

SW846 8270D

Samples:

S818148-CCV1

This affected the following samples:

1804230-BLK1
1804230-BS1
1804230-BSD1
ATC-1

Sample Acceptance Check Form

Client:	ATC Group Services, LLC - Worcester, MA
Project:	CFI #8474 - N. Attleboro, MA / 03-225434
Work Order:	SC45049
Sample(s) received on:	3/23/2018

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: SC45049-01 **Client ID:** Pond-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Ammonia as Nitrogen	0.08		0.05	mg/l	E350.1
Calcium	22.0		0.100	mg/l	EPA 200.7
Copper	0.0064		0.0050	mg/l	EPA 200.7
Magnesium	4.74		0.0100	mg/l	EPA 200.7
Zinc	0.0303		0.0050	mg/l	EPA 200.7
Hardness	74.5		0.291	mg/l CaCO3	SM 2340B (11)

Lab ID: SC45049-02 **Client ID:** ATC-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Calcium	14.5		0.100	mg/l	EPA 200.7
Chromium	0.0080		0.0050	mg/l	EPA 200.7
Copper	0.0114		0.0050	mg/l	EPA 200.7
Iron	7.56		0.0150	mg/l	EPA 200.7
Magnesium	3.81		0.0100	mg/l	EPA 200.7
Nickel	0.0070		0.0050	mg/l	EPA 200.7
Zinc	0.0220		0.0050	mg/l	EPA 200.7
Chloride	19.5		1.00	mg/l	EPA 300.0
Hardness	51.9		0.291	mg/l CaCO3	SM 2340B (11)
Total Dissolved Solids	85		5	mg/l	SM18-22 2540C
Total Suspended Solids	150		2.5	mg/l	SM2540D (11)

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
Pond-1 SC45049-01	03-225434	Ground Water	22-Mar-18 17:00	23-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 200/6000 Series Methods													
Prepared by method General Prep-Metal													
	Preservation	**Field Preserved; pH<2 confirmed**		N/A			1	EPA 200/6000 methods	26-Mar-18		JS	1804059	
Total Metals by EPA 200 Series Methods													
7440-22-4	Silver	< 0.0050		mg/l	0.0050	0.0035	1	EPA 200.7	27-Mar-18	30-Mar-18	SJR/TBC	1804084	X
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0028	1	"	"	"	"	"	X
7440-41-7	Beryllium	< 0.0020		mg/l	0.0020	0.0002	1	"	"	03-Apr-18	"	"	X
7440-70-2	Calcium	**22.0**		mg/l	0.100	0.0340	1	"	"	30-Mar-18	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0004	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0019	1	"	"	03-Apr-18	"	"	X
7440-50-8	Copper	**0.0064**		mg/l	0.0050	0.0029	1	"	"	30-Mar-18	"	"	X
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00013	1	EPA 245.1/7470A	"	28-Mar-18	ABW	1804085	X
7439-95-4	Magnesium	**4.74**		mg/l	0.0100	0.0074	1	EPA 200.7	"	30-Mar-18	SJR/TBC	1804084	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0034	1	"	"	"	"	"	X
7440-36-0	Antimony	< 0.0060		mg/l	0.0060	0.0026	1	"	"	"	"	"	X
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0072	1	"	"	"	"	"	X
7440-28-0	Thallium	< 0.0050		mg/l	0.0050	0.0024	1	"	"	"	"	"	X
7440-66-6	Zinc	**0.0303**		mg/l	0.0050	0.0027	1	"	"	"	"	"	X
General Chemistry Parameters													
	Hardness	**74.5**	HD	mg/l CaCO3	0.291	0.115	1	SM 2340B (11)	27-Mar-18	30-Mar-18	SJR/TBC	[CALC]	
	pH	**6.82**	pH	pH Units			1	ASTM D 1293-99B	23-Mar-18 17:30	23-Mar-18 18:00	BD	1804002	X
Subcontracted Analyses													
Prepared by method 424092													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7664-41-7	Ammonia as Nitrogen	**0.08**		mg/l	0.05	0.05	1	E350.1	22-Mar-18 17:00	28-Mar-18 11:56	M-CT007	424092A	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ATC-1	03-225434	Ground Water	22-Mar-18 17:00	23-Mar-18
SC45049-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Purgeable Organic Compounds													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 0.50		µg/l	0.50	0.35	1	EPA 524.2	26-Mar-18	26-Mar-18	GMA	1804029	
67-64-1	Acetone	< 10.0		µg/l	10.0	0.80	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.44	1	"	"	"	"	"	
71-43-2	Benzene	< 0.50		µg/l	0.50	0.21	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 0.50		µg/l	0.50	0.33	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.30	1	"	"	"	"	"	
75-25-2	Bromoform	< 0.50		µg/l	0.50	0.42	1	"	"	"	"	"	
74-83-9	Bromomethane	< 0.50		µg/l	0.50	0.38	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	< 2.00		µg/l	2.00	0.55	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 0.50		µg/l	0.50	0.41	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 0.50		µg/l	0.50	0.33	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 0.50		µg/l	0.50	0.26	1	"	"	"	"	"	
75-15-0	Carbon disulfide	< 0.50		µg/l	0.50	0.25	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 0.50		µg/l	0.50	0.25	1	"	"	"	"	"	
75-00-3	Chloroethane	< 0.50		µg/l	0.50	0.38	1	"	"	"	"	"	
67-66-3	Chloroform	< 0.50		µg/l	0.50	0.23	1	"	"	"	"	"	
74-87-3	Chloromethane	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 0.50		µg/l	0.50	0.17	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 0.50		µg/l	0.50	0.24	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.16	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 0.50		µg/l	0.50	0.31	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 0.50		µg/l	0.50	0.20	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 0.50		µg/l	0.50	0.25	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 0.50		µg/l	0.50	0.25	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 0.50		µg/l	0.50	0.24	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 0.50		µg/l	0.50	0.28	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 0.50		µg/l	0.50	0.33	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 0.50		µg/l	0.50	0.35	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 0.50		µg/l	0.50	0.27	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 0.50		µg/l	0.50	0.22	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 0.50		µg/l	0.50	0.42	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 0.50		µg/l	0.50	0.28	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 0.50		µg/l	0.50	0.23	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.47	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	< 2.00		µg/l	2.00	0.53	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ATC-1	03-225434	Ground Water	22-Mar-18 17:00	23-Mar-18
SC45049-02				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Purgeable Organic Compounds													
98-82-8	Isopropylbenzene	< 0.50		µg/l	0.50	0.23	1	EPA 524.2	26-Mar-18	26-Mar-18	GMA	1804029	
99-87-6	4-Isopropyltoluene	< 0.50		µg/l	0.50	0.28	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	< 0.50		µg/l	0.50	0.15	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00		µg/l	2.00	0.35	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 0.50		µg/l	0.50	0.35	1	"	"	"	"	"	
91-20-3	Naphthalene	< 0.50		µg/l	0.50	0.40	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	
100-42-5	Styrene	< 0.50		µg/l	0.50	0.40	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.38	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.33	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 0.50		µg/l	0.50	0.39	1	"	"	"	"	"	
108-88-3	Toluene	< 0.50		µg/l	0.50	0.33	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 0.50		µg/l	0.50	0.38	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 0.50		µg/l	0.50	0.35	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 0.50		µg/l	0.50	0.33	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 0.50		µg/l	0.50	0.38	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 0.50		µg/l	0.50	0.22	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 0.50		µg/l	0.50	0.43	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 0.50		µg/l	0.50	0.45	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	< 0.50		µg/l	0.50	0.38	1	"	"	"	"	"	
95-47-6	o-Xylene	< 0.50		µg/l	0.50	0.26	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	0.39	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	< 0.50		µg/l	0.50	0.33	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	< 0.50		µg/l	0.50	0.16	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	3.55	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*97*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*102*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*115*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*106*			*80-120 %*			"	"	"	"	"	
Volatile Organic Compounds by GCMS													
67-64-1	Acetone	< 10.0		µg/l	10.0	0.8	1	EPA 624	"	"	GMA	"	
71-43-2	Benzene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.0		µg/l	2.0	0.9	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.1	1	"	"	"	"	"	
75-15-0	Carbon disulfide	< 5.0		µg/l	5.0	0.4	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ATC-1	03-225434	Ground Water	22-Mar-18 17:00	23-Mar-18
SC45049-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by GCMS													
75-00-3	Chloroethane	< 2.0		µg/l	2.0	0.6	1	EPA 624	26-Mar-18	26-Mar-18	GMA	1804029	X
67-66-3	Chloroform	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.0		µg/l	2.0	0.4	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.0		µg/l	1.0	0.7	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.5	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	< 1.0		µg/l	1.0	0.2	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	0.5	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 10.0		µg/l	10.0	0.7	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.0		µg/l	1.0	0.4	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.0		µg/l	1.0	0.6	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.0		µg/l	1.0	0.5	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.0		µg/l	1.0	0.5	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.0		µg/l	1.0	0.5	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.0		µg/l	1.0	0.5	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.0		µg/l	2.0	0.4	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.0		µg/l	1.0	0.3	1	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*97*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*102*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*115*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*106*			*70-130 %*			"	"	"	"	"	
Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.53	1	SW846 8260C	"	"	GMA	"	
67-64-1	Acetone	< 10.0		µg/l	10.0	0.80	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.47	1	"	"	"	"	"	
71-43-2	Benzene	< 1.00		µg/l	1.00	0.28	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ATC-1	03-225434	Ground Water	22-Mar-18 17:00	23-Mar-18
SC45049-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.33	1	SW846 8260C	26-Mar-18	26-Mar-18	GMA	1804029	
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.34	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.42	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	
74-83-9	Bromomethane	< 2.00		µg/l	2.00	0.90	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	< 2.00		µg/l	2.00	1.07	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.41	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	0.41	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.44	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.25	1	"	"	"	"	"	
75-00-3	Chloroethane	< 2.00		µg/l	2.00	0.59	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	
74-87-3	Chloromethane	< 2.00		µg/l	2.00	0.37	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	0.86	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.20	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.31	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.28	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.31	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.27	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.58	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.28	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.29	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.21	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.35	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.47	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	< 2.00		µg/l	2.00	0.53	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.28	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.24	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	< 2.00		µg/l	2.00	0.52	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ATC-1	03-225434	Ground Water	22-Mar-18 17:00	23-Mar-18
SC45049-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.66	1	SW846 8260C	26-Mar-18	26-Mar-18	GMA	1804029	
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.35	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.34	1	"	"	"	"	"	
100-42-5	Styrene	< 1.00		µg/l	1.00	0.40	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.33	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.57	1	"	"	"	"	"	
108-88-3	Toluene	< 1.00		µg/l	1.00	0.30	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.30	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.51	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.50	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.29	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.47	1	"	"	"	"	"	
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	0.38	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.28	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.06	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.37	1	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.29	1	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	5.90	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	11.4	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00	0.82	1	"	"	"	"	"	
64-17-5	Ethanol	< 200		µg/l	200	30.9	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*97*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*102*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*115*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*106*			*70-130 %*			"	"	"	"	"	
Ethanol by SW846 8260													
64-17-5	Ethanol	< 200		µg/l	200	30.9	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*97*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*102*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*115*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*106*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
PAHs by SIM													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ATC-1	03-225434	Ground Water	22-Mar-18 17:00	23-Mar-18
SC45049-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GCMS													
PAHs by SIM													
83-32-9	Acenaphthene	< 0.050		µg/l	0.050	0.030	1	Mod. EPA 625	29-Mar-18	02-Apr-18	EDT	1804230	
208-96-8	Acenaphthylene	< 0.050		µg/l	0.050	0.032	1	"	"	"	"	"	
120-12-7	Anthracene	< 0.050		µg/l	0.050	0.026	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	< 0.050		µg/l	0.050	0.024	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	< 0.050		µg/l	0.050	0.036	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	< 0.050		µg/l	0.050	0.035	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	< 0.050		µg/l	0.050	0.027	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	< 0.050		µg/l	0.050	0.028	1	"	"	"	"	"	
218-01-9	Chrysene	< 0.050		µg/l	0.050	0.023	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	< 0.050		µg/l	0.050	0.026	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 0.050		µg/l	0.050	0.020	1	"	"	"	"	"	
86-73-7	Fluorene	< 0.050		µg/l	0.050	0.030	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	< 0.050		µg/l	0.050	0.022	1	"	"	"	"	"	
91-20-3	Naphthalene	< 0.050		µg/l	0.050	0.027	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 0.050		µg/l	0.050	0.026	1	"	"	"	"	"	
129-00-0	Pyrene	< 0.050		µg/l	0.050	0.022	1	"	"	"	"	"	
Surrogate recoveries:													
205440-82-0	*Benzo (e) pyrene-d12*	*40*			*30-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds													
83-32-9	Acenaphthene	< 4.81		µg/l	4.81	0.664	1	EPA 625	"	02-Apr-18	MSL	"	X
208-96-8	Acenaphthylene	< 4.81		µg/l	4.81	0.657	1	"	"	"	"	"	X
120-12-7	Anthracene	< 4.81		µg/l	4.81	0.585	1	"	"	"	"	"	X
92-87-5	Benzidine	< 9.62		µg/l	9.62	1.10	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 4.81		µg/l	4.81	0.515	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 4.81		µg/l	4.81	0.540	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 4.81		µg/l	4.81	0.420	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 4.81		µg/l	4.81	0.510	1	"	"	"	"	"	X
207-08-9	Benzo (k) fluoranthene	< 4.81		µg/l	4.81	0.462	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 4.81		µg/l	4.81	0.640	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 4.81		µg/l	4.81	0.706	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 4.81		µg/l	4.81	0.748	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	< 4.81		µg/l	4.81	0.613	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 4.81		µg/l	4.81	0.579	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 4.81		µg/l	4.81	0.421	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 4.81		µg/l	4.81	0.482	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 4.81		µg/l	4.81	0.567	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 4.81		µg/l	4.81	0.719	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 4.81		µg/l	4.81	0.580	1	"	"	"	"	"	X
218-01-9	Chrysene	< 4.81		µg/l	4.81	0.512	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 4.81		µg/l	4.81	0.433	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.81		µg/l	4.81	0.540	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.81		µg/l	4.81	0.622	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.81		µg/l	4.81	0.590	1	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ATC-1	03-225434	Ground Water	22-Mar-18 17:00	23-Mar-18
SC45049-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds													
91-94-1	3,3´-Dichlorobenzidine	< 4.81		µg/l	4.81	1.91	1	EPA 625	29-Mar-18	02-Apr-18	MSL	1804230	X
120-83-2	2,4-Dichlorophenol	< 4.81		µg/l	4.81	0.510	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 4.81		µg/l	4.81	0.599	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 4.81		µg/l	4.81	0.729	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 4.81		µg/l	4.81	0.628	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 4.81		µg/l	4.81	0.439	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 4.81		µg/l	4.81	0.307	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 4.81		µg/l	4.81	0.539	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 4.81		µg/l	4.81	0.647	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 4.81		µg/l	4.81	0.570	1	"	"	"	"	"	X
117-84-0	Di-n-octyl phthalate	< 4.81		µg/l	4.81	0.390	1	"	"	"	"	"	X
206-44-0	Fluoranthene	< 4.81		µg/l	4.81	0.613	1	"	"	"	"	"	X
86-73-7	Fluorene	< 4.81		µg/l	4.81	0.588	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 4.81		µg/l	4.81	0.549	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 4.81		µg/l	4.81	0.373	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 4.81		µg/l	4.81	0.996	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 4.81		µg/l	4.81	0.614	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.81		µg/l	4.81	0.558	1	"	"	"	"	"	X
78-59-1	Isophorone	< 4.81		µg/l	4.81	0.563	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 4.81		µg/l	4.81	0.659	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 4.81		µg/l	4.81	0.663	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 4.81		µg/l	4.81	0.447	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 4.81		µg/l	4.81	0.806	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 4.81		µg/l	4.81	0.647	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 4.81		µg/l	4.81	0.556	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 4.81		µg/l	4.81	0.626	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 4.81		µg/l	4.81	0.359	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 4.81		µg/l	4.81	0.563	1	"	"	"	"	"	X
108-95-2	Phenol	< 4.81		µg/l	4.81	0.620	1	"	"	"	"	"	X
129-00-0	Pyrene	< 4.81		µg/l	4.81	0.587	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 4.81		µg/l	4.81	0.661	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 4.81		µg/l	4.81	0.498	1	"	"	"	"	"	X
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*30*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*26*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*32*			*30-130 %*			"	"	"	"	"	
4165-62-2	*Phenol-d5*	*17*			*15-110 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*39*			*30-130 %*			"	"	"	"	"	
118-79-6	*2,4,6-Tribromophenol*	*35*			*15-110 %*			"	"	"	"	"	
Semivolatile Organic Compounds Prepared by method SW846 3510C													
83-32-9	Acenaphthene	< 4.81		µg/l	4.81	0.664	1	SW846 8270D	"	"	MSL	"	
208-96-8	Acenaphthylene	< 4.81		µg/l	4.81	0.657	1	"	"	"	"	"	
62-53-3	Aniline	< 4.81		µg/l	4.81	1.70	1	"	"	"	"	"	
120-12-7	Anthracene	< 4.81		µg/l	4.81	0.585	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ATC-1	03-225434	Ground Water	22-Mar-18 17:00	23-Mar-18
SC45049-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds													
103-33-3	Azobenzene/Diphenyldiazene	< 4.81		µg/l	4.81	0.719	1	SW846 8270D	29-Mar-18	02-Apr-18	MSL	1804230	
92-87-5	Benzidine	< 9.62		µg/l	9.62	1.10	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	< 4.81		µg/l	4.81	0.515	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	< 4.81		µg/l	4.81	0.540	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	< 4.81		µg/l	4.81	0.420	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	< 4.81		µg/l	4.81	0.510	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	< 4.81		µg/l	4.81	0.462	1	"	"	"	"	"	
65-85-0	Benzoic acid	< 4.81		µg/l	4.81	0.507	1	"	"	"	"	"	
100-51-6	Benzyl alcohol	< 4.81		µg/l	4.81	0.750	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 4.81		µg/l	4.81	0.640	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 4.81		µg/l	4.81	0.706	1	"	"	"	"	"	
108-60-1	Bis(2-chloroisopropyl)ether	< 4.81		µg/l	4.81	0.748	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 4.81		µg/l	4.81	0.613	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 4.81		µg/l	4.81	0.579	1	"	"	"	"	"	
85-68-7	Butyl benzyl phthalate	< 4.81		µg/l	4.81	0.421	1	"	"	"	"	"	
86-74-8	Carbazole	< 4.81		µg/l	4.81	1.50	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 4.81		µg/l	4.81	0.482	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 4.81		µg/l	4.81	1.08	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 4.81		µg/l	4.81	0.567	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 4.81		µg/l	4.81	0.719	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 4.81		µg/l	4.81	0.580	1	"	"	"	"	"	
218-01-9	Chrysene	< 4.81		µg/l	4.81	0.512	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	< 4.81		µg/l	4.81	0.433	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 4.81		µg/l	4.81	0.712	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 4.81		µg/l	4.81	0.540	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 4.81		µg/l	4.81	0.622	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 4.81		µg/l	4.81	0.590	1	"	"	"	"	"	
91-94-1	3,3′-Dichlorobenzidine	< 4.81		µg/l	4.81	1.91	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 4.81		µg/l	4.81	0.510	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 4.81		µg/l	4.81	0.599	1	"	"	"	"	"	
131-11-3	Dimethyl phthalate	< 4.81		µg/l	4.81	0.729	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 4.81		µg/l	4.81	0.628	1	"	"	"	"	"	
84-74-2	Di-n-butyl phthalate	< 4.81		µg/l	4.81	0.439	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 4.81		µg/l	4.81	0.307	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 4.81		µg/l	4.81	0.539	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 4.81		µg/l	4.81	0.647	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 4.81		µg/l	4.81	0.570	1	"	"	"	"	"	
117-84-0	Di-n-octyl phthalate	< 4.81		µg/l	4.81	0.390	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 4.81		µg/l	4.81	0.613	1	"	"	"	"	"	
86-73-7	Fluorene	< 4.81		µg/l	4.81	0.588	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 4.81		µg/l	4.81	0.549	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 4.81		µg/l	4.81	0.373	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ATC-1 SC45049-02	03-225434	Ground Water	22-Mar-18 17:00	23-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds													
77-47-4	Hexachlorocyclopentadiene	< 4.81		µg/l	4.81	0.996	1	SW846 8270D	29-Mar-18	02-Apr-18	MSL	1804230	
67-72-1	Hexachloroethane	< 4.81		µg/l	4.81	0.614	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	< 4.81		µg/l	4.81	0.558	1	"	"	"	"	"	
78-59-1	Isophorone	< 4.81		µg/l	4.81	0.563	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 4.81		µg/l	4.81	0.552	1	"	"	"	"	"	
95-48-7	2-Methylphenol	< 4.81		µg/l	4.81	0.639	1	"	"	"	"	"	
108-39-4, 106-44-5	3 & 4-Methylphenol	< 9.62		µg/l	9.62	0.591	1	"	"	"	"	"	
91-20-3	Naphthalene	< 4.81		µg/l	4.81	0.659	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 4.81		µg/l	4.81	0.583	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 4.81		µg/l	4.81	0.522	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 4.81		µg/l	4.81	0.360	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 4.81		µg/l	4.81	0.663	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 4.81		µg/l	4.81	0.447	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 19.2		µg/l	19.2	0.806	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 4.81		µg/l	4.81	0.647	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 4.81		µg/l	4.81	0.556	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 4.81		µg/l	4.81	0.626	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 19.2		µg/l	19.2	0.359	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 4.81		µg/l	4.81	0.563	1	"	"	"	"	"	
108-95-2	Phenol	< 4.81		µg/l	4.81	0.620	1	"	"	"	"	"	
129-00-0	Pyrene	< 4.81		µg/l	4.81	0.587	1	"	"	"	"	"	
110-86-1	Pyridine	< 4.81		µg/l	4.81	0.788	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 4.81		µg/l	4.81	0.661	1	"	"	"	"	"	
90-12-0	1-Methylnaphthalene	< 4.81		µg/l	4.81	0.705	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.81		µg/l	4.81	0.500	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 4.81		µg/l	4.81	0.498	1	"	"	"	"	"	
82-68-8	Pentachloronitrobenzene	< 4.81		µg/l	4.81	0.669	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 4.81		µg/l	4.81	0.697	1	"	"	"	"	"	
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*30*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*26*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*32*			*30-130 %*			"	"	"	"	"	
4165-62-2	*Phenol-d5*	*17*			*15-110 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*39*			*30-130 %*			"	"	"	"	"	
118-79-6	*2,4,6-Tribromophenol*	*35*			*15-110 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls													
12674-11-2	Aroclor-1016	< 0.194		µg/l	0.194	0.101	1	EPA 608	29-Mar-18	31-Mar-18	AM	1804228	X
11104-28-2	Aroclor-1221	< 0.194		µg/l	0.194	0.112	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 0.194		µg/l	0.194	0.108	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 0.194		µg/l	0.194	0.104	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 0.194		µg/l	0.194	0.132	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	< 0.194		µg/l	0.194	0.113	1	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ATC-1 SC45049-02	03-225434	Ground Water	22-Mar-18 17:00	23-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Semivolatile Organic Compounds by GC													
Polychlorinated Biphenyls													
11096-82-5	Aroclor-1260	< 0.194		µg/l	0.194	0.0826	1	EPA 608	29-Mar-18	31-Mar-18	AM	1804228	X
37324-23-5	Aroclor-1262	< 0.194		µg/l	0.194	0.0870	1	"	"	"	"	"	
11100-14-4	Aroclor-1268	< 0.194		µg/l	0.194	0.0888	1	"	"	"	"	"	
Surrogate recoveries:													
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr)*	*60*			*30-150 %*			"	"	"	"	"	
10386-84-2	*4,4-DB-Octafluorobiphenyl (Sr) [2C]*	*60*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr)*	*70*			*30-150 %*			"	"	"	"	"	
2051-24-3	*Decachlorobiphenyl (Sr) [2C]*	*65*			*30-150 %*			"	"	"	"	"	
Extractable Petroleum Hydrocarbons													
Prepared by method General Preparation SVOC													
	Non-polar material (SGT-HEM)	< 1.0		mg/l	1.0	0.9	1	EPA 1664B	27-Mar-18	29-Mar-18	SC	1804099	
Total Metals by EPA 200/6000 Series Methods													
Prepared by method General Prep-Metal													
	Preservation	**Field Preserved; pH<2 confirmed**		N/A			1	EPA 200/6000 methods	26-Mar-18		JS	1804059	
Total Metals by EPA 200 Series Methods													
7440-22-4	Silver	< 0.0050		mg/l	0.0050	0.0035	1	EPA 200.7	27-Mar-18	30-Mar-18	SJR/TBC	1804084	X
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0028	1	"	"	"	"	"	X
7440-41-7	Beryllium	< 0.0020		mg/l	0.0020	0.0002	1	"	"	03-Apr-18	"	"	X
7440-70-2	Calcium	**14.5**		mg/l	0.100	0.0340	1	"	"	30-Mar-18	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0004	1	"	"	"	"	"	X
7440-47-3	Chromium	**0.0080**		mg/l	0.0050	0.0019	1	"	"	03-Apr-18	"	"	X
7440-50-8	Copper	**0.0114**		mg/l	0.0050	0.0029	1	"	"	30-Mar-18	"	"	X
7439-89-6	Iron	**7.56**		mg/l	0.0150	0.0100	1	"	"	03-Apr-18	"	"	X
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00013	1	EPA 245.1/7470A	"	28-Mar-18	ABW	1804085	X
7439-95-4	Magnesium	**3.81**		mg/l	0.0100	0.0074	1	EPA 200.7	"	30-Mar-18	SJR/TBC	1804084	X
7440-02-0	Nickel	**0.0070**		mg/l	0.0050	0.0010	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0034	1	"	"	"	"	"	X
7440-36-0	Antimony	< 0.0060		mg/l	0.0060	0.0026	1	"	"	"	"	"	X
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0072	1	"	"	"	"	"	X
7440-28-0	Thallium	< 0.0050		mg/l	0.0050	0.0024	1	"	"	"	"	"	X
7440-66-6	Zinc	**0.0220**		mg/l	0.0050	0.0027	1	"	"	"	"	"	X
General Chemistry Parameters													
	Hardness	**51.9**	HD	mg/l CaCO3	0.291	0.115	1	SM 2340B (11)	27-Mar-18	30-Mar-18	SJR/TBC	[CALC]	
7782-50-5	Total Residual Chlorine	< 0.020	CIHT	mg/l	0.020	0.006	1	SM4500-Cl-G (11)	29-Mar-18 13:53	30-Mar-18 11:08	RLT	1804248	X
16887-00-6	Chloride	**19.5**		mg/l	1.00	0.0994	1	EPA 300.0	27-Mar-18	27-Mar-18	TN	1804110	X
18540-29-9	Hexavalent Chromium	< 0.025	D, O09, R01	mg/l	0.025	0.010	5	SM3500-Cr-B (11)/7196A	23-Mar-18 18:30	23-Mar-18 18:30	TN	1804006	
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00474	1	EPA 335.4 / SW846 9012B	29-Mar-18	29-Mar-18	RLT	1804241	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ATC-1 SC45049-02	03-225434	Ground Water	22-Mar-18 17:00	23-Mar-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
General Chemistry Parameters													
	pH	**6.38**	pH	pH Units			1	ASTM D 1293-99B	23-Mar-18 17:30	23-Mar-18 18:00	BD	1804002	X
Reactivity Cyanide/Sulfide													
	Reactivity	**See Narrative**		mg/l			1	SW846 Ch. 7.3	26-Mar-18	26-Mar-18	TN	1804038	
57-12-5	Reactive Cyanide	< 25.0		mg/l	25.0	25.0	1	"	"	"	"	"	
18496-25-8	Reactive Sulfide	< 50.0		mg/l	50.0	50.0	1	"	"	"	"	"	
	Total Dissolved Solids	**85**		mg/l	5	3	1	SM18-22 2540C	28-Mar-18	29-Mar-18	CMB	1804172	X
	Total Suspended Solids	**150**		mg/l	2.5	1.1	1	SM2540D (11)	24-Mar-18	26-Mar-18	CMB	1804011	X
Subcontracted Analyses													
Prepared by method 424092													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7664-41-7	Ammonia as Nitrogen	< 1.00		mg/l	1.00	1.00	20	E350.1	22-Mar-18 17:00	28-Mar-18 11:57	M-CT007	424092A	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 524.2										
Batch 1804029 - SW846 5030 Water MS										
Blank (1804029-BLK1)					Prepared & Analyzed: 26-Mar-18					
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 0.50		µg/l	0.50						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 0.50		µg/l	0.50						
Bromobenzene	< 0.50		µg/l	0.50						
Bromochloromethane	< 0.50		µg/l	0.50						
Bromodichloromethane	< 0.50		µg/l	0.50						
Bromoform	< 0.50		µg/l	0.50						
Bromomethane	< 0.50		µg/l	0.50						
2-Butanone (MEK)	< 2.00		µg/l	2.00						
n-Butylbenzene	< 0.50		µg/l	0.50						
sec-Butylbenzene	< 0.50		µg/l	0.50						
tert-Butylbenzene	< 0.50		µg/l	0.50						
Carbon disulfide	< 0.50		µg/l	0.50						
Carbon tetrachloride	< 0.50		µg/l	0.50						
Chlorobenzene	< 0.50		µg/l	0.50						
Chloroethane	< 0.50		µg/l	0.50						
Chloroform	< 0.50		µg/l	0.50						
Chloromethane	< 0.50		µg/l	0.50						
2-Chlorotoluene	< 0.50		µg/l	0.50						
4-Chlorotoluene	< 0.50		µg/l	0.50						
1,2-Dibromo-3-chloropropane	< 0.50		µg/l	0.50						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 0.50		µg/l	0.50						
1,2-Dichlorobenzene	< 0.50		µg/l	0.50						
1,3-Dichlorobenzene	< 0.50		µg/l	0.50						
1,4-Dichlorobenzene	< 0.50		µg/l	0.50						
Dichlorodifluoromethane (Freon12)	< 0.50		µg/l	0.50						
1,1-Dichloroethane	< 0.50		µg/l	0.50						
1,2-Dichloroethane	< 0.50		µg/l	0.50						
1,1-Dichloroethene	< 0.50		µg/l	0.50						
cis-1,2-Dichloroethene	< 0.50		µg/l	0.50						
trans-1,2-Dichloroethene	< 0.50		µg/l	0.50						
1,2-Dichloropropane	< 0.50		µg/l	0.50						
1,3-Dichloropropane	< 0.50		µg/l	0.50						
2,2-Dichloropropane	< 0.50		µg/l	0.50						
1,1-Dichloropropene	< 0.50		µg/l	0.50						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 0.50		µg/l	0.50						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 2.00		µg/l	2.00						
Isopropylbenzene	< 0.50		µg/l	0.50						
4-Isopropyltoluene	< 0.50		µg/l	0.50						
Methyl tert-butyl ether	< 0.50		µg/l	0.50						
4-Methyl-2-pentanone (MIBK)	< 2.00		µg/l	2.00						
Methylene chloride	< 0.50		µg/l	0.50						
Naphthalene	< 0.50		µg/l	0.50						
n-Propylbenzene	< 0.50		µg/l	0.50						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 524.2										
Batch 1804029 - SW846 5030 Water MS										
Blank (1804029-BLK1)					Prepared & Analyzed: 26-Mar-18					
Styrene	< 0.50		µg/l	0.50						
1,1,1,2-Tetrachloroethane	< 0.50		µg/l	0.50						
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 0.50		µg/l	0.50						
Toluene	< 0.50		µg/l	0.50						
1,2,3-Trichlorobenzene	< 0.50		µg/l	0.50						
1,2,4-Trichlorobenzene	< 0.50		µg/l	0.50						
1,1,1-Trichloroethane	< 0.50		µg/l	0.50						
1,1,2-Trichloroethane	< 0.50		µg/l	0.50						
Trichloroethene	< 0.50		µg/l	0.50						
Trichlorofluoromethane (Freon 11)	< 0.50		µg/l	0.50						
1,2,3-Trichloropropane	< 0.50		µg/l	0.50						
1,2,4-Trimethylbenzene	< 0.50		µg/l	0.50						
1,3,5-Trimethylbenzene	< 0.50		µg/l	0.50						
Vinyl chloride	< 0.50		µg/l	0.50						
m,p-Xylene	< 0.50		µg/l	0.50						
o-Xylene	< 0.50		µg/l	0.50						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Tert-amyl methyl ether	< 0.50		µg/l	0.50						
Ethyl tert-butyl ether	< 0.50		µg/l	0.50						
Di-isopropyl ether	< 0.50		µg/l	0.50						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
Surrogate: 4-Bromofluorobenzene	*48.6*		µg/l		*50.0*		*97*	*80-120*		
Surrogate: Toluene-d8	*48.5*		µg/l		*50.0*		*97*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*44.9*		µg/l		*50.0*		*90*	*80-120*		
Surrogate: Dibromofluoromethane	*47.7*		µg/l		*50.0*		*95*	*80-120*		
LCS (1804029-BS1)					Prepared & Analyzed: 26-Mar-18					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**22.9**		µg/l		20.0		115	80-120		
Acetone	**15.7**		µg/l		20.0		79	70-130		
Acrylonitrile	**16.3**		µg/l		20.0		81	70-130		
Benzene	**19.6**		µg/l		20.0		98	80-120		
Bromobenzene	**20.4**		µg/l		20.0		102	80-120		
Bromochloromethane	**21.6**		µg/l		20.0		108	80-120		
Bromodichloromethane	**20.0**		µg/l		20.0		100	80-120		
Bromoform	**21.7**		µg/l		20.0		109	80-120		
Bromomethane	**20.5**		µg/l		20.0		102	80-120		
2-Butanone (MEK)	**15.8**		µg/l		20.0		79	70-130		
n-Butylbenzene	**18.1**		µg/l		20.0		90	80-120		
sec-Butylbenzene	**19.5**		µg/l		20.0		98	80-120		
tert-Butylbenzene	**19.9**		µg/l		20.0		99	80-120		
Carbon disulfide	**20.6**		µg/l		20.0		103	70-130		
Carbon tetrachloride	**22.6**		µg/l		20.0		113	80-120		
Chlorobenzene	**20.2**		µg/l		20.0		101	80-120		
Chloroethane	**20.1**		µg/l		20.0		100	80-120		
Chloroform	**19.4**		µg/l		20.0		97	80-120		
Chloromethane	**14.8**	QC2	µg/l		20.0		74	80-120		
2-Chlorotoluene	**20.1**		µg/l		20.0		101	80-120		
4-Chlorotoluene	**20.2**		µg/l		20.0		101	80-120		
1,2-Dibromo-3-chloropropane	**20.2**		µg/l		20.0		101	80-120		
Dibromochloromethane	**21.6**		µg/l		20.0		108	80-120		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 524.2										
Batch 1804029 - SW846 5030 Water MS										
LCS (1804029-BS1)					Prepared & Analyzed: 26-Mar-18					
1,2-Dibromoethane (EDB)	**19.8**		µg/l		20.0		99	80-120		
Dibromomethane	**20.0**		µg/l		20.0		100	80-120		
1,2-Dichlorobenzene	**19.3**		µg/l		20.0		97	80-120		
1,3-Dichlorobenzene	**21.0**		µg/l		20.0		105	80-120		
1,4-Dichlorobenzene	**19.6**		µg/l		20.0		98	80-120		
Dichlorodifluoromethane (Freon12)	**16.3**		µg/l		20.0		82	80-120		
1,1-Dichloroethane	**18.6**		µg/l		20.0		93	80-120		
1,2-Dichloroethane	**18.2**		µg/l		20.0		91	80-120		
1,1-Dichloroethene	**20.9**		µg/l		20.0		104	80-120		
cis-1,2-Dichloroethene	**19.0**		µg/l		20.0		95	80-120		
trans-1,2-Dichloroethene	**19.7**		µg/l		20.0		98	80-120		
1,2-Dichloropropane	**18.0**		µg/l		20.0		90	80-120		
1,3-Dichloropropane	**18.3**		µg/l		20.0		91	80-120		
2,2-Dichloropropane	**20.9**		µg/l		20.0		105	80-120		
1,1-Dichloropropene	**18.7**		µg/l		20.0		94	80-120		
cis-1,3-Dichloropropene	**18.3**		µg/l		20.0		92	80-120		
trans-1,3-Dichloropropene	**19.3**		µg/l		20.0		96	80-120		
Ethylbenzene	**20.3**		µg/l		20.0		102	80-120		
Hexachlorobutadiene	**20.5**		µg/l		20.0		103	80-120		
2-Hexanone (MBK)	**15.6**		µg/l		20.0		78	70-130		
Isopropylbenzene	**20.0**		µg/l		20.0		100	80-120		
4-Isopropyltoluene	**19.3**		µg/l		20.0		97	80-120		
Methyl tert-butyl ether	**18.7**		µg/l		20.0		93	80-120		
4-Methyl-2-pentanone (MIBK)	**16.3**		µg/l		20.0		81	70-130		
Methylene chloride	**19.1**		µg/l		20.0		96	80-120		
Naphthalene	**25.2**	QC2	µg/l		20.0		126	80-120		
n-Propylbenzene	**19.7**		µg/l		20.0		98	80-120		
Styrene	**20.4**		µg/l		20.0		102	80-120		
1,1,1,2-Tetrachloroethane	**23.0**		µg/l		20.0		115	80-120		
1,1,2,2-Tetrachloroethane	**20.6**		µg/l		20.0		103	80-120		
Tetrachloroethene	**21.0**		µg/l		20.0		105	80-120		
Toluene	**20.2**		µg/l		20.0		101	80-120		
1,2,3-Trichlorobenzene	**21.8**		µg/l		20.0		109	80-120		
1,2,4-Trichlorobenzene	**22.1**		µg/l		20.0		111	80-120		
1,1,1-Trichloroethane	**20.9**		µg/l		20.0		104	80-120		
1,1,2-Trichloroethane	**19.1**		µg/l		20.0		96	80-120		
Trichloroethene	**20.0**		µg/l		20.0		100	80-120		
Trichlorofluoromethane (Freon 11)	**22.7**		µg/l		20.0		114	80-120		
1,2,3-Trichloropropane	**20.4**		µg/l		20.0		102	80-120		
1,2,4-Trimethylbenzene	**21.0**		µg/l		20.0		105	80-120		
1,3,5-Trimethylbenzene	**20.4**		µg/l		20.0		102	80-120		
Vinyl chloride	**20.6**		µg/l		20.0		103	80-120		
m,p-Xylene	**22.2**		µg/l		20.0		111	80-120		
o-Xylene	**20.8**		µg/l		20.0		104	80-120		
Tetrahydrofuran	**15.3**		µg/l		20.0		77	70-130		
Tert-amyl methyl ether	**17.7**		µg/l		20.0		89	70-130		
Ethyl tert-butyl ether	**17.0**		µg/l		20.0		85	70-130		
Di-isopropyl ether	**16.1**		µg/l		20.0		80	70-130		
Tert-Butanol / butyl alcohol	**162**		µg/l		200		81	70-130		
Surrogate: 4-Bromofluorobenzene	*49.2*		µg/l		*50.0*		*98*	*80-120*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 524.2										
Batch 1804029 - SW846 5030 Water MS										
LCS (1804029-BS1)					Prepared & Analyzed: 26-Mar-18					
Surrogate: Toluene-d8	*49.0*		µg/l		*50.0*		*98*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*45.6*		µg/l		*50.0*		*91*	*80-120*		
Surrogate: Dibromofluoromethane	*48.5*		µg/l		*50.0*		*97*	*80-120*		
EPA 624										
Batch 1804029 - SW846 5030 Water MS										
Blank (1804029-BLK1)					Prepared & Analyzed: 26-Mar-18					
Acetone	< 10.0		µg/l	10.0						
Benzene	< 1.0		µg/l	1.0						
Bromodichloromethane	< 1.0		µg/l	1.0						
Bromoform	< 1.0		µg/l	1.0						
Bromomethane	< 2.0		µg/l	2.0						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
Carbon disulfide	< 5.0		µg/l	5.0						
Carbon tetrachloride	< 1.0		µg/l	1.0						
Chlorobenzene	< 1.0		µg/l	1.0						
Chloroethane	< 2.0		µg/l	2.0						
Chloroform	< 1.0		µg/l	1.0						
Chloromethane	< 2.0		µg/l	2.0						
Dibromochloromethane	< 1.0		µg/l	1.0						
Dibromomethane	< 1.0		µg/l	1.0						
1,2-Dichlorobenzene	< 1.0		µg/l	1.0						
1,3-Dichlorobenzene	< 1.0		µg/l	1.0						
1,4-Dichlorobenzene	< 1.0		µg/l	1.0						
1,1-Dichloroethane	< 1.0		µg/l	1.0						
1,2-Dichloroethane	< 1.0		µg/l	1.0						
1,1-Dichloroethene	< 1.0		µg/l	1.0						
cis-1,2-Dichloroethene	< 1.0		µg/l	1.0						
trans-1,2-Dichloroethene	< 1.0		µg/l	1.0						
1,2-Dichloropropane	< 1.0		µg/l	1.0						
cis-1,3-Dichloropropene	< 1.0		µg/l	1.0						
trans-1,3-Dichloropropene	< 1.0		µg/l	1.0						
Ethylbenzene	< 1.0		µg/l	1.0						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Methyl tert-butyl ether	< 1.0		µg/l	1.0						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 10.0		µg/l	10.0						
Styrene	< 1.0		µg/l	1.0						
1,1,2,2-Tetrachloroethane	< 1.0		µg/l	1.0						
Tetrachloroethene	< 1.0		µg/l	1.0						
Toluene	< 1.0		µg/l	1.0						
1,1,1-Trichloroethane	< 1.0		µg/l	1.0						
1,1,2-Trichloroethane	< 1.0		µg/l	1.0						
Trichloroethene	< 1.0		µg/l	1.0						
Trichlorofluoromethane (Freon 11)	< 1.0		µg/l	1.0						
Vinyl chloride	< 1.0		µg/l	1.0						
m,p-Xylene	< 2.0		µg/l	2.0						
o-Xylene	< 1.0		µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*48.6*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*48.5*		µg/l		*50.0*		*97*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 624										
Batch 1804029 - SW846 5030 Water MS										
Blank (1804029-BLK1)					Prepared & Analyzed: 26-Mar-18					
Surrogate: 1,2-Dichloroethane-d4	*44.9*		µg/l		*50.0*		*90*	*70-130*		
Surrogate: Dibromofluoromethane	*47.7*		µg/l		*50.0*		*95*	*70-130*		
LCS (1804029-BS1)					Prepared & Analyzed: 26-Mar-18					
Acetone	**15.7**		µg/l		20.0		79	70-130		
Benzene	**19.6**		µg/l		20.0		98	70-130		
Bromodichloromethane	**20.0**		µg/l		20.0		100	35-155		
Bromoform	**21.7**		µg/l		20.0		109	45-169		
Bromomethane	**20.5**		µg/l		20.0		102	1-242		
2-Butanone (MEK)	**15.8**		µg/l		20.0		79	70-130		
Carbon disulfide	**20.6**		µg/l		20.0		103	70-130		
Carbon tetrachloride	**22.6**		µg/l		20.0		113	70-140		
Chlorobenzene	**20.2**		µg/l		20.0		101	70-130		
Chloroethane	**20.1**		µg/l		20.0		100	14-230		
Chloroform	**19.4**		µg/l		20.0		97	51-138		
Chloromethane	**14.8**		µg/l		20.0		74	1-273		
Dibromochloromethane	**21.6**		µg/l		20.0		108	53-149		
Dibromomethane	**20.0**		µg/l		20.0		100	70-130		
1,2-Dichlorobenzene	**19.3**		µg/l		20.0		97	18-190		
1,3-Dichlorobenzene	**21.0**		µg/l		20.0		105	59-156		
1,4-Dichlorobenzene	**19.6**		µg/l		20.0		98	18-190		
1,1-Dichloroethane	**18.6**		µg/l		20.0		93	59-155		
1,2-Dichloroethane	**18.2**		µg/l		20.0		91	49-155		
1,1-Dichloroethene	**20.9**		µg/l		20.0		104	70-130		
cis-1,2-Dichloroethene	**19.0**		µg/l		20.0		95	70-130		
trans-1,2-Dichloroethene	**19.7**		µg/l		20.0		98	54-156		
1,2-Dichloropropane	**18.0**		µg/l		20.0		90	1-210		
cis-1,3-Dichloropropene	**18.3**		µg/l		20.0		92	1-227		
trans-1,3-Dichloropropene	**19.3**		µg/l		20.0		96	17-183		
Ethylbenzene	**20.3**		µg/l		20.0		102	37-162		
2-Hexanone (MBK)	**15.6**		µg/l		20.0		78	70-130		
Methyl tert-butyl ether	**18.7**		µg/l		20.0		93	70-130		
4-Methyl-2-pentanone (MIBK)	**16.3**		µg/l		20.0		81	70-130		
Methylene chloride	**19.1**		µg/l		20.0		96	1-221		
Styrene	**20.4**		µg/l		20.0		102	70-130		
1,1,2,2-Tetrachloroethane	**20.6**		µg/l		20.0		103	46-157		
Tetrachloroethene	**21.0**		µg/l		20.0		105	64-148		
Toluene	**20.2**		µg/l		20.0		101	70-130		
1,1,1-Trichloroethane	**20.9**		µg/l		20.0		104	52-162		
1,1,2-Trichloroethane	**19.1**		µg/l		20.0		96	52-150		
Trichloroethene	**20.0**		µg/l		20.0		100	71-157		
Trichlorofluoromethane (Freon 11)	**22.7**		µg/l		20.0		114	17-181		
Vinyl chloride	**20.6**		µg/l		20.0		103	1-251		
m,p-Xylene	**22.2**		µg/l		20.0		111	70-130		
o-Xylene	**20.8**		µg/l		20.0		104	70-130		
Surrogate: 4-Bromofluorobenzene	*49.2*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*49.0*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*45.6*		µg/l		*50.0*		*91*	*70-130*		
Surrogate: Dibromofluoromethane	*48.5*		µg/l		*50.0*		*97*	*70-130*		
LCS Dup (1804029-BSD1)					Prepared & Analyzed: 26-Mar-18					
Acetone	**16.5**		µg/l		20.0		82	70-130	5	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 624										
Batch 1804029 - SW846 5030 Water MS										
LCS Dup (1804029-BSD1)					Prepared & Analyzed: 26-Mar-18					
Benzene	**19.0**		µg/l		20.0		95	70-130	3	30
Bromodichloromethane	**20.3**		µg/l		20.0		102	35-155	1	30
Bromoform	**22.0**		µg/l		20.0		110	45-169	1	30
Bromomethane	**20.8**		µg/l		20.0		104	1-242	1	30
2-Butanone (MEK)	**16.4**		µg/l		20.0		82	70-130	4	30
Carbon disulfide	**18.7**		µg/l		20.0		93	70-130	10	30
Carbon tetrachloride	**21.6**		µg/l		20.0		108	70-140	4	30
Chlorobenzene	**19.8**		µg/l		20.0		99	70-130	2	30
Chloroethane	**19.7**		µg/l		20.0		99	14-230	2	30
Chloroform	**19.2**		µg/l		20.0		96	51-138	1	30
Chloromethane	**14.9**		µg/l		20.0		74	1-273	0.9	30
Dibromochloromethane	**22.1**		µg/l		20.0		111	53-149	2	30
Dibromomethane	**20.0**		µg/l		20.0		100	70-130	0	25
1,2-Dichlorobenzene	**20.0**		µg/l		20.0		100	18-190	4	30
1,3-Dichlorobenzene	**20.4**		µg/l		20.0		102	59-156	3	30
1,4-Dichlorobenzene	**19.3**		µg/l		20.0		96	18-190	2	30
1,1-Dichloroethane	**18.0**		µg/l		20.0		90	59-155	3	30
1,2-Dichloroethane	**18.4**		µg/l		20.0		92	49-155	1	30
1,1-Dichloroethene	**19.6**		µg/l		20.0		98	70-130	6	30
cis-1,2-Dichloroethene	**18.9**		µg/l		20.0		94	70-130	0.4	30
trans-1,2-Dichloroethene	**18.6**		µg/l		20.0		93	54-156	6	30
1,2-Dichloropropane	**17.9**		µg/l		20.0		90	1-210	0.7	30
cis-1,3-Dichloropropene	**18.6**		µg/l		20.0		93	1-227	2	30
trans-1,3-Dichloropropene	**19.6**		µg/l		20.0		98	17-183	2	30
Ethylbenzene	**19.7**		µg/l		20.0		98	37-162	3	30
2-Hexanone (MBK)	**17.3**		µg/l		20.0		87	70-130	10	30
Methyl tert-butyl ether	**19.1**		µg/l		20.0		95	70-130	2	30
4-Methyl-2-pentanone (MIBK)	**16.8**		µg/l		20.0		84	70-130	3	30
Methylene chloride	**18.8**		µg/l		20.0		94	1-221	2	30
Styrene	**19.7**		µg/l		20.0		99	70-130	3	30
1,1,2,2-Tetrachloroethane	**21.4**		µg/l		20.0		107	46-157	4	30
Tetrachloroethene	**20.0**		µg/l		20.0		100	64-148	5	30
Toluene	**19.8**		µg/l		20.0		99	70-130	2	30
1,1,1-Trichloroethane	**20.0**		µg/l		20.0		100	52-162	4	30
1,1,2-Trichloroethane	**19.9**		µg/l		20.0		99	52-150	4	30
Trichloroethene	**19.2**		µg/l		20.0		96	71-157	4	30
Trichlorofluoromethane (Freon 11)	**21.5**		µg/l		20.0		108	17-181	6	30
Vinyl chloride	**20.2**		µg/l		20.0		101	1-251	2	30
m,p-Xylene	**21.2**		µg/l		20.0		106	70-130	5	30
o-Xylene	**20.0**		µg/l		20.0		100	70-130	4	30
Surrogate: 4-Bromofluorobenzene	*49.6*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: Toluene-d8	*49.5*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.4*		µg/l		*50.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*48.3*		µg/l		*50.0*		*97*	*70-130*		
SW846 8260C										
Batch 1804029 - SW846 5030 Water MS										
Blank (1804029-BLK1)					Prepared & Analyzed: 26-Mar-18					
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1804029 - SW846 5030 Water MS										
Blank (1804029-BLK1)					Prepared & Analyzed: 26-Mar-18					
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromochloromethane	< 1.00		µg/l	1.00						
Bromodichloromethane	< 0.50		µg/l	0.50						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 2.00		µg/l	2.00						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 2.00		µg/l	2.00						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 2.00		µg/l	2.00						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1804029 - SW846 5030 Water MS										
Blank (1804029-BLK1)					Prepared & Analyzed: 26-Mar-18					
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 200		µg/l	200						
Ethanol	< 200		µg/l	200						
Surrogate: 4-Bromofluorobenzene	*48.6*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: 4-Bromofluorobenzene	*48.6*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*48.5*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*48.5*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*44.9*		µg/l		*50.0*		*90*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*44.9*		µg/l		*50.0*		*90*	*70-130*		
Surrogate: Dibromofluoromethane	*47.7*		µg/l		*50.0*		*95*	*70-130*		
Surrogate: Dibromofluoromethane	*47.7*		µg/l		*50.0*		*95*	*70-130*		
LCS (1804029-BS1)					Prepared & Analyzed: 26-Mar-18					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**22.9**		µg/l		20.0		115	70-130		
Acetone	**15.7**		µg/l		20.0		79	70-130		
Acrylonitrile	**16.3**		µg/l		20.0		81	70-130		
Benzene	**19.6**		µg/l		20.0		98	70-130		
Bromobenzene	**20.4**		µg/l		20.0		102	70-130		
Bromochloromethane	**21.6**		µg/l		20.0		108	70-130		
Bromodichloromethane	**20.0**		µg/l		20.0		100	70-130		
Bromoform	**21.7**		µg/l		20.0		109	70-130		
Bromomethane	**20.5**		µg/l		20.0		102	70-130		
2-Butanone (MEK)	**15.8**		µg/l		20.0		79	70-130		
n-Butylbenzene	**18.1**		µg/l		20.0		90	70-130		
sec-Butylbenzene	**19.5**		µg/l		20.0		98	70-130		
tert-Butylbenzene	**19.9**		µg/l		20.0		99	70-130		
Carbon disulfide	**20.6**		µg/l		20.0		103	70-130		
Carbon tetrachloride	**22.6**		µg/l		20.0		113	70-130		
Chlorobenzene	**20.2**		µg/l		20.0		101	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1804029 - SW846 5030 Water MS										
LCS (1804029-BS1)						Prepared & Analyzed: 26-Mar-18				
Chloroethane	**20.1**		µg/l		20.0		100	70-130		
Chloroform	**19.4**		µg/l		20.0		97	70-130		
Chloromethane	**14.8**		µg/l		20.0		74	70-130		
2-Chlorotoluene	**20.1**		µg/l		20.0		101	70-130		
4-Chlorotoluene	**20.2**		µg/l		20.0		101	70-130		
1,2-Dibromo-3-chloropropane	**20.2**		µg/l		20.0		101	70-130		
Dibromochloromethane	**21.6**		µg/l		20.0		108	70-130		
1,2-Dibromoethane (EDB)	**19.8**		µg/l		20.0		99	70-130		
Dibromomethane	**20.0**		µg/l		20.0		100	70-130		
1,2-Dichlorobenzene	**19.3**		µg/l		20.0		97	70-130		
1,3-Dichlorobenzene	**21.0**		µg/l		20.0		105	70-130		
1,4-Dichlorobenzene	**19.6**		µg/l		20.0		98	70-130		
Dichlorodifluoromethane (Freon12)	**16.3**		µg/l		20.0		82	70-130		
1,1-Dichloroethane	**18.6**		µg/l		20.0		93	70-130		
1,2-Dichloroethane	**18.2**		µg/l		20.0		91	70-130		
1,1-Dichloroethene	**20.9**		µg/l		20.0		104	70-130		
cis-1,2-Dichloroethene	**19.0**		µg/l		20.0		95	70-130		
trans-1,2-Dichloroethene	**19.7**		µg/l		20.0		98	70-130		
1,2-Dichloropropane	**18.0**		µg/l		20.0		90	70-130		
1,3-Dichloropropane	**18.3**		µg/l		20.0		91	70-130		
2,2-Dichloropropane	**20.9**		µg/l		20.0		105	70-130		
1,1-Dichloropropene	**18.7**		µg/l		20.0		94	70-130		
cis-1,3-Dichloropropene	**18.3**		µg/l		20.0		92	70-130		
trans-1,3-Dichloropropene	**19.3**		µg/l		20.0		96	70-130		
Ethylbenzene	**20.3**		µg/l		20.0		102	70-130		
Hexachlorobutadiene	**20.5**		µg/l		20.0		103	70-130		
2-Hexanone (MBK)	**15.6**		µg/l		20.0		78	70-130		
Isopropylbenzene	**20.0**		µg/l		20.0		100	70-130		
4-Isopropyltoluene	**19.3**		µg/l		20.0		97	70-130		
Methyl tert-butyl ether	**18.7**		µg/l		20.0		93	70-130		
4-Methyl-2-pentanone (MIBK)	**16.3**		µg/l		20.0		81	70-130		
Methylene chloride	**19.1**		µg/l		20.0		96	70-130		
Naphthalene	**25.2**		µg/l		20.0		126	70-130		
n-Propylbenzene	**19.7**		µg/l		20.0		98	70-130		
Styrene	**20.4**		µg/l		20.0		102	70-130		
1,1,1,2-Tetrachloroethane	**23.0**		µg/l		20.0		115	70-130		
1,1,2,2-Tetrachloroethane	**20.6**		µg/l		20.0		103	70-130		
Tetrachloroethene	**21.0**		µg/l		20.0		105	70-130		
Toluene	**20.2**		µg/l		20.0		101	70-130		
1,2,3-Trichlorobenzene	**21.8**		µg/l		20.0		109	70-130		
1,2,4-Trichlorobenzene	**22.1**		µg/l		20.0		111	70-130		
1,3,5-Trichlorobenzene	**22.4**		µg/l		20.0		112	70-130		
1,1,1-Trichloroethane	**20.9**		µg/l		20.0		104	70-130		
1,1,2-Trichloroethane	**19.1**		µg/l		20.0		96	70-130		
Trichloroethene	**20.0**		µg/l		20.0		100	70-130		
Trichlorofluoromethane (Freon 11)	**22.7**		µg/l		20.0		114	70-130		
1,2,3-Trichloropropane	**20.4**		µg/l		20.0		102	70-130		
1,2,4-Trimethylbenzene	**21.0**		µg/l		20.0		105	70-130		
1,3,5-Trimethylbenzene	**20.4**		µg/l		20.0		102	70-130		
Vinyl chloride	**20.6**		µg/l		20.0		103	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1804029 - SW846 5030 Water MS										
LCS (1804029-BS1)					Prepared & Analyzed: 26-Mar-18					
m,p-Xylene	**22.2**		µg/l		20.0		111	70-130		
o-Xylene	**20.8**		µg/l		20.0		104	70-130		
Tetrahydrofuran	**15.3**		µg/l		20.0		77	70-130		
Ethyl ether	**22.5**		µg/l		20.0		112	70-130		
Tert-amyl methyl ether	**17.7**		µg/l		20.0		89	70-130		
Ethyl tert-butyl ether	**17.0**		µg/l		20.0		85	70-130		
Di-isopropyl ether	**16.1**		µg/l		20.0		80	70-130		
Tert-Butanol / butyl alcohol	**162**		µg/l		200		81	70-130		
1,4-Dioxane	**168**		µg/l		200		84	70-130		
trans-1,4-Dichloro-2-butene	**22.7**		µg/l		20.0		114	70-130		
Ethanol	**353**		µg/l		400		88	70-130		
Ethanol	**353**		µg/l		400		88	70-130		
Surrogate: 4-Bromofluorobenzene	*49.2*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: 4-Bromofluorobenzene	*49.2*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*49.0*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*49.0*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*45.6*		µg/l		*50.0*		*91*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*45.6*		µg/l		*50.0*		*91*	*70-130*		
Surrogate: Dibromofluoromethane	*48.5*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*48.5*		µg/l		*50.0*		*97*	*70-130*		
LCS Dup (1804029-BSD1)					Prepared & Analyzed: 26-Mar-18					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**21.5**		µg/l		20.0		108	70-130	6	20
Acetone	**16.5**		µg/l		20.0		82	70-130	5	20
Acrylonitrile	**17.3**		µg/l		20.0		86	70-130	6	20
Benzene	**19.0**		µg/l		20.0		95	70-130	3	20
Bromobenzene	**20.4**		µg/l		20.0		102	70-130	0.05	20
Bromochloromethane	**21.0**		µg/l		20.0		105	70-130	3	20
Bromodichloromethane	**20.3**		µg/l		20.0		102	70-130	1	20
Bromoform	**22.0**		µg/l		20.0		110	70-130	1	20
Bromomethane	**20.8**		µg/l		20.0		104	70-130	1	20
2-Butanone (MEK)	**16.4**		µg/l		20.0		82	70-130	4	20
n-Butylbenzene	**18.0**		µg/l		20.0		90	70-130	0.2	20
sec-Butylbenzene	**19.4**		µg/l		20.0		97	70-130	0.8	20
tert-Butylbenzene	**19.7**		µg/l		20.0		99	70-130	0.7	20
Carbon disulfide	**18.7**		µg/l		20.0		93	70-130	10	20
Carbon tetrachloride	**21.6**		µg/l		20.0		108	70-130	4	20
Chlorobenzene	**19.8**		µg/l		20.0		99	70-130	2	20
Chloroethane	**19.7**		µg/l		20.0		99	70-130	2	20
Chloroform	**19.2**		µg/l		20.0		96	70-130	1	20
Chloromethane	**14.9**		µg/l		20.0		74	70-130	0.9	20
2-Chlorotoluene	**19.5**		µg/l		20.0		98	70-130	3	20
4-Chlorotoluene	**19.6**		µg/l		20.0		98	70-130	3	20
1,2-Dibromo-3-chloropropane	**20.8**		µg/l		20.0		104	70-130	3	20
Dibromochloromethane	**22.1**		µg/l		20.0		111	70-130	2	20
1,2-Dibromoethane (EDB)	**20.5**		µg/l		20.0		102	70-130	4	20
Dibromomethane	**20.0**		µg/l		20.0		100	70-130	0	20
1,2-Dichlorobenzene	**20.0**		µg/l		20.0		100	70-130	4	20
1,3-Dichlorobenzene	**20.4**		µg/l		20.0		102	70-130	3	20
1,4-Dichlorobenzene	**19.3**		µg/l		20.0		96	70-130	2	20
Dichlorodifluoromethane (Freon12)	**15.9**		µg/l		20.0		79	70-130	3	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1804029 - SW846 5030 Water MS										
LCS Dup (1804029-BSD1)					Prepared & Analyzed: 26-Mar-18					
1,1-Dichloroethane	**18.0**		µg/l		20.0		90	70-130	3	20
1,2-Dichloroethane	**18.4**		µg/l		20.0		92	70-130	1	20
1,1-Dichloroethene	**19.6**		µg/l		20.0		98	70-130	6	20
cis-1,2-Dichloroethene	**18.9**		µg/l		20.0		94	70-130	0.4	20
trans-1,2-Dichloroethene	**18.6**		µg/l		20.0		93	70-130	6	20
1,2-Dichloropropane	**17.9**		µg/l		20.0		90	70-130	0.7	20
1,3-Dichloropropane	**18.7**		µg/l		20.0		94	70-130	2	20
2,2-Dichloropropane	**20.0**		µg/l		20.0		100	70-130	5	20
1,1-Dichloropropene	**17.7**		µg/l		20.0		89	70-130	6	20
cis-1,3-Dichloropropene	**18.6**		µg/l		20.0		93	70-130	2	20
trans-1,3-Dichloropropene	**19.6**		µg/l		20.0		98	70-130	2	20
Ethylbenzene	**19.7**		µg/l		20.0		98	70-130	3	20
Hexachlorobutadiene	**20.0**		µg/l		20.0		100	70-130	2	20
2-Hexanone (MBK)	**17.3**		µg/l		20.0		87	70-130	10	20
Isopropylbenzene	**19.4**		µg/l		20.0		97	70-130	3	20
4-Isopropyltoluene	**18.9**		µg/l		20.0		94	70-130	2	20
Methyl tert-butyl ether	**19.1**		µg/l		20.0		95	70-130	2	20
4-Methyl-2-pentanone (MIBK)	**16.8**		µg/l		20.0		84	70-130	3	20
Methylene chloride	**18.8**		µg/l		20.0		94	70-130	2	20
Naphthalene	**25.8**		µg/l		20.0		129	70-130	2	20
n-Propylbenzene	**19.2**		µg/l		20.0		96	70-130	3	20
Styrene	**19.7**		µg/l		20.0		99	70-130	3	20
1,1,1,2-Tetrachloroethane	**23.2**		µg/l		20.0		116	70-130	0.7	20
1,1,2,2-Tetrachloroethane	**21.4**		µg/l		20.0		107	70-130	4	20
Tetrachloroethene	**20.0**		µg/l		20.0		100	70-130	5	20
Toluene	**19.8**		µg/l		20.0		99	70-130	2	20
1,2,3-Trichlorobenzene	**22.3**		µg/l		20.0		111	70-130	2	20
1,2,4-Trichlorobenzene	**22.6**		µg/l		20.0		113	70-130	2	20
1,3,5-Trichlorobenzene	**22.6**		µg/l		20.0		113	70-130	1	20
1,1,1-Trichloroethane	**20.0**		µg/l		20.0		100	70-130	4	20
1,1,2-Trichloroethane	**19.9**		µg/l		20.0		99	70-130	4	20
Trichloroethene	**19.2**		µg/l		20.0		96	70-130	4	20
Trichlorofluoromethane (Freon 11)	**21.5**		µg/l		20.0		108	70-130	6	20
1,2,3-Trichloropropane	**20.9**		µg/l		20.0		104	70-130	3	20
1,2,4-Trimethylbenzene	**20.3**		µg/l		20.0		102	70-130	3	20
1,3,5-Trimethylbenzene	**19.6**		µg/l		20.0		98	70-130	4	20
Vinyl chloride	**20.2**		µg/l		20.0		101	70-130	2	20
m,p-Xylene	**21.2**		µg/l		20.0		106	70-130	5	20
o-Xylene	**20.0**		µg/l		20.0		100	70-130	4	20
Tetrahydrofuran	**15.8**		µg/l		20.0		79	70-130	3	20
Ethyl ether	**22.6**		µg/l		20.0		113	70-130	0.7	20
Tert-amyl methyl ether	**18.2**		µg/l		20.0		91	70-130	3	20
Ethyl tert-butyl ether	**17.5**		µg/l		20.0		87	70-130	2	20
Di-isopropyl ether	**16.2**		µg/l		20.0		81	70-130	0.8	20
Tert-Butanol / butyl alcohol	**165**		µg/l		200		83	70-130	2	20
1,4-Dioxane	**171**		µg/l		200		86	70-130	2	20
trans-1,4-Dichloro-2-butene	**23.8**		µg/l		20.0		119	70-130	5	20
Ethanol	**348**		µg/l		400		87	70-130	1	20
Ethanol	**348**		µg/l		400		87	70-130	1	20
Surrogate: 4-Bromofluorobenzene	*49.6*		µg/l		*50.0*		*99*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1804029 - SW846 5030 Water MS										
LCS Dup (1804029-BSD1)					Prepared & Analyzed: 26-Mar-18					
Surrogate: 4-Bromofluorobenzene	*49.6*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: Toluene-d8	*49.5*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: Toluene-d8	*49.5*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.4*		µg/l		*50.0*		*93*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.4*		µg/l		*50.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*48.3*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Dibromofluoromethane	*48.3*		µg/l		*50.0*		*97*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 625										
Batch 1804230 - SW846 3510C										
Blank (1804230-BLK1)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Acenaphthene	< 5.00		µg/l	5.00						
Acenaphthylene	< 5.00		µg/l	5.00						
Anthracene	< 5.00		µg/l	5.00						
Benzidine	< 10.0		µg/l	10.0						
Benzo (a) anthracene	< 5.00		µg/l	5.00						
Benzo (a) pyrene	< 5.00		µg/l	5.00						
Benzo (b) fluoranthene	< 5.00		µg/l	5.00						
Benzo (g,h,i) perylene	< 5.00		µg/l	5.00						
Benzo (k) fluoranthene	< 5.00		µg/l	5.00						
Bis(2-chloroethoxy)methane	< 5.00		µg/l	5.00						
Bis(2-chloroethyl)ether	< 5.00		µg/l	5.00						
Bis(2-chloroisopropyl)ether	< 5.00		µg/l	5.00						
Bis(2-ethylhexyl)phthalate	< 5.00		µg/l	5.00						
4-Bromophenyl phenyl ether	< 5.00		µg/l	5.00						
Butyl benzyl phthalate	< 5.00		µg/l	5.00						
4-Chloro-3-methylphenol	< 5.00		µg/l	5.00						
2-Chloronaphthalene	< 5.00		µg/l	5.00						
2-Chlorophenol	< 5.00		µg/l	5.00						
4-Chlorophenyl phenyl ether	< 5.00		µg/l	5.00						
Chrysene	< 5.00		µg/l	5.00						
Dibenzo (a,h) anthracene	< 5.00		µg/l	5.00						
1,2-Dichlorobenzene	< 5.00		µg/l	5.00						
1,3-Dichlorobenzene	< 5.00		µg/l	5.00						
1,4-Dichlorobenzene	< 5.00		µg/l	5.00						
3,3´-Dichlorobenzidine	< 5.00		µg/l	5.00						
2,4-Dichlorophenol	< 5.00		µg/l	5.00						
Diethyl phthalate	< 5.00		µg/l	5.00						
Dimethyl phthalate	< 5.00		µg/l	5.00						
2,4-Dimethylphenol	< 5.00		µg/l	5.00						
Di-n-butyl phthalate	< 5.00		µg/l	5.00						
4,6-Dinitro-2-methylphenol	< 5.00		µg/l	5.00						
2,4-Dinitrophenol	< 5.00		µg/l	5.00						
2,4-Dinitrotoluene	< 5.00		µg/l	5.00						
2,6-Dinitrotoluene	< 5.00		µg/l	5.00						
Di-n-octyl phthalate	< 5.00		µg/l	5.00						
Fluoranthene	< 5.00		µg/l	5.00						
Fluorene	< 5.00		µg/l	5.00						
Hexachlorobenzene	< 5.00		µg/l	5.00						
Hexachlorobutadiene	< 5.00		µg/l	5.00						
Hexachlorocyclopentadiene	< 5.00		µg/l	5.00						
Hexachloroethane	< 5.00		µg/l	5.00						
Indeno (1,2,3-cd) pyrene	< 5.00		µg/l	5.00						
Isophorone	< 5.00		µg/l	5.00						
Naphthalene	< 5.00		µg/l	5.00						
Nitrobenzene	< 5.00		µg/l	5.00						
2-Nitrophenol	< 5.00		µg/l	5.00						
4-Nitrophenol	< 5.00		µg/l	5.00						
N-Nitrosodimethylamine	< 5.00		µg/l	5.00						
N-Nitrosodi-n-propylamine	< 5.00		µg/l	5.00						
N-Nitrosodiphenylamine	< 5.00		µg/l	5.00						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 625										
Batch 1804230 - SW846 3510C										
Blank (1804230-BLK1)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Pentachlorophenol	< 5.00		µg/l	5.00						
Phenanthrene	< 5.00		µg/l	5.00						
Phenol	< 5.00		µg/l	5.00						
Pyrene	< 5.00		µg/l	5.00						
1,2,4-Trichlorobenzene	< 5.00		µg/l	5.00						
2,4,6-Trichlorophenol	< 5.00		µg/l	5.00						
Surrogate: 2-Fluorobiphenyl	*25.2*		µg/l		*50.0*		*50*	*30-130*		
Surrogate: 2-Fluorophenol	*19.4*		µg/l		*50.0*		*39*	*15-110*		
Surrogate: Nitrobenzene-d5	*26.8*		µg/l		*50.0*		*54*	*30-130*		
Surrogate: Phenol-d5	*12.3*		µg/l		*50.0*		*25*	*15-110*		
Surrogate: Terphenyl-dl4	*33.0*		µg/l		*50.0*		*66*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*29.1*		µg/l		*50.0*		*58*	*15-110*		
LCS (1804230-BS1)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Acenaphthene	**26.8**		µg/l	5.00	50.0		54	47-145		
Acenaphthylene	**26.7**		µg/l	5.00	50.0		53	33-145		
Anthracene	**30.0**		µg/l	5.00	50.0		60	27-133		
Benzidine	**29.5**		µg/l	10.0	50.0		59	40-140		
Benzo (a) anthracene	**29.8**		µg/l	5.00	50.0		60	33-143		
Benzo (a) pyrene	**39.1**		µg/l	5.00	50.0		78	17-163		
Benzo (b) fluoranthene	**41.7**		µg/l	5.00	50.0		83	24-159		
Benzo (g,h,i) perylene	**38.8**		µg/l	5.00	50.0		78	1-219		
Benzo (k) fluoranthene	**38.3**		µg/l	5.00	50.0		77	11-162		
Bis(2-chloroethoxy)methane	**20.8**		µg/l	5.00	50.0		42	33-184		
Bis(2-chloroethyl)ether	**22.7**		µg/l	5.00	50.0		45	12-158		
Bis(2-chloroisopropyl)ether	**20.2**		µg/l	5.00	50.0		40	36-166		
Bis(2-ethylhexyl)phthalate	**31.3**		µg/l	5.00	50.0		63	8-158		
4-Bromophenyl phenyl ether	**27.9**		µg/l	5.00	50.0		56	53-127		
Butyl benzyl phthalate	**30.2**		µg/l	5.00	50.0		60	1-152		
4-Chloro-3-methylphenol	**26.8**		µg/l	5.00	50.0		54	22-147		
2-Chloronaphthalene	**30.6**		µg/l	5.00	50.0		61	60-118		
2-Chlorophenol	**25.0**		µg/l	5.00	50.0		50	23-134		
4-Chlorophenyl phenyl ether	**24.5**		µg/l	5.00	50.0		49	25-158		
Chrysene	**28.2**		µg/l	5.00	50.0		56	17-168		
Dibenzo (a,h) anthracene	**41.0**		µg/l	5.00	50.0		82	1-227		
1,2-Dichlorobenzene	**29.6**		µg/l	5.00	50.0		59	32-129		
1,3-Dichlorobenzene	**28.7**		µg/l	5.00	50.0		57	1-172		
1,4-Dichlorobenzene	**29.0**		µg/l	5.00	50.0		58	20-124		
3,3´-Dichlorobenzidine	**36.5**		µg/l	5.00	50.0		73	1-262		
2,4-Dichlorophenol	**26.6**		µg/l	5.00	50.0		53	39-135		
Diethyl phthalate	**26.4**		µg/l	5.00	50.0		53	1-114		
Dimethyl phthalate	**25.6**		µg/l	5.00	50.0		51	1-112		
2,4-Dimethylphenol	**24.9**		µg/l	5.00	50.0		50	32-119		
Di-n-butyl phthalate	**30.9**		µg/l	5.00	50.0		62	1-118		
4,6-Dinitro-2-methylphenol	**40.6**		µg/l	5.00	50.0		81	1-181		
2,4-Dinitrophenol	**33.2**		µg/l	5.00	50.0		66	1-191		
2,4-Dinitrotoluene	**39.0**		µg/l	5.00	50.0		78	39-139		
2,6-Dinitrotoluene	**38.7**		µg/l	5.00	50.0		77	50-158		
Di-n-octyl phthalate	**41.2**		µg/l	5.00	50.0		82	4-146		
Fluoranthene	**28.8**		µg/l	5.00	50.0		58	26-137		
Fluorene	**25.7**	QC6	µg/l	5.00	50.0		51	59-121		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 625										
Batch 1804230 - SW846 3510C										
LCS (1804230-BS1)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Hexachlorobenzene	**34.1**		µg/l	5.00	50.0		68	1-152		
Hexachlorobutadiene	**23.0**		µg/l	5.00	50.0		46	24-116		
Hexachlorocyclopentadiene	**30.2**		µg/l	5.00	50.0		60	40-140		
Hexachloroethane	**27.6**		µg/l	5.00	50.0		55	40-113		
Indeno (1,2,3-cd) pyrene	**40.2**		µg/l	5.00	50.0		80	1-171		
Isophorone	**25.4**		µg/l	5.00	50.0		51	21-196		
Naphthalene	**24.8**		µg/l	5.00	50.0		50	21-133		
Nitrobenzene	**32.3**		µg/l	5.00	50.0		65	35-180		
2-Nitrophenol	**28.9**		µg/l	5.00	50.0		58	29-182		
4-Nitrophenol	**18.8**		µg/l	5.00	50.0		38	1-132		
N-Nitrosodimethylamine	**19.0**	QC6	µg/l	5.00	50.0		38	40-140		
N-Nitrosodi-n-propylamine	**25.2**		µg/l	5.00	50.0		50	1-230		
N-Nitrosodiphenylamine	**33.1**		µg/l	5.00	50.0		66	40-140		
Pentachlorophenol	**28.6**		µg/l	5.00	50.0		57	14-176		
Phenanthrene	**27.9**		µg/l	5.00	50.0		56	54-120		
Phenol	**12.3**		µg/l	5.00	50.0		25	5-112		
Pyrene	**28.5**		µg/l	5.00	50.0		57	52-115		
1,2,4-Trichlorobenzene	**28.2**		µg/l	5.00	50.0		56	44-142		
2,4,6-Trichlorophenol	**25.4**		µg/l	5.00	50.0		51	37-144		
Surrogate: 2-Fluorobiphenyl	*25.2*		µg/l		*50.0*		*50*	*30-130*		
Surrogate: 2-Fluorophenol	*17.9*		µg/l		*50.0*		*36*	*15-110*		
Surrogate: Nitrobenzene-d5	*26.6*		µg/l		*50.0*		*53*	*30-130*		
Surrogate: Phenol-d5	*11.9*		µg/l		*50.0*		*24*	*15-110*		
Surrogate: Terphenyl-dl4	*32.0*		µg/l		*50.0*		*64*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*31.4*		µg/l		*50.0*		*63*	*15-110*		
LCS Dup (1804230-BSD1)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Acenaphthene	**28.6**		µg/l	4.95	49.5		58	47-145	7	20
Acenaphthylene	**28.7**		µg/l	4.95	49.5		58	33-145	7	20
Anthracene	**31.7**		µg/l	4.95	49.5		64	27-133	5	20
Benzidine	**34.0**		µg/l	9.90	49.5		69	40-140	14	20
Benzo (a) anthracene	**31.5**		µg/l	4.95	49.5		64	33-143	5	20
Benzo (a) pyrene	**41.1**		µg/l	4.95	49.5		83	17-163	5	20
Benzo (b) fluoranthene	**43.3**		µg/l	4.95	49.5		87	24-159	4	20
Benzo (g,h,i) perylene	**40.1**		µg/l	4.95	49.5		81	1-219	3	20
Benzo (k) fluoranthene	**41.0**		µg/l	4.95	49.5		83	11-162	7	20
Bis(2-chloroethoxy)methane	**21.9**		µg/l	4.95	49.5		44	33-184	5	20
Bis(2-chloroethyl)ether	**24.1**		µg/l	4.95	49.5		49	12-158	6	20
Bis(2-chloroisopropyl)ether	**21.7**		µg/l	4.95	49.5		44	36-166	7	20
Bis(2-ethylhexyl)phthalate	**39.4**	QR9	µg/l	4.95	49.5		80	8-158	23	20
4-Bromophenyl phenyl ether	**29.8**		µg/l	4.95	49.5		60	53-127	7	20
Butyl benzyl phthalate	**32.0**		µg/l	4.95	49.5		65	1-152	6	20
4-Chloro-3-methylphenol	**28.4**		µg/l	4.95	49.5		57	22-147	6	20
2-Chloronaphthalene	**33.3**		µg/l	4.95	49.5		67	60-118	9	20
2-Chlorophenol	**26.9**		µg/l	4.95	49.5		54	23-134	7	20
4-Chlorophenyl phenyl ether	**26.4**		µg/l	4.95	49.5		53	25-158	7	20
Chrysene	**29.4**		µg/l	4.95	49.5		59	17-168	4	20
Dibenzo (a,h) anthracene	**42.5**		µg/l	4.95	49.5		86	1-227	4	20
1,2-Dichlorobenzene	**31.7**		µg/l	4.95	49.5		64	32-129	7	20
1,3-Dichlorobenzene	**31.0**		µg/l	4.95	49.5		63	1-172	8	20
1,4-Dichlorobenzene	**31.2**		µg/l	4.95	49.5		63	20-124	7	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 625										
Batch 1804230 - SW846 3510C										
LCS Dup (1804230-BSD1)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
3,3´-Dichlorobenzidine	**36.8**		µg/l	4.95	49.5		74	1-262	1	20
2,4-Dichlorophenol	**28.5**		µg/l	4.95	49.5		58	39-135	7	20
Diethyl phthalate	**28.3**		µg/l	4.95	49.5		57	1-114	7	20
Dimethyl phthalate	**27.7**		µg/l	4.95	49.5		56	1-112	8	20
2,4-Dimethylphenol	**27.1**		µg/l	4.95	49.5		55	32-119	8	20
Di-n-butyl phthalate	**32.1**		µg/l	4.95	49.5		65	1-118	4	20
4,6-Dinitro-2-methylphenol	**42.4**		µg/l	4.95	49.5		86	1-181	4	20
2,4-Dinitrophenol	**35.4**		µg/l	4.95	49.5		72	1-191	6	20
2,4-Dinitrotoluene	**42.0**		µg/l	4.95	49.5		85	39-139	8	20
2,6-Dinitrotoluene	**41.1**		µg/l	4.95	49.5		83	50-158	6	20
Di-n-octyl phthalate	**43.4**		µg/l	4.95	49.5		88	4-146	5	20
Fluoranthene	**30.0**		µg/l	4.95	49.5		61	26-137	4	20
Fluorene	**27.5**	QC6	µg/l	4.95	49.5		56	59-121	7	20
Hexachlorobenzene	**35.7**		µg/l	4.95	49.5		72	1-152	4	20
Hexachlorobutadiene	**24.7**		µg/l	4.95	49.5		50	24-116	7	20
Hexachlorocyclopentadiene	**32.7**		µg/l	4.95	49.5		66	40-140	8	20
Hexachloroethane	**29.9**		µg/l	4.95	49.5		60	40-113	8	20
Indeno (1,2,3-cd) pyrene	**41.5**		µg/l	4.95	49.5		84	1-171	3	20
Isophorone	**26.8**		µg/l	4.95	49.5		54	21-196	6	20
Naphthalene	**26.2**		µg/l	4.95	49.5		53	21-133	5	20
Nitrobenzene	**34.0**		µg/l	4.95	49.5		69	35-180	5	20
2-Nitrophenol	**30.7**		µg/l	4.95	49.5		62	29-182	6	20
4-Nitrophenol	**20.6**		µg/l	4.95	49.5		42	1-132	9	20
N-Nitrosodimethylamine	**20.3**		µg/l	4.95	49.5		41	40-140	6	20
N-Nitrosodi-n-propylamine	**26.6**		µg/l	4.95	49.5		54	1-230	5	20
N-Nitrosodiphenylamine	**35.2**		µg/l	4.95	49.5		71	40-140	6	20
Pentachlorophenol	**30.3**		µg/l	4.95	49.5		61	14-176	6	20
Phenanthrene	**29.6**		µg/l	4.95	49.5		60	54-120	6	20
Phenol	**13.5**		µg/l	4.95	49.5		27	5-112	9	20
Pyrene	**29.9**		µg/l	4.95	49.5		60	52-115	5	20
1,2,4-Trichlorobenzene	**30.3**		µg/l	4.95	49.5		61	44-142	7	20
2,4,6-Trichlorophenol	**27.9**		µg/l	4.95	49.5		56	37-144	9	20
Surrogate: 2-Fluorobiphenyl	*26.3*		µg/l		*49.5*		*53*	*30-130*		
Surrogate: 2-Fluorophenol	*19.0*		µg/l		*49.5*		*38*	*15-110*		
Surrogate: Nitrobenzene-d5	*28.2*		µg/l		*49.5*		*57*	*30-130*		
Surrogate: Phenol-d5	*12.9*		µg/l		*49.5*		*26*	*15-110*		
Surrogate: Terphenyl-dl4	*32.7*		µg/l		*49.5*		*66*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*33.1*		µg/l		*49.5*		*67*	*15-110*		
Mod. EPA 625										
Batch 1804230 - SW846 3510C										
Blank (1804230-BLK2)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Acenaphthene	< 0.050		µg/l	0.050						
Acenaphthylene	< 0.050		µg/l	0.050						
Anthracene	< 0.050		µg/l	0.050						
Benzo (a) anthracene	< 0.050		µg/l	0.050						
Benzo (a) pyrene	< 0.050		µg/l	0.050						
Benzo (b) fluoranthene	< 0.050		µg/l	0.050						
Benzo (g,h,i) perylene	< 0.050		µg/l	0.050						
Benzo (k) fluoranthene	< 0.050		µg/l	0.050						
Chrysene	< 0.050		µg/l	0.050						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mod. EPA 625										
Batch 1804230 - SW846 3510C										
Blank (1804230-BLK2)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Dibenzo (a,h) anthracene	< 0.050		µg/l	0.050						
Fluoranthene	< 0.050		µg/l	0.050						
Fluorene	< 0.050		µg/l	0.050						
Indeno (1,2,3-cd) pyrene	< 0.050		µg/l	0.050						
Naphthalene	< 0.050		µg/l	0.050						
Phenanthrene	< 0.050		µg/l	0.050						
Pyrene	< 0.050		µg/l	0.050						
Surrogate: 2-Fluorobiphenyl	*25.3*		µg/l		*49.5*		*51*	*30-130*		
Surrogate: Terphenyl-dl4	*33.9*		µg/l		*49.5*		*68*	*30-130*		
Surrogate: Benzo (e) pyrene-d12	*0.475*		µg/l		*0.990*		*48*	*30-130*		
LCS (1804230-BS2)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Acenaphthene	**0.725**		µg/l	0.050	0.990		73	40-140		
Acenaphthylene	**0.740**		µg/l	0.050	0.990		75	40-140		
Anthracene	**0.652**		µg/l	0.050	0.990		66	40-140		
Benzo (a) anthracene	**0.907**		µg/l	0.050	0.990		92	40-140		
Benzo (a) pyrene	**0.875**		µg/l	0.050	0.990		88	40-140		
Benzo (b) fluoranthene	**0.922**		µg/l	0.050	0.990		93	40-140		
Benzo (g,h,i) perylene	**0.800**		µg/l	0.050	0.990		81	40-140		
Benzo (k) fluoranthene	**0.880**		µg/l	0.050	0.990		89	40-140		
Chrysene	**0.781**		µg/l	0.050	0.990		79	40-140		
Dibenzo (a,h) anthracene	**0.855**		µg/l	0.050	0.990		86	40-140		
Fluoranthene	**0.799**		µg/l	0.050	0.990		81	40-140		
Fluorene	**0.771**		µg/l	0.050	0.990		78	40-140		
Indeno (1,2,3-cd) pyrene	**0.816**		µg/l	0.050	0.990		82	40-140		
Naphthalene	**0.572**		µg/l	0.050	0.990		58	40-140		
Phenanthrene	**0.722**		µg/l	0.050	0.990		73	40-140		
Pyrene	**0.799**		µg/l	0.050	0.990		81	40-140		
Surrogate: 2-Fluorobiphenyl	*22.1*		µg/l		*49.5*		*45*	*30-130*		
Surrogate: Terphenyl-dl4	*30.4*		µg/l		*49.5*		*61*	*30-130*		
Surrogate: Benzo (e) pyrene-d12	*0.723*		µg/l		*0.990*		*73*	*30-130*		
LCS Dup (1804230-BSD2)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Acenaphthene	**0.728**		µg/l	0.050	0.990		74	40-140	0.5	20
Acenaphthylene	**0.741**		µg/l	0.050	0.990		75	40-140	0.2	20
Anthracene	**0.663**		µg/l	0.050	0.990		67	40-140	2	20
Benzo (a) anthracene	**0.921**		µg/l	0.050	0.990		93	40-140	2	20
Benzo (a) pyrene	**0.880**		µg/l	0.050	0.990		89	40-140	0.5	20
Benzo (b) fluoranthene	**0.937**		µg/l	0.050	0.990		95	40-140	2	20
Benzo (g,h,i) perylene	**0.798**		µg/l	0.050	0.990		81	40-140	0.3	20
Benzo (k) fluoranthene	**0.891**		µg/l	0.050	0.990		90	40-140	1	20
Chrysene	**0.790**		µg/l	0.050	0.990		80	40-140	1	20
Dibenzo (a,h) anthracene	**0.852**		µg/l	0.050	0.990		86	40-140	0.3	20
Fluoranthene	**0.797**		µg/l	0.050	0.990		81	40-140	0.1	20
Fluorene	**0.770**		µg/l	0.050	0.990		78	40-140	0.1	20
Indeno (1,2,3-cd) pyrene	**0.784**		µg/l	0.050	0.990		79	40-140	4	20
Naphthalene	**0.572**		µg/l	0.050	0.990		58	40-140	0.05	20
Phenanthrene	**0.727**		µg/l	0.050	0.990		73	40-140	0.7	20
Pyrene	**0.811**		µg/l	0.050	0.990		82	40-140	2	20
Surrogate: 2-Fluorobiphenyl	*22.7*		µg/l		*49.5*		*46*	*30-130*		
Surrogate: Terphenyl-dl4	*30.9*		µg/l		*49.5*		*62*	*30-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Mod. EPA 625										
Batch 1804230 - SW846 3510C										
LCS Dup (1804230-BSD2)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Surrogate: Benzo (e) pyrene-d12	*0.713*		µg/l		*0.990*		*72*	*30-130*		
SW846 8270D										
Batch 1804230 - SW846 3510C										
Blank (1804230-BLK1)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Acenaphthene	< 5.00		µg/l	5.00						
Acenaphthylene	< 5.00		µg/l	5.00						
Aniline	< 5.00		µg/l	5.00						
Anthracene	< 5.00		µg/l	5.00						
Azobenzene/Diphenyldiazene	< 5.00		µg/l	5.00						
Benzidine	< 10.0		µg/l	10.0						
Benzo (a) anthracene	< 5.00		µg/l	5.00						
Benzo (a) pyrene	< 5.00		µg/l	5.00						
Benzo (b) fluoranthene	< 5.00		µg/l	5.00						
Benzo (g,h,i) perylene	< 5.00		µg/l	5.00						
Benzo (k) fluoranthene	< 5.00		µg/l	5.00						
Benzoic acid	< 5.00		µg/l	5.00						
Benzyl alcohol	< 5.00		µg/l	5.00						
Bis(2-chloroethoxy)methane	< 5.00		µg/l	5.00						
Bis(2-chloroethyl)ether	< 5.00		µg/l	5.00						
Bis(2-chloroisopropyl)ether	< 5.00		µg/l	5.00						
Bis(2-ethylhexyl)phthalate	< 5.00		µg/l	5.00						
4-Bromophenyl phenyl ether	< 5.00		µg/l	5.00						
Butyl benzyl phthalate	< 5.00		µg/l	5.00						
Carbazole	< 5.00		µg/l	5.00						
4-Chloro-3-methylphenol	< 5.00		µg/l	5.00						
4-Chloroaniline	< 5.00		µg/l	5.00						
2-Chloronaphthalene	< 5.00		µg/l	5.00						
2-Chlorophenol	< 5.00		µg/l	5.00						
4-Chlorophenyl phenyl ether	< 5.00		µg/l	5.00						
Chrysene	< 5.00		µg/l	5.00						
Dibenzo (a,h) anthracene	< 5.00		µg/l	5.00						
Dibenzofuran	< 5.00		µg/l	5.00						
1,2-Dichlorobenzene	< 5.00		µg/l	5.00						
1,3-Dichlorobenzene	< 5.00		µg/l	5.00						
1,4-Dichlorobenzene	< 5.00		µg/l	5.00						
3,3´-Dichlorobenzidine	< 5.00		µg/l	5.00						
2,4-Dichlorophenol	< 5.00		µg/l	5.00						
Diethyl phthalate	< 5.00		µg/l	5.00						
Dimethyl phthalate	< 5.00		µg/l	5.00						
2,4-Dimethylphenol	< 5.00		µg/l	5.00						
Di-n-butyl phthalate	< 5.00		µg/l	5.00						
4,6-Dinitro-2-methylphenol	< 5.00		µg/l	5.00						
2,4-Dinitrophenol	< 5.00		µg/l	5.00						
2,4-Dinitrotoluene	< 5.00		µg/l	5.00						
2,6-Dinitrotoluene	< 5.00		µg/l	5.00						
Di-n-octyl phthalate	< 5.00		µg/l	5.00						
Fluoranthene	< 5.00		µg/l	5.00						
Fluorene	< 5.00		µg/l	5.00						
Hexachlorobenzene	< 5.00		µg/l	5.00						
Hexachlorobutadiene	< 5.00		µg/l	5.00						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8270D										
Batch 1804230 - SW846 3510C										
Blank (1804230-BLK1)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Hexachlorocyclopentadiene	< 5.00		µg/l	5.00						
Hexachloroethane	< 5.00		µg/l	5.00						
Indeno (1,2,3-cd) pyrene	< 5.00		µg/l	5.00						
Isophorone	< 5.00		µg/l	5.00						
2-Methylnaphthalene	< 5.00		µg/l	5.00						
2-Methylphenol	< 5.00		µg/l	5.00						
3 & 4-Methylphenol	< 10.0		µg/l	10.0						
Naphthalene	< 5.00		µg/l	5.00						
2-Nitroaniline	< 5.00		µg/l	5.00						
3-Nitroaniline	< 5.00		µg/l	5.00						
4-Nitroaniline	< 5.00		µg/l	5.00						
Nitrobenzene	< 5.00		µg/l	5.00						
2-Nitrophenol	< 5.00		µg/l	5.00						
4-Nitrophenol	< 20.0		µg/l	20.0						
N-Nitrosodimethylamine	< 5.00		µg/l	5.00						
N-Nitrosodi-n-propylamine	< 5.00		µg/l	5.00						
N-Nitrosodiphenylamine	< 5.00		µg/l	5.00						
Pentachlorophenol	< 20.0		µg/l	20.0						
Phenanthrene	< 5.00		µg/l	5.00						
Phenol	< 5.00		µg/l	5.00						
Pyrene	< 5.00		µg/l	5.00						
Pyridine	< 5.00		µg/l	5.00						
1,2,4-Trichlorobenzene	< 5.00		µg/l	5.00						
1-Methylnaphthalene	< 5.00		µg/l	5.00						
2,4,5-Trichlorophenol	< 5.00		µg/l	5.00						
2,4,6-Trichlorophenol	< 5.00		µg/l	5.00						
Pentachloronitrobenzene	< 5.00		µg/l	5.00						
1,2,4,5-Tetrachlorobenzene	< 5.00		µg/l	5.00						
Surrogate: 2-Fluorobiphenyl	*25.2*		µg/l		*50.0*		*50*	*30-130*		
Surrogate: 2-Fluorophenol	*19.4*		µg/l		*50.0*		*39*	*15-110*		
Surrogate: Nitrobenzene-d5	*26.8*		µg/l		*50.0*		*54*	*30-130*		
Surrogate: Phenol-d5	*12.3*		µg/l		*50.0*		*25*	*15-110*		
Surrogate: Terphenyl-dl4	*33.0*		µg/l		*50.0*		*66*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*29.1*		µg/l		*50.0*		*58*	*15-110*		
LCS (1804230-BS1)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Acenaphthene	**26.8**		µg/l	5.00	50.0		54	40-140		
Acenaphthylene	**26.7**		µg/l	5.00	50.0		53	40-140		
Aniline	**18.1**	QC6	µg/l	5.00	50.0		36	40-140		
Anthracene	**30.0**		µg/l	5.00	50.0		60	40-140		
Azobenzene/Diphenyldiazene	**25.9**		µg/l	5.00	50.0		52	40-140		
Benzidine	**29.5**		µg/l	10.0	50.0		59	40-140		
Benzo (a) anthracene	**29.8**		µg/l	5.00	50.0		60	40-140		
Benzo (a) pyrene	**39.1**		µg/l	5.00	50.0		78	40-140		
Benzo (b) fluoranthene	**41.7**		µg/l	5.00	50.0		83	40-140		
Benzo (g,h,i) perylene	**38.8**		µg/l	5.00	50.0		78	40-140		
Benzo (k) fluoranthene	**38.3**		µg/l	5.00	50.0		77	40-140		
Benzoic acid	**19.1**		µg/l	5.00	50.0		38	30-130		
Benzyl alcohol	**27.3**		µg/l	5.00	50.0		55	40-140		
Bis(2-chloroethoxy)methane	**20.8**		µg/l	5.00	50.0		42	40-140		
Bis(2-chloroethyl)ether	**22.7**		µg/l	5.00	50.0		45	40-140		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8270D										
Batch 1804230 - SW846 3510C										
LCS (1804230-BS1)						Prepared: 29-Mar-18 Analyzed: 02-Apr-18				
Bis(2-chloroisopropyl)ether	**20.2**		µg/l	5.00	50.0		40	40-140		
Bis(2-ethylhexyl)phthalate	**31.3**		µg/l	5.00	50.0		63	40-140		
4-Bromophenyl phenyl ether	**27.9**		µg/l	5.00	50.0		56	40-140		
Butyl benzyl phthalate	**30.2**		µg/l	5.00	50.0		60	40-140		
Carbazole	**46.0**		µg/l	5.00	50.0		92	40-140		
4-Chloro-3-methylphenol	**26.8**		µg/l	5.00	50.0		54	30-130		
4-Chloroaniline	**25.1**		µg/l	5.00	50.0		50	40-140		
2-Chloronaphthalene	**30.6**		µg/l	5.00	50.0		61	40-140		
2-Chlorophenol	**25.0**		µg/l	5.00	50.0		50	30-130		
4-Chlorophenyl phenyl ether	**24.5**		µg/l	5.00	50.0		49	40-140		
Chrysene	**28.2**		µg/l	5.00	50.0		56	40-140		
Dibenzo (a,h) anthracene	**41.0**		µg/l	5.00	50.0		82	40-140		
Dibenzofuran	**30.3**		µg/l	5.00	50.0		61	40-140		
1,2-Dichlorobenzene	**29.6**		µg/l	5.00	50.0		59	40-140		
1,3-Dichlorobenzene	**28.7**		µg/l	5.00	50.0		57	40-140		
1,4-Dichlorobenzene	**29.0**		µg/l	5.00	50.0		58	40-140		
3,3´-Dichlorobenzidine	**36.5**		µg/l	5.00	50.0		73	40-140		
2,4-Dichlorophenol	**26.6**		µg/l	5.00	50.0		53	30-130		
Diethyl phthalate	**26.4**		µg/l	5.00	50.0		53	40-140		
Dimethyl phthalate	**25.6**		µg/l	5.00	50.0		51	40-140		
2,4-Dimethylphenol	**24.9**		µg/l	5.00	50.0		50	30-130		
Di-n-butyl phthalate	**30.9**		µg/l	5.00	50.0		62	40-140		
4,6-Dinitro-2-methylphenol	**40.6**		µg/l	5.00	50.0		81	30-130		
2,4-Dinitrophenol	**33.2**		µg/l	5.00	50.0		66	30-130		
2,4-Dinitrotoluene	**39.0**		µg/l	5.00	50.0		78	40-140		
2,6-Dinitrotoluene	**38.7**		µg/l	5.00	50.0		77	40-140		
Di-n-octyl phthalate	**41.2**		µg/l	5.00	50.0		82	40-140		
Fluoranthene	**28.8**		µg/l	5.00	50.0		58	40-140		
Fluorene	**25.7**		µg/l	5.00	50.0		51	40-140		
Hexachlorobenzene	**34.1**		µg/l	5.00	50.0		68	40-140		
Hexachlorobutadiene	**23.0**		µg/l	5.00	50.0		46	40-140		
Hexachlorocyclopentadiene	**30.2**		µg/l	5.00	50.0		60	40-140		
Hexachloroethane	**27.6**		µg/l	5.00	50.0		55	40-140		
Indeno (1,2,3-cd) pyrene	**40.2**		µg/l	5.00	50.0		80	40-140		
Isophorone	**25.4**		µg/l	5.00	50.0		51	40-140		
2-Methylnaphthalene	**30.6**		µg/l	5.00	50.0		61	40-140		
2-Methylphenol	**23.9**		µg/l	5.00	50.0		48	30-130		
3 & 4-Methylphenol	**22.8**		µg/l	10.0	50.0		46	30-130		
Naphthalene	**24.8**		µg/l	5.00	50.0		50	40-140		
2-Nitroaniline	**29.0**		µg/l	5.00	50.0		58	40-140		
3-Nitroaniline	**36.6**		µg/l	5.00	50.0		73	40-140		
4-Nitroaniline	**43.5**		µg/l	5.00	50.0		87	40-140		
Nitrobenzene	**32.3**		µg/l	5.00	50.0		65	40-140		
2-Nitrophenol	**28.9**		µg/l	5.00	50.0		58	30-130		
4-Nitrophenol	**18.8**		µg/l	20.0	50.0		38	30-130		
N-Nitrosodimethylamine	**19.0**	QC6	µg/l	5.00	50.0		38	40-140		
N-Nitrosodi-n-propylamine	**25.2**		µg/l	5.00	50.0		50	40-140		
N-Nitrosodiphenylamine	**33.1**		µg/l	5.00	50.0		66	40-140		
Pentachlorophenol	**28.6**		µg/l	20.0	50.0		57	30-130		
Phenanthrene	**27.9**		µg/l	5.00	50.0		56	40-140		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8270D										
Batch 1804230 - SW846 3510C										
LCS (1804230-BS1)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Phenol	**12.3**	QC6	µg/l	5.00	50.0		25	30-130		
Pyrene	**28.5**		µg/l	5.00	50.0		57	40-140		
Pyridine	**13.9**	QC6	µg/l	5.00	50.0		28	40-140		
1,2,4-Trichlorobenzene	**28.2**		µg/l	5.00	50.0		56	40-140		
1-Methylnaphthalene	**26.1**		µg/l	5.00	50.0		52	40-140		
2,4,5-Trichlorophenol	**28.5**		µg/l	5.00	50.0		57	30-130		
2,4,6-Trichlorophenol	**25.4**		µg/l	5.00	50.0		51	30-130		
Pentachloronitrobenzene	**29.1**		µg/l	5.00	50.0		58	40-140		
1,2,4,5-Tetrachlorobenzene	**23.4**		µg/l	5.00	50.0		47	40-140		
Surrogate: 2-Fluorobiphenyl	*25.2*		µg/l		*50.0*		*50*	*30-130*		
Surrogate: 2-Fluorophenol	*17.9*		µg/l		*50.0*		*36*	*15-110*		
Surrogate: Nitrobenzene-d5	*26.6*		µg/l		*50.0*		*53*	*30-130*		
Surrogate: Phenol-d5	*11.9*		µg/l		*50.0*		*24*	*15-110*		
Surrogate: Terphenyl-dl4	*32.0*		µg/l		*50.0*		*64*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*31.4*		µg/l		*50.0*		*63*	*15-110*		
LCS Dup (1804230-BSD1)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Acenaphthene	**28.6**		µg/l	4.95	49.5		58	40-140	7	20
Acenaphthylene	**28.7**		µg/l	4.95	49.5		58	40-140	7	20
Aniline	**19.2**	QC6	µg/l	4.95	49.5		39	40-140	6	20
Anthracene	**31.7**		µg/l	4.95	49.5		64	40-140	5	20
Azobenzene/Diphenyldiazene	**27.2**		µg/l	4.95	49.5		55	40-140	5	20
Benzidine	**34.0**		µg/l	9.90	49.5		69	40-140	14	20
Benzo (a) anthracene	**31.5**		µg/l	4.95	49.5		64	40-140	5	20
Benzo (a) pyrene	**41.1**		µg/l	4.95	49.5		83	40-140	5	20
Benzo (b) fluoranthene	**43.3**		µg/l	4.95	49.5		87	40-140	4	20
Benzo (g,h,i) perylene	**40.1**		µg/l	4.95	49.5		81	40-140	3	20
Benzo (k) fluoranthene	**41.0**		µg/l	4.95	49.5		83	40-140	7	20
Benzoic acid	**20.1**		µg/l	4.95	49.5		41	30-130	5	20
Benzyl alcohol	**28.8**		µg/l	4.95	49.5		58	40-140	6	20
Bis(2-chloroethoxy)methane	**21.9**		µg/l	4.95	49.5		44	40-140	5	20
Bis(2-chloroethyl)ether	**24.1**		µg/l	4.95	49.5		49	40-140	6	20
Bis(2-chloroisopropyl)ether	**21.7**		µg/l	4.95	49.5		44	40-140	7	20
Bis(2-ethylhexyl)phthalate	**39.4**	QR9	µg/l	4.95	49.5		80	40-140	23	20
4-Bromophenyl phenyl ether	**29.8**		µg/l	4.95	49.5		60	40-140	7	20
Butyl benzyl phthalate	**32.0**		µg/l	4.95	49.5		65	40-140	6	20
Carbazole	**48.5**		µg/l	4.95	49.5		98	40-140	5	20
4-Chloro-3-methylphenol	**28.4**		µg/l	4.95	49.5		57	30-130	6	20
4-Chloroaniline	**25.8**		µg/l	4.95	49.5		52	40-140	3	20
2-Chloronaphthalene	**33.3**		µg/l	4.95	49.5		67	40-140	9	20
2-Chlorophenol	**26.9**		µg/l	4.95	49.5		54	30-130	7	20
4-Chlorophenyl phenyl ether	**26.4**		µg/l	4.95	49.5		53	40-140	7	20
Chrysene	**29.4**		µg/l	4.95	49.5		59	40-140	4	20
Dibenzo (a,h) anthracene	**42.5**		µg/l	4.95	49.5		86	40-140	4	20
Dibenzofuran	**32.7**		µg/l	4.95	49.5		66	40-140	8	20
1,2-Dichlorobenzene	**31.7**		µg/l	4.95	49.5		64	40-140	7	20
1,3-Dichlorobenzene	**31.0**		µg/l	4.95	49.5		63	40-140	8	20
1,4-Dichlorobenzene	**31.2**		µg/l	4.95	49.5		63	40-140	7	20
3,3´-Dichlorobenzidine	**36.8**		µg/l	4.95	49.5		74	40-140	1	20
2,4-Dichlorophenol	**28.5**		µg/l	4.95	49.5		58	30-130	7	20
Diethyl phthalate	**28.3**		µg/l	4.95	49.5		57	40-140	7	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8270D										
Batch 1804230 - SW846 3510C										
LCS Dup (1804230-BSD1)					Prepared: 29-Mar-18 Analyzed: 02-Apr-18					
Dimethyl phthalate	**27.7**		µg/l	4.95	49.5		56	40-140	8	20
2,4-Dimethylphenol	**27.1**		µg/l	4.95	49.5		55	30-130	8	20
Di-n-butyl phthalate	**32.1**		µg/l	4.95	49.5		65	40-140	4	20
4,6-Dinitro-2-methylphenol	**42.4**		µg/l	4.95	49.5		86	30-130	4	20
2,4-Dinitrophenol	**35.4**		µg/l	4.95	49.5		72	30-130	6	20
2,4-Dinitrotoluene	**42.0**		µg/l	4.95	49.5		85	40-140	8	20
2,6-Dinitrotoluene	**41.1**		µg/l	4.95	49.5		83	40-140	6	20
Di-n-octyl phthalate	**43.4**		µg/l	4.95	49.5		88	40-140	5	20
Fluoranthene	**30.0**		µg/l	4.95	49.5		61	40-140	4	20
Fluorene	**27.5**		µg/l	4.95	49.5		56	40-140	7	20
Hexachlorobenzene	**35.7**		µg/l	4.95	49.5		72	40-140	4	20
Hexachlorobutadiene	**24.7**		µg/l	4.95	49.5		50	40-140	7	20
Hexachlorocyclopentadiene	**32.7**		µg/l	4.95	49.5		66	40-140	8	20
Hexachloroethane	**29.9**		µg/l	4.95	49.5		60	40-140	8	20
Indeno (1,2,3-cd) pyrene	**41.5**		µg/l	4.95	49.5		84	40-140	3	20
Isophorone	**26.8**		µg/l	4.95	49.5		54	40-140	6	20
2-Methylnaphthalene	**32.2**		µg/l	4.95	49.5		65	40-140	5	20
2-Methylphenol	**26.1**		µg/l	4.95	49.5		53	30-130	9	20
3 & 4-Methylphenol	**24.6**		µg/l	9.90	49.5		50	30-130	7	20
Naphthalene	**26.2**		µg/l	4.95	49.5		53	40-140	5	20
2-Nitroaniline	**31.8**		µg/l	4.95	49.5		64	40-140	9	20
3-Nitroaniline	**36.3**		µg/l	4.95	49.5		73	40-140	0.7	20
4-Nitroaniline	**47.8**		µg/l	4.95	49.5		97	40-140	9	20
Nitrobenzene	**34.0**		µg/l	4.95	49.5		69	40-140	5	20
2-Nitrophenol	**30.7**		µg/l	4.95	49.5		62	30-130	6	20
4-Nitrophenol	**20.6**		µg/l	19.8	49.5		42	30-130	9	20
N-Nitrosodimethylamine	**20.3**		µg/l	4.95	49.5		41	40-140	6	20
N-Nitrosodi-n-propylamine	**26.6**		µg/l	4.95	49.5		54	40-140	5	20
N-Nitrosodiphenylamine	**35.2**		µg/l	4.95	49.5		71	40-140	6	20
Pentachlorophenol	**30.3**		µg/l	19.8	49.5		61	30-130	6	20
Phenanthrene	**29.6**		µg/l	4.95	49.5		60	40-140	6	20
Phenol	**13.5**	QC6	µg/l	4.95	49.5		27	30-130	9	20
Pyrene	**29.9**		µg/l	4.95	49.5		60	40-140	5	20
Pyridine	**15.2**	QC6	µg/l	4.95	49.5		31	40-140	9	20
1,2,4-Trichlorobenzene	**30.3**		µg/l	4.95	49.5		61	40-140	7	20
1-Methylnaphthalene	**27.9**		µg/l	4.95	49.5		56	40-140	7	20
2,4,5-Trichlorophenol	**31.0**		µg/l	4.95	49.5		63	30-130	8	20
2,4,6-Trichlorophenol	**27.9**		µg/l	4.95	49.5		56	30-130	9	20
Pentachloronitrobenzene	**31.5**		µg/l	4.95	49.5		64	40-140	8	20
1,2,4,5-Tetrachlorobenzene	**25.0**		µg/l	4.95	49.5		50	40-140	6	20
Surrogate: 2-Fluorobiphenyl	*26.3*		µg/l		*49.5*		*53*	*30-130*		
Surrogate: 2-Fluorophenol	*19.0*		µg/l		*49.5*		*38*	*15-110*		
Surrogate: Nitrobenzene-d5	*28.2*		µg/l		*49.5*		*57*	*30-130*		
Surrogate: Phenol-d5	*12.9*		µg/l		*49.5*		*26*	*15-110*		
Surrogate: Terphenyl-dl4	*32.7*		µg/l		*49.5*		*66*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*33.1*		µg/l		*49.5*		*67*	*15-110*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 608										
Batch 1804228 - SW846 3510C										
Blank (1804228-BLK1)					Prepared: 29-Mar-18 Analyzed: 30-Mar-18					
Aroclor-1016	< 0.204		µg/l	0.204						
Aroclor-1016 [2C]	< 0.204		µg/l	0.204						
Aroclor-1221	< 0.204		µg/l	0.204						
Aroclor-1221 [2C]	< 0.204		µg/l	0.204						
Aroclor-1232	< 0.204		µg/l	0.204						
Aroclor-1232 [2C]	< 0.204		µg/l	0.204						
Aroclor-1242	< 0.204		µg/l	0.204						
Aroclor-1242 [2C]	< 0.204		µg/l	0.204						
Aroclor-1248	< 0.204		µg/l	0.204						
Aroclor-1248 [2C]	< 0.204		µg/l	0.204						
Aroclor-1254	< 0.204		µg/l	0.204						
Aroclor-1254 [2C]	< 0.204		µg/l	0.204						
Aroclor-1260	< 0.204		µg/l	0.204						
Aroclor-1260 [2C]	< 0.204		µg/l	0.204						
Aroclor-1262	< 0.204		µg/l	0.204						
Aroclor-1262 [2C]	< 0.204		µg/l	0.204						
Aroclor-1268	< 0.204		µg/l	0.204						
Aroclor-1268 [2C]	< 0.204		µg/l	0.204						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.153*		µg/l		*0.204*		*75*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	*0.143*		µg/l		*0.204*		*70*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.214*		µg/l		*0.204*		*105*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*0.184*		µg/l		*0.204*		*90*	*30-150*		
LCS (1804228-BS1)					Prepared: 29-Mar-18 Analyzed: 30-Mar-18					
Aroclor-1016	**2.08**		µg/l	0.204	2.55		82	50-114		
Aroclor-1016 [2C]	**2.12**		µg/l	0.204	2.55		83	50-114		
Aroclor-1260	**2.61**		µg/l	0.204	2.55		102	40-127		
Aroclor-1260 [2C]	**2.33**		µg/l	0.204	2.55		91	40-127		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.153*		µg/l		*0.204*		*75*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	*0.153*		µg/l		*0.204*		*75*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.245*		µg/l		*0.204*		*120*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*0.214*		µg/l		*0.204*		*105*	*30-150*		
LCS Dup (1804228-BSD1)					Prepared: 29-Mar-18 Analyzed: 30-Mar-18					
Aroclor-1016	**1.99**		µg/l	0.206	2.58		77	50-114	5	20
Aroclor-1016 [2C]	**1.87**		µg/l	0.206	2.58		72	50-114	13	20
Aroclor-1260	**2.45**		µg/l	0.206	2.58		95	40-127	6	20
Aroclor-1260 [2C]	**2.19**		µg/l	0.206	2.58		85	40-127	6	20
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	*0.144*		µg/l		*0.206*		*70*	*30-150*		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	*0.144*		µg/l		*0.206*		*70*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr)	*0.227*		µg/l		*0.206*		*110*	*30-150*		
Surrogate: Decachlorobiphenyl (Sr) [2C]	*0.196*		µg/l		*0.206*		*95*	*30-150*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 1664B										
Batch 1804099 - General Preparation SVOC										
Blank (1804099-BLK1)						Prepared: 27-Mar-18 Analyzed: 29-Mar-18				
Non-polar material (SGT-HEM)	< 1.0		mg/l	1.0						
LCS (1804099-BS1)						Prepared: 27-Mar-18 Analyzed: 29-Mar-18				
Non-polar material (SGT-HEM)	**28.8**		mg/l	1.0	39.6		73	64-132		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 200.7										
Batch 1804084 - EPA 200 Series										
Blank (1804084-BLK1)					Prepared: 27-Mar-18 Analyzed: 30-Mar-18					
Selenium	< 0.0150		mg/l	0.0150						
Iron	< 0.0150		mg/l	0.0150						
Antimony	< 0.0060		mg/l	0.0060						
Thallium	< 0.0050		mg/l	0.0050						
Cadmium	< 0.0025		mg/l	0.0025						
Beryllium	< 0.0020		mg/l	0.0020						
Chromium	< 0.0050		mg/l	0.0050						
Silver	< 0.0050		mg/l	0.0050						
Lead	< 0.0075		mg/l	0.0075						
Calcium	< 0.100		mg/l	0.100						
Zinc	< 0.0050		mg/l	0.0050						
Copper	< 0.0050		mg/l	0.0050						
Magnesium	< 0.0100		mg/l	0.0100						
Nickel	< 0.0050		mg/l	0.0050						
Arsenic	< 0.0040		mg/l	0.0040						
LCS (1804084-BS1)					Prepared: 27-Mar-18 Analyzed: 30-Mar-18					
Thallium	**1.21**		mg/l	0.0050	1.25		97	85-115		
Selenium	**1.28**		mg/l	0.0150	1.25		103	85-115		
Antimony	**1.22**		mg/l	0.0060	1.25		98	85-115		
Iron	**1.43**		mg/l	0.0150	1.25		114	85-115		
Magnesium	**1.25**		mg/l	0.0100	1.25		100	85-115		
Nickel	**1.25**		mg/l	0.0050	1.25		100	85-115		
Cadmium	**1.20**		mg/l	0.0025	1.25		96	85-115		
Lead	**1.23**		mg/l	0.0075	1.25		98.5	85-115		
Copper	**1.28**		mg/l	0.0050	1.25		102	85-115		
Calcium	**6.02**		mg/l	0.100	6.25		96	85-115		
Arsenic	**1.23**		mg/l	0.0040	1.25		98	85-115		
Silver	**1.20**		mg/l	0.0050	1.25		96	85-115		
Chromium	**1.29**		mg/l	0.0050	1.25		103	85-115		
Beryllium	**1.45**	QC2	mg/l	0.0020	1.25		116	85-115		
Zinc	**1.23**		mg/l	0.0050	1.25		98	85-115		
Duplicate (1804084-DUP1)			**Source: SC45049-01**		Prepared: 27-Mar-18 Analyzed: 30-Mar-18					
Antimony	< 0.0060		mg/l	0.0060		BRL				20
Selenium	< 0.0150		mg/l	0.0150		BRL				20
Thallium	< 0.0050		mg/l	0.0050		BRL				20
Arsenic	< 0.0040		mg/l	0.0040		BRL				20
Lead	< 0.0075		mg/l	0.0075		BRL				20
Beryllium	< 0.0020		mg/l	0.0020		BRL				20
Silver	< 0.0050		mg/l	0.0050		BRL				20
Chromium	< 0.0050		mg/l	0.0050		BRL				20
Calcium	**21.8**		mg/l	0.100		22.0			1	20
Cadmium	< 0.0025		mg/l	0.0025		BRL				20
Copper	**0.0066**		mg/l	0.0050		0.0064			2	20
Magnesium	**4.70**		mg/l	0.0100		4.74			0.9	20
Nickel	**0.0043**	J	mg/l	0.0050		0.0044			3	20
Zinc	**0.0297**		mg/l	0.0050		0.0303			2	20
Matrix Spike (1804084-MS1)			**Source: SC45049-01**		Prepared: 27-Mar-18 Analyzed: 30-Mar-18					
Thallium	**1.19**		mg/l	0.0050	1.25	BRL	95	70-130		
Selenium	**1.34**		mg/l	0.0150	1.25	BRL	108	70-130		
Antimony	**1.26**		mg/l	0.0060	1.25	BRL	101	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 200.7										
Batch 1804084 - EPA 200 Series										
Matrix Spike (1804084-MS1)			**Source: SC45049-01**			Prepared: 27-Mar-18 Analyzed: 30-Mar-18				
Silver	**1.27**		mg/l	0.0050	1.25	BRL	101	70-130		
Nickel	**1.23**		mg/l	0.0050	1.25	0.0044	98	70-130		
Lead	**1.20**		mg/l	0.0075	1.25	BRL	95.7	70-130		
Zinc	**1.27**		mg/l	0.0050	1.25	0.0303	99	70-130		
Magnesium	**5.90**		mg/l	0.0100	1.25	4.74	93	70-130		
Copper	**1.32**		mg/l	0.0050	1.25	0.0064	105	70-130		
Cadmium	**1.20**		mg/l	0.0025	1.25	BRL	96	70-130		
Arsenic	**1.30**		mg/l	0.0040	1.25	BRL	104	70-130		
Chromium	**1.27**		mg/l	0.0050	1.25	BRL	101	70-130		
Beryllium	**1.48**		mg/l	0.0020	1.25	BRL	119	70-130		
Calcium	**27.5**		mg/l	0.100	6.25	22.0	87	70-130		
Post Spike (1804084-PS1)			**Source: SC45049-01**			Prepared: 27-Mar-18 Analyzed: 30-Mar-18				
Thallium	**1.20**		mg/l	0.0050	1.25	BRL	96	85-115		
Selenium	**1.36**		mg/l	0.0150	1.25	BRL	109	85-115		
Antimony	**1.28**		mg/l	0.0060	1.25	BRL	103	85-115		
Copper	**1.34**		mg/l	0.0050	1.25	0.0064	107	85-115		
Lead	**1.21**		mg/l	0.0075	1.25	BRL	96.8	85-115		
Zinc	**1.29**		mg/l	0.0050	1.25	0.0303	101	85-115		
Magnesium	**5.90**		mg/l	0.0100	1.25	4.74	92	85-115		
Calcium	**27.3**		mg/l	0.100	6.25	22.0	85	85-115		
Arsenic	**1.32**		mg/l	0.0040	1.25	BRL	106	85-115		
Silver	**1.28**		mg/l	0.0050	1.25	BRL	103	85-115		
Chromium	**1.27**		mg/l	0.0050	1.25	BRL	102	85-115		
Beryllium	**1.46**	QC2	mg/l	0.0020	1.25	BRL	117	85-115		
Nickel	**1.24**		mg/l	0.0050	1.25	0.0044	99	85-115		
Cadmium	**1.21**		mg/l	0.0025	1.25	BRL	97	85-115		
EPA 245.1/7470A										
Batch 1804085 - EPA200/SW7000 Series										
Blank (1804085-BLK1)						Prepared: 27-Mar-18 Analyzed: 28-Mar-18				
Mercury	< 0.00020		mg/l	0.00020						
LCS (1804085-BS1)						Prepared: 27-Mar-18 Analyzed: 28-Mar-18				
Mercury	**0.00455**		mg/l	0.00020	0.00500		91	85-115		
Duplicate (1804085-DUP1)			**Source: SC45049-02**			Prepared: 27-Mar-18 Analyzed: 28-Mar-18				
Mercury	< 0.00020		mg/l	0.00020		BRL				20
Matrix Spike (1804085-MS1)			**Source: SC45049-02**			Prepared: 27-Mar-18 Analyzed: 28-Mar-18				
Mercury	**0.00453**		mg/l	0.00020	0.00500	BRL	91	80-120		
Post Spike (1804085-PS1)			**Source: SC45049-02**			Prepared: 27-Mar-18 Analyzed: 28-Mar-18				
Mercury	**0.00392**	QM9	mg/l	0.00020	0.00500	BRL	78	85-115		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
ASTM D 1293-99B										
Batch 1804002 - General Preparation										
Reference (1804002-SRM1)						Prepared & Analyzed: 23-Mar-18				
pH	**6.04**		pH Units		6.00		101	97.5-102.5		
Reference (1804002-SRM2)						Prepared & Analyzed: 23-Mar-18				
pH	**5.99**		pH Units		6.00		100	97.5-102.5		
EPA 300.0										
Batch 1804110 - General Preparation										
Blank (1804110-BLK1)						Prepared & Analyzed: 27-Mar-18				
Chloride	< 1.00		mg/l	1.00						
LCS (1804110-BS1)						Prepared & Analyzed: 27-Mar-18				
Chloride	**19.4**		mg/l	1.00	20.0		97	90-110		
Reference (1804110-SRM1)						Prepared & Analyzed: 27-Mar-18				
Chloride	**25.1**		mg/l	1.00	25.0		100	90-110		
EPA 335.4 / SW846 9012B										
Batch 1804241 - General Preparation										
Blank (1804241-BLK1)						Prepared & Analyzed: 29-Mar-18				
Cyanide (total)	< 0.00500		mg/l	0.00500						
Blank (1804241-BLK2)						Prepared & Analyzed: 29-Mar-18				
Cyanide (total)	< 0.00500		mg/l	0.00500						
LCS (1804241-BS1)						Prepared & Analyzed: 29-Mar-18				
Cyanide (total)	**0.301**	QC3	mg/l	0.00500	0.250		120	90-110		
LCS (1804241-BS2)						Prepared & Analyzed: 29-Mar-18				
Cyanide (total)	**0.251**		mg/l	0.00500	0.250		100	90-110		
Reference (1804241-SRM1)						Prepared & Analyzed: 29-Mar-18				
Cyanide (total)	**0.479**		mg/l	0.00500	0.396		121	76-123		
SM18-22 2540C										
Batch 1804172 - General Preparation										
Blank (1804172-BLK1)						Prepared: 28-Mar-18 Analyzed: 29-Mar-18				
Total Dissolved Solids	< 5		mg/l	5						
LCS (1804172-BS1)						Prepared: 28-Mar-18 Analyzed: 29-Mar-18				
Total Dissolved Solids	**998**		mg/l	10	1000		100	90-110		
Duplicate (1804172-DUP1)			**Source: SC45049-02**			Prepared: 28-Mar-18 Analyzed: 29-Mar-18				
Total Dissolved Solids	**82**		mg/l	5		85			4	5
SM2540D (11)										
Batch 1804011 - General Preparation										
Blank (1804011-BLK1)						Prepared: 24-Mar-18 Analyzed: 26-Mar-18				
Total Suspended Solids	< 0.5		mg/l	0.5						
LCS (1804011-BS1)						Prepared: 24-Mar-18 Analyzed: 26-Mar-18				
Total Suspended Solids	**100**		mg/l	10.0	100		100	90-110		
SM3500-Cr-B (11)/7196A										
Batch 1804006 - General Preparation										
Blank (1804006-BLK1)						Prepared & Analyzed: 23-Mar-18				
Hexavalent Chromium	< 0.005		mg/l	0.005						
LCS (1804006-BS1)						Prepared & Analyzed: 23-Mar-18				
Hexavalent Chromium	**0.051**		mg/l	0.005	0.0500		102	90-111		
Duplicate (1804006-DUP1)			**Source: SC45049-02**			Prepared & Analyzed: 23-Mar-18				
Hexavalent Chromium	< 0.025	D	mg/l	0.025		BRL				20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SM3500-Cr-B (11)/7196A										
Batch 1804006 - General Preparation										
Matrix Spike (1804006-MS1)			**Source: SC45049-02**			Prepared & Analyzed: 23-Mar-18				
Hexavalent Chromium	**0.094**	QM5, D	mg/l	0.025	0.250	BRL	37	85-115		
Matrix Spike Dup (1804006-MSD1)			**Source: SC45049-02**			Prepared & Analyzed: 23-Mar-18				
Hexavalent Chromium	**0.093**	QM5, D	mg/l	0.025	0.250	BRL	37	85-115	0.5	20
Reference (1804006-SRM1)						Prepared & Analyzed: 23-Mar-18				
Hexavalent Chromium	**0.025**		mg/l	0.005	0.0250		101	85-115		
SM4500-Cl-G (11)										
Batch 1804248 - General Preparation										
Blank (1804248-BLK1)						Prepared: 29-Mar-18 Analyzed: 30-Mar-18				
Total Residual Chlorine	< 0.020		mg/l	0.020						
LCS (1804248-BS1)						Prepared: 29-Mar-18 Analyzed: 30-Mar-18				
Total Residual Chlorine	**0.051**		mg/l	0.020	0.0500		101	90-110		
Reference (1804248-SRM1)						Prepared: 29-Mar-18 Analyzed: 30-Mar-18				
Total Residual Chlorine	**0.100**		mg/l	0.020	0.104		97	96-115		
SW846 Ch. 7.3										
Batch 1804038 - General Preparation										
Blank (1804038-BLK1)						Prepared & Analyzed: 26-Mar-18				
Reactivity	**See Narrative**		mg/l							
Reactive Cyanide	< 25.0		mg/l	25.0						
Reactive Sulfide	< 50.0		mg/l	50.0						
Reference (1804038-SRM1)						Prepared & Analyzed: 26-Mar-18				
Reactive Cyanide	< 25.0		mg/l	25.0	200		0	0-200		
Reference (1804038-SRM2)						Prepared & Analyzed: 26-Mar-18				
Reactive Sulfide	< 50.0		mg/l	50.0	13400		0	0-200		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E350.1										
Batch 424092A - 424092										
BLK (CA08393-BLK)						Prepared: 27-Mar-18 Analyzed: 28-Mar-18				
Ammonia as Nitrogen	< 0.05		mg/l	0.05				-		
DUP (CA08393-DUP)			**Source: SC45049-02**			Prepared: 27-Mar-18 Analyzed: 28-Mar-18				
Ammonia as Nitrogen	< 1.00		mg/l	1.00		BRL		-	NC	20
LCS (CA08393-LCS)						Prepared: 27-Mar-18 Analyzed: 28-Mar-18				
Ammonia as Nitrogen	**3.640**		mg/l	0.05	3.74		97.3	90-110		20
MS (CA08393-MS)			**Source: SC45049-02**			Prepared: 27-Mar-18 Analyzed: 28-Mar-18				
Ammonia as Nitrogen	**39.00**		mg/l	0.05	40	BRL	97.5	90-110		20

Notes and Definitions

D	Data reported from a dilution
O09	This sample was analyzed outside the EPA recommended holding time per client request.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QC3	The spike recovery is outside acceptable limits for the LCS. The batch was accepted based upon the MS and/or MSD meeting the LCS limits criteria.
QC6	Analyte is out of acceptance range in the QC spike but the total number of out of range analytes is within overall method criteria.
QM5	The spike recovery was outside acceptance limits for the MS, MSD and/or PS due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
QR2	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR9	RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.
R01	The Reporting Limit has been raised to account for matrix interference.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
[2C]	Indicates concentration was reported from the secondary, confirmation column.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
ClHT	The method for residual chlorine indicates that samples should be analyzed immediately. 40 CFR 136 specifies a holding time of 15 minutes from sampling to analysis. Therefore all aqueous residual chlorine samples not analyzed in the field are considered out of hold time at the time of sample receipt.
pH	The method for pH does not stipulate a specific holding time other than to state that the samples should be analyzed as soon as possible. For aqueous samples the 40 CFR 136 specifies a holding time of 15 minutes from sampling to analysis. Therefore all aqueous pH samples not analyzed in the field are considered out of hold time at the time of sample receipt. All soil samples are analyzed as soon as possible after sample receipt.
HD	Total Hardness is a calculation based on the reported values of Ca and Mg.

Interpretation of Total Petroleum Hydrocarbon Report

Petroleum identification is determined by comparing the GC fingerprint obtained from the sample with a library of GC fingerprints obtained from analyses of various petroleum products. Possible match categories are as follows:

Gasoline - includes regular, unleaded, premium, etc.
Fuel Oil #2 - includes home heating oil, #2 fuel oil, and diesel
Fuel Oil #4 - includes #4 fuel oil
Fuel Oil #6 - includes #6 fuel oil and bunker "C" oil
Motor Oil - includes virgin and waste automobile oil
Ligroin - includes mineral spirits, petroleum naphtha, vm&p naphtha
Aviation Fuel - includes kerosene, Jet A and JP-4
Other Oil - includes lubricating and cutting oil, and silicon oil

At times, the unidentified petroleum product is quantified using a calibration that most closely approximates the distribution of compounds in the sample. When this occurs, the result is qualified as Calculated as.

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.

✓ SC 45049

eurofins | Spectrum Analytical

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

☐ Standard TAT - 7 to 10 business days

☑ Rush TAT - Date Needed: 5 day

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

Report To: ATC Worcester

Telephone #: 508 756 0151

Project Mgr: Matt Lyne

Invoice To: CF1

P.O No.: Pending 316981 Quote #:

Lowest RLs possible See Analytical List

Project No: 03-225434

Site Name: Bt-1 Attleboro CF1

Location: 135 E. Washington St. N. Attleboro State: MA

Sampler(s): A. Clark

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

List Preservative Code below:

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	Iron, Chloride, TRC	pH, Ammonia, Hardness	PP13 Total Metals	VOC-624 w/ 8260 + SVOC SIM 625	SVOC 8270	VOC-TPH/TANG-14	TPH Hexchrom 7196, PCB's 608	Cyanide 4500 Reactivity	Perchlorate 331	TSS, TDS	TPH 1664 Ethanol 1666	Check if chlorinated
45049-01	Pond-1	3/22/18	500PM		GW				4		/	/									☐
		~~3/22~~ @ 3/23/18																			☐
-02	ATC-1	3/22/18	500PM		GW	6	2		6	/	/	/	/	/	/	/	/	/	/	/	☐
						@ 3/23/18															☐
																					☐
																					☐
																					☐
																					☐
																					☐
																					☐

all additions per client req 3/23/18 @

QA/QC Reporting Notes:
* additional charges may appply

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

Relinquished by:	Received by:	Date:	Time:	Temp °C
		3/23/18	10:01	Observed 4.0
		3/23/18	1705	Correction Factor 0
				Corrected 4.0
				IR ID # 02

☐ EDD format:

☑ E-mail to: Matthew.Lyne@atcassociates.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken

☐ Ambient ☐ Iced ☒ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

1. Chemical-Specific Effluent Limitations in Massachusetts and New Hampshire

During the period beginning on the effective date and lasting through the expiration date, EPA will authorize the discharges under Part 1.1 of this general permit to receiving waters in Massachusetts and New Hampshire. The effective date of authorization for each discharge covered under this general permit is the date indicated in EPA's written authorization to discharge, lasting through the expiration date of this general permit or written termination of coverage, whichever occurs first. Each discharge shall be limited and monitored as specified in Table 2, below. The applicability of effluent limitations for each Activity Category listed in Table 1 is included in footnote 2, below. Additional limitations and monitoring requirements are specified in Parts 2.2 through 2.5 and Part 4, below.

Table 2: Chemical-Specific Effluent Limitations and Monitor-Only Requirements[1]

Parameter[2] /Method / RL	Effluent Limitation[3,4]	
	TBEL[5]	WQBEL[6]
A. Inorganics		
Ammonia[7] 350.1 / 0.1 ug/L or 0.0001 mg/L	Report mg/L	
Chloride[8] 300.0 / 1000 ug/L or 1.0 mg/L	Report µg/L	
Total Residual Chlorine[9] SM4500-Cl-G (11) / 0.02 mg/L	0.2 mg/L	FW= 11 µg/L SW= 7.5 µg/L
Total Suspended Solids SM2540 D / 5 mg/L	30 mg/L	
Antimony[10] 200.8 / 0.5 ug/L	206 µg/L	640 µg/L in MA 4.3 mg/L in NH
Arsenic[10] 200.8 / 0.5 ug/L	104 µg/L	FW= 10 µg/L SW= 36 µg/L
Cadmium[11,12] 200.8 / 0.5 ug/L	10.2 µg/L	FW= 0.25 µg/L SW= 8.8 µg/L in MA SW= 9.3 µg/L in NH
Chromium III[11,12] Calculation / 10 ug/L	323 µg/L	FW= 74 µg/L SW= 100 µg/L
Chromium VI[11,13] 7196 / 5 ug/L	323 µg/L	FW= 11 µg/L SW= 50 µg/L
Copper[11,12] 200.8 / 0.5 ug/L	242 µg/L	FW= 9 µg/L SW= 3.1 µg/L
Iron[10] 200.7 / 30 ug/L	5,000 µg/L	FW = 1,000 µg/L
Lead[11,12] 200.8 / 0.5 ug/L	160 µg/L	FW= 2.5 µg/L SW= 8.1 µg/L
Mercury[11] 245.1 / 0.2 ug/L	0.739 µg/L	FW= 0.77 µg/L SW= 0.94 µg/L
Nickel[11,12] 200.8 / 0.5 ug/L	1,450 µg/L	FW= 52 µg/L SW= 8.2 µg/L
Selenium 200.8 / 0.5 ug/L	235.8 µg/L	FW= 5.0 µg/L[10] SW= 71 µg/L[11]
Silver[11,12] 200.8 / 0.5ug/L	35.1 µg/L	FW= 3.2 µg/L SW= 1.9 µg/L
Zinc[11,12] 200.8 / 0.5 ug/L	420 µg/L	FW= 120 µg/L SW= 81 µg/L

Parameter[2]	Effluent Limitation[3,4]	
	TBEL[5]	WQBEL[6]
Cyanide[14] 335.4 / 5.0 ug/L	178 mg/L	FW = 5.2 µg/L SW = 1.0 µg/L
B. Non-Halogenated Volatile Organic Compounds		
Total BTEX[15] 624 / BTEX reported as ind. cmpds.	100 µg/L	
Benzene[15] 624 / 1 ug/L	5.0 µg/L	
1,4 Dioxane[16] 624 / 20 ug/L or 8260 SIM / 0.5 ug/L	200 µg/L	
Acetone 624 / 10 ug/L	7.97 mg/L	
Phenol 625 / 5 ug/L	1,080 µg/L	300 µg/L
C. Halogenated Volatile Organic Compounds		
Carbon Tetrachloride 624 / 1 ug/L	4.4 µg/L	1.6 µg/L in MA
1,2 Dichlorobenzene 624 / 1 ug/L	600 µg/L	
1,3 Dichlorobenzene 624 / 1 ug/L	320 µg/L	
1,4 Dichlorobenzene 624 / 1 ug/L	5.0 µg/L	
Total dichlorobenzene reported as individ. cmpds	763 µg/L in NH	
1,1 Dichloroethane 624 / 1 ug/L	70 µg/L	
1,2 Dichloroethane 624 / 1 ug/L	5.0 µg/L	
1,1 Dichloroethylene 624 / 1 ug/L	3.2 µg/L	
Ethylene Dibromide[17] 8260 / 0.5 ug/L *need 8011 or 504.1 to achieve RL	0.05 µg/L	
Methylene Chloride 624 / 10 ug/L *2ug/L when requested	4.6 µg/L	
1,1,1 Trichloroethane 624 / 1 ug/L	200 µg/L	
1,1,2 Trichloroethane 624 / 1 ug/L	5.0 µg/L	
Trichloroethylene 624 / 1 ug/L	5.0 µg/L	
Tetrachloroethylene 624 / 1 ug/L	5.0 µg/L	3.3 µg/L in MA
cis-1,2 Dichloroethylene 624 / 1 ug/L	70 µg/L	
Vinyl Chloride 624 / 1 ug/L	2.0 µg/L	
D. Non-Halogenated Semi-Volatile Organic Compounds		
Total Phthalates[18] 625 / Phthalates reported indivic.	190 µg/L	FW = 3.0 µg/L in NH SW = 3.4 µg/L in NH
Diethylhexyl phthalate[18] 625 / 5 ug/L	101 µg/L	2.2 µg/L in MA 5.9 µg/L in NH
Total Group I Polycyclic Aromatic Hydrocarbons[19] 625 SIM	1.0 µg/L	As Individual PAHs
Benzo(a)anthracene[19] 625 / 0.05 ug/L	As Total Group I PAHs	0.0038 µg/L
Benzo(a)pyrene[19] 625 / 0.05 ug/L		0.0038 µg/L
Benzo(b)fluoranthene[19] 625 / 0.05 ug/L		0.0038 µg/L
Benzo(k)fluoranthene[19] 625 / 0.05 ug/L		0.0038 µg/L
Chrysene[19] 625 / 0.05 ug/L		0.0038 µg/L
Dibenzo(a,h)anthracene[19] 625 / 0.05 ug/L		0.0038 µg/L
Indeno(1,2,3-cd)pyrene[19] 625 / 0.05 ug/L		0.0038 µg/L
Total Group II Polycyclic Aromatic Hydrocarbons[20]	100 µg/L	
Naphthalene[20] 625 / 0.05 ug/L	20 µg/L	
E. Halogenated Semi-Volatile Organic Compounds		
Total Polychlorinated Biphenyls[21] 608 / 0.2 ug/L reported individ.	0.000064 µg/L	
Pentachlorophenol 625 / 1.0 ug/L	1.0 µg/L	

Parameter[2]	Effluent Limitation[3,4]	
	TBEL[5]	WQBEL[6]
F. Fuels Parameters		
Total Petroleum Hydrocarbons[22] 1664 / 1.0 mg/L	5.0 mg/L	
Ethanol[23] 8015 / 1 mg/L or 524 / 200 ug/L	Report mg/L	
Methyl-tert-Butyl Ether[24] 624 / 1.0 ug/L	70 µg/L	20 µg/L in MA
tert-Butyl Alcohol 524 / 10 ug/L	120 µg/L in MA 40 µg/L in NH	
tert-Amyl Methyl Ether[24] 524 / 0.5 ug/L	90 µg/L in MA 140 µg/L in NH	

Table 2 Footnotes:

[1] The following abbreviations are used in Table 2, above:
- [a] TBEL = technology-based effluent limitation
- [b] WQBEL = water quality-based effluent limitation
- [c] mg/L = milligrams per liter
- [d] avg = average
- [e] µg/L = micrograms per liter
- [f] FW = freshwater
- [g] SW = saltwater

[2] The sample type required for all parameters is grab. Grab samples must be analyzed individually and cannot be composited. See Appendix IX for additional definitions.

[3] The effluent limitation and/or monitor-only requirement for any parameter listed applies to any site if the given parameter is present at that site. The effluent limitations and monitor-only requirements also apply to Activity Categories as follows:

[a] Activity Category I:
all parameters in contamination type A. Inorganics;
any present in contamination type B. non-halogenated VOCs;
if present in contamination type C. halogenated VOCs;
any present in contamination type D. non-halogenated SVOCs;
if present in contamination type E. halogenated SVOCs; and
any present in contamination type F. fuels parameters.

[b] Activity Category II:
all parameters in contamination type A. Inorganics;
any present in contamination type B. non-halogenated VOCs;
any present in contamination type C. halogenated VOCs;
any present in contamination type D. non-halogenated SVOCs;
if present in contamination type E. halogenated SVOCs; and
if present in contamination type F. fuels parameters.

Batch Summary

[CALC]

General Chemistry Parameters

SC45049-01 (Pond-1)
SC45049-02 (ATC-1)

1804002

General Chemistry Parameters

1804002-SRM1
1804002-SRM2
SC45049-01 (Pond-1)
SC45049-02 (ATC-1)

1804006

General Chemistry Parameters

1804006-BLK1
1804006-BS1
1804006-DUP1
1804006-MS1
1804006-MSD1
1804006-SRM1
SC45049-02 (ATC-1)

1804011

General Chemistry Parameters

1804011-BLK1
1804011-BS1
SC45049-02 (ATC-1)

1804029

Volatile Organic Compounds

1804029-BLK1
1804029-BS1
1804029-BSD1
SC45049-02 (ATC-1)

1804038

General Chemistry Parameters

1804038-BLK1
1804038-SRM1
1804038-SRM2
SC45049-02 (ATC-1)

1804059

Total Metals by EPA 200/6000 Series Methods

SC45049-01 (Pond-1)
SC45049-02 (ATC-1)

1804084

Total Metals by EPA 200 Series Methods

1804084-BLK1
1804084-BS1
1804084-DUP1
1804084-MS1
1804084-PS1
SC45049-01 (Pond-1)
SC45049-02 (ATC-1)

1804085

Total Metals by EPA 200 Series Methods

1804085-BLK1
1804085-BS1
1804085-DUP1
1804085-MS1
1804085-PS1
SC45049-01 (Pond-1)
SC45049-02 (ATC-1)

1804099

Extractable Petroleum Hydrocarbons

1804099-BLK1
1804099-BS1
SC45049-02 (ATC-1)

1804110

General Chemistry Parameters

1804110-BLK1
1804110-BS1
1804110-SRM1
SC45049-02 (ATC-1)

1804172

General Chemistry Parameters

1804172-BLK1
1804172-BS1
1804172-DUP1
SC45049-02 (ATC-1)

1804228

Semivolatile Organic Compounds by GC

1804228-BLK1
1804228-BS1
1804228-BSD1
SC45049-02 (ATC-1)

1804230

Semivolatile Organic Compounds by GCMS

1804230-BLK1
1804230-BLK2
1804230-BS1
1804230-BS2
1804230-BSD1
1804230-BSD2
SC45049-02 (ATC-1)

1804241

General Chemistry Parameters

1804241-BLK1
1804241-BLK2
1804241-BS1
1804241-BS2
1804241-SRM1
SC45049-02 (ATC-1)

1804248

General Chemistry Parameters

1804248-BLK1
1804248-BS1
1804248-SRM1
SC45049-02 (ATC-1)

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Subcontracted Analyses

CA08393-BLK
CA08393-DUP
CA08393-LCS
CA08393-MS
SC45049-01 (Pond-1)
SC45049-02 (ATC-1)

S815859

Semivolatile Organic Compounds by GCMS

S815859-CAL1
S815859-CAL2
S815859-CAL3
S815859-CAL4
S815859-CAL5
S815859-CAL6
S815859-CAL7
S815859-CAL8
S815859-CAL9
S815859-CALA
S815859-ICV1
S815859-LCV1
S815859-LCV2
S815859-TUN1

S816480

Semivolatile Organic Compounds by GC

S816480-CAL1
S816480-CAL2
S816480-CAL3
S816480-CAL4
S816480-CAL5
S816480-CAL6
S816480-CAL7
S816480-CAL8
S816480-CAL9
S816480-CALA
S816480-CALB
S816480-CALC
S816480-CALD
S816480-CALE
S816480-CALF
S816480-CALG
S816480-CALH
S816480-CALI
S816480-CALJ
S816480-CALK
S816480-CALL
S816480-CALM
S816480-CALN
S816480-CALO
S816480-CALP
S816480-CALQ
S816480-CALR
S816480-CALS
S816480-CALT
S816480-CALU
S816480-ICV2
S816480-ICV3
S816480-ICV4
S816480-ICV5
S816480-ICV6
S816480-LCV1
S816480-LCV2
S816480-LCV3
S816480-LCV4
S816480-LCV5
S816480-LCV6

S817144

Volatile Organic Compounds

S817144-CAL1
S817144-CAL2
S817144-CAL3
S817144-CAL4
S817144-CAL5
S817144-CAL6
S817144-CAL7
S817144-CAL8
S817144-CAL9
S817144-ICV1
S817144-LCV1
S817144-TUN1

S817769

Semivolatile Organic Compounds by GCMS

S817769-CAL1
S817769-CAL2
S817769-CAL3
S817769-CAL4
S817769-CAL5
S817769-CAL6
S817769-CAL7
S817769-CAL8
S817769-CAL9
S817769-ICV1
S817769-LCV1
S817769-LCV2
S817769-TUN1

S817980

Volatile Organic Compounds

S817980-CCV1
S817980-TUN1

S818142

Semivolatile Organic Compounds by GCMS

S818142-CCV1
S818142-TUN1

S818148

Semivolatile Organic Compounds by GCMS

S818148-CCV1
S818148-TUN1

S818176

Semivolatile Organic Compounds by GC

S818176-CCV1
S818176-CCV2
S818176-CCV3
S818176-IBL1
S818176-IBL2
S818176-IBL3