July 26, 2019

Ms. Shauna Little
U.S. Environmental Protection Agency
Office of Ecosystem Protection
EPA/OEP RGP Applications Coordinator
5 Post Office Square - Suite 100 (OEP06-01)
Boston, MA 02109-3912

Notice of Intent for Application of a Remediation General Permit
Cumberland Farms, Inc. Property #MA8619
710 Oak Street
Brockton, MA 02301

To Whom It May Concern:

Kleinfelder, on behalf of Cumberland Farms, Inc. (CFI), has prepared the enclosed Notice of Intent (NOI) for application of Remediation General Permit (RGP) for upcoming activities at Cumberland Farms, Inc. Property #MA8619, located at 710 Oak Street, in Brockton, Massachusetts. This NOI is for the discharge anticipated to be generated during temporary groundwater dewatering activities associated with the excavation required for the foundation of a 4,384 square foot building, installation of a fuel dispenser area with a canopy structure, and installation of two 20,000 gallon compartmentalized (gasoline/diesel) underground storage tanks (USTs).

Groundwater Characterization
Depth to water at the site was gauged at depths of 5.34 to 7.09 feet below top of casing.
In preparation for groundwater dewatering activities, a representative groundwater sample was collected on June 21, 2019. The sample was submitted to Eurofins Spectrum Analytical of Agawam, MA for analysis of volatile organic compounds (VOCs) via EPA Methods 624 and 8260, polynuclear aromatic hydrocarbons (PAHs) and phenols via EPA Method 625 SIM, total PCBs via EPA Method 8082, total metals via EPA Method 200.7, Oil and Grease via EPA Method 1664A, chloride via EPA Method 4500, ammonia via EPA Method 350.1, cyanide via EPA Method 335.4, ethanol via EPA method 8015 and total suspended solids via Standard Method 2540D. Groundwater temperature (64 degrees F / 16.67 degrees C) and pH (7.0) were recorded in the field.

The groundwater sample collected during this sampling event indicated concentrations of total suspended solids, and total metals above the Appendix III permissible discharge limits.

A previous round of groundwater sampling at the site was performed in February 2018. This round of sampling was not intended to characterize groundwater for NPDES RGP permitting and was therefore analyzed by analytical methods outside of those accepted for such use. Results from this sampling round which were detected above laboratory detection limits are included in Attachment A, NOI under daily maximum influent values. Laboratory analytical reports are included in Attachment C. Please note that the sample collected on June 21, 2019 is expected to

be more representative of the groundwater planned to be dewatered, but previous sampling is included to be conservative.

Receiving Water Characterization

Treated effluent will be discharged via a catch basin on the Walmart parking lot access road that runs along the east side of the site. Discharge of the catch basin will occur through existing private storm sewer system into an unnamed wetland southwest of the site, directly on the other side of the Walmart access road. This area of wetland eventually discharges to Thirtyacre Pond, located to the southeast.

The owner of the private storm sewer system is being notified of the planned discharge. Permission is expected to be granted within approximately 2 weeks of the submittal of this application.

This area of wetland was sampled on June 21, 2019, at the point where water from the storm system enters the wetland. The surface water sample was submitted to Eurofins Spectrum Analytical of Agawam, MA for analysis of total metals via EPA Method 200.7, ammonia via EPA Method 350.1 and hardness via EPA Method 130.1. Receiving water analytical results are included as Attachment C. Temperature (64 degrees F / 17.78 degrees C) and pH (6.8) of the water in the wetland area were collected in the field.

Thirtyacre Pond is listed on the Massachusetts 303(d) list under Category 4c Waters – "Impairment not caused by a pollutant – TMDL not required."

Proposed Treatment System

A Design Flow treatment system discharge rate of 150 gallons per minute (gpm) was used to evaluate the applicable RGP discharge standards. Extracted water from the excavation activities will be initially pumped into up to two 21,000-gallon fractionation tanks.

Following settling, extracted groundwater will be treated by passage through (at minimum) 50-micron particle filters, and through liquid-phase reactive carbon vessels. The treatment system will include a resin ion-exchange unit for the removal of dissolved metals, and may also include an aeration system. Flow will be measured using an in-line flowmeter and totalizer prior to the discharge into a catchbasin and/or manhole connecting to the stormwater system on the Walmart property.

Kleinfelder anticipates that the dewatering system will operate from approximately August 19, 2019 through December 2019. A Work Plan for the groundwater extraction and treatment systems satisfying the requirements of Section 2.5 of the RGP will be available at the Site prior to initiating dewatering activities. See Attachment B, Figure 4 for a Treatment System Schematic.

Notice of Intent

Preparation of this NOI has included a review of the literature pertaining to Areas of Critical Environmental Concern, (ACECs), the Endangered Species Act, and the National Historic Preservation Act:

- Review of the Massachusetts Geographic Information Systems MassDEP Priority Resources Map (Figure 5) in Attachment B shows the Site is not within an ACEC.

- An “informal consultation” with the Fish and Wildlife Service resulted in a consistency letter stating that there are no threatened, endangered, candidate species, or critical habitats in the proposed construction area. See Attachment E for a copy of the Fish and Wildlife Consistency Letter.
- This work will not affect historical properties that are listed by the United States Park Service or Massachusetts Cultural Resources. The Massachusetts Historical Commission’s Massachusetts Cultural Resource Information System (MACRIS) listed 640 historic sites in Brockton. The closest is the Route 24 bridge over Oak Street, which is located approximately 100 feet from the northwest corner of the property. Based on the nature of dewatering activity and the expected drainage patterns, it is unlikely that the discharge will affect the bridge or any other federal or state-listed historical sites.

The proposed treatment system has been designed to reduce contaminants of concern below the applicable effluent limits. Effluent compliance monitoring will be conducted in compliance with the RGP. Additionally, the flow rate, pH, and temperature of the effluent will be monitoring in the field and recorded.

We appreciate your assistance in processing this Notice of Intent.

Should you have any questions regarding this correspondence, please do not hesitate to contact the undersigned at (617)497-7800.

Sincerely,
KLEINFELDER

Madeline Soule
Staff Professional II

Emily M. Straley
Project Manager

cc: Mr. Matthew Young, Cumberland Farms, Inc. (file)
cc: Megan Shave, Conservation Agent, Brockton Conservation Commission (electronic)
cc: Cathy Vakalopoulos, Massachusetts Department of Environmental Protection, Surface Water Discharge Permit Program, One Winter Street, 5th Floor, Boston, MA 02108

Attachment A – RGP NOI Form
Attachment B – Figures
Figure 1 – Locus Plan
Figure 2 – Site Plan and Proposed Construction
Figure 3 – NOI Map
Figure 4 – Treatment System Schematic
Figure 5 – MassDEP Priority Resource Map
Attachment C – Laboratory Analytical Data
Attachment D – Fish and Wildlife Consistency Letter
Attachment E – Massachusetts Cultural Resources in Vicinity of Site

ATTACHMENT A

RGP NOI Form

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

A. General site information:

<table>
<tr><td rowspan="4">1. Name of site:
Proposed Convenience Store and Fuel Station</td><td colspan="3">Site address: 710 Oak Street
Street:</td></tr>
<tr><td>City: Brockton</td><td>State: MA</td><td>Zip: 02301</td></tr>
<tr><td colspan="3">Contact Person: Matt Young (Cumberland Farms)</td></tr>
<tr><td colspan="3">Telephone: 508-270-4477 Email: myoung@cumberlandfarms.com</td></tr>
<tr><td rowspan="4">2. Site owner
Brockton Oak Street LLC
Under lease to Cumberland Farms, Inc.

Owner is (check one): ☐ Federal ☐ State/Tribal ■ Private
☐ Other; if so, specify:</td><td colspan="3">Mailing address: 165 Flanders Road
Street:</td></tr>
<tr><td>City: Westborough</td><td>State: MA</td><td>Zip: 01581</td></tr>
<tr><td colspan="3">Contact Person: Madeline Soule</td></tr>
<tr><td colspan="3">Telephone: 617-498-1679 Email: msoule@kleinfelder.com</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner
Kleinfelder, on behalf of Cumberland Farms</td><td colspan="3">Mailing address:
Street: One Beacon St, Suite 8100</td></tr>
<tr><td>City: Boston</td><td>State: MA</td><td>Zip: 02108</td></tr>
<tr><td colspan="3">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):
Unnamed wetland discharging to Thirtyacre Pond	MA62190	Class 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: Receiving water includes a wetland

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. Not listed

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.	Not available
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.	0 (no dilution)

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:

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: Suspended solids, inorganics, and non-halogenated SVOCs.	
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): Outlet to wetland	Outfall location(s): (Latitude, Longitude) 42°06'00.8"N 71°03'19.7"W
Discharges enter the receiving water(s) via (check any that apply): ☐ Direct discharge to the receiving water ■ Indirect discharge, if so, specify: Discharge to stormwater system which discharges into an unnamed wetland. Unnamed wetland drains to Thirtyacre Pond. ■ 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: 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): August 2019 to March 2020 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	E350.1	0.05		0.74	Report mg/L	---
Chloride		✔	1	4500	6.0		132	Report µg/l	---
Total Residual Chlorine	✔		1	4500	1.0		<1.0	0.2 mg/L	0.011 mg/L
Total Suspended Solids		✔	1	2540	17	1970	1200	30 mg/L	---
Antimony	✔		1	200.7	5		<5	206 µg/L	
Arsenic		✔	1	200.7/6010	4	5.95	<4	104 µg/L	
Cadmium		✔	1	200.7/6010	1	2.7	2	10.2 µg/L	0.2654µg/L
Chromium III		✔	1	200.7/6010	1	22.4	12	323 µg/L	
Chromium VI	✔		1	200.7	50		<50	323 µg/L	
Copper		✔	1	200.7	5		16	242 µg/L	9.1 µg/L
Iron		✔	1	200.7	100		43600	5,000 µg/L	1000 µg/L
Lead		✔	2	200.7/6010	2	22.9	9	160 µg/L	3.08 µg/L
Mercury	✔		1	200.7	0.2		<0.2	0.739 µg/L	
Nickel		✔	1	200.7	1		8	1,450 µg/L	
Selenium	✔		1	200.7	10		<10	235.8 µg/L	
Silver	✔		1	200.7	1		<1	35.1 µg/L	
Zinc		✔	1	200.7	4		55	420 µg/L	
Cyanide	✔		1	335.4	0.010		<0.010	178 mg/L	
B. Non-Halogenated VOCs									
Total BTEX	✔		1	624	<2.5		<2.5	100 µg/L	---
Benzene	✔		1	624	0.50		<0.50	5.0 µg/L	---
1,4 Dioxane	✔		1	8260	100		<100	200 µg/L	---
Acetone		✔	1	624/8260	5.0	31.0	<5.0	7.97 mg/L	---
Phenol	✔		1					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	4.4 µg/L	
1,2 Dichlorobenzene	✔		1	624	0.50		<0.50	600 µg/L	---
1,3 Dichlorobenzene	✔		1	624	0.50		<0.50	320 µg/L	---
1,4 Dichlorobenzene	✔		1	624	0.50		<0.50	5.0 µg/L	---
Total dichlorobenzene	✔		1	624	0.50		<0.50	763 µg/L in NH	---
1,1 Dichloroethane	✔		1	624	0.50		<0.50	70 µg/L	---
1,2 Dichloroethane	✔		1	624	0.50		<0.50	5.0 µg/L	---
1,1 Dichloroethylene	✔		1	624	0.50		<0.50	3.2 µg/L	---
Ethylene Dibromide	✔		1	8260	1.0		<1.0	0.05 µg/L	---
Methylene Chloride	✔		1	624	0.50		<0.50	4.6 µg/L	---
1,1,1 Trichloroethane	✔		1	624	0.50		<0.50	200 µg/L	---
1,1,2 Trichloroethane	✔		1	624	0.50		<0.50	5.0 µg/L	---
Trichloroethylene	✔		1	624	0.50		<0.50	5.0 µg/L	---
Tetrachloroethylene		✔	1	624/8260	0.50	1.06	<0.50	5.0 µg/L	
cis-1,2 Dichloroethylene	✔		1	624	0.50		<0.50	70 µg/L	---
Vinyl Chloride	✔		1	624	0.50		<0.50	2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates	✔		1	625				190 µg/L	
Diethylhexyl phthalate	✔		1	625				101 µg/L	
Total Group I PAHs	✔		1	625	0.52		<0.52	1.0 µg/L	---
Benzo(a)anthracene	✔		1	625	0.05		<0.05	As Total PAHs	
Benzo(a)pyrene	✔		1	625	0.10		<0.10		
Benzo(b)fluoranthene	✔		1	625	0.05		<0.05		
Benzo(k)fluoranthene	✔		1	625	0.10		<0.10		
Chrysene	✔		1	625	0.10		<0.10		
Dibenzo(a,h)anthracene	✔		1	625	0.02		<0.02		
Indeno(1,2,3-cd)pyrene	✔		1	625	0.10		<0.10		

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	0.85		<0.85	100 µg/L	---
Naphthalene		✔	1	625/8270	0.10	5.47	<0.10	20 µg/L	---
E. Halogenated SVOCs									
Total PCBs	✔		1	608	0.52		<4.68	0.000064 µg/L	---
Pentachlorophenol	✔		1	625				1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons		✔	1	1664/8100	1.6	3.2	<1.6	5.0 mg/L	---
Ethanol		✔	1	8015/8260	1.0	3.02	<1.0	Report mg/L	---
Methyl-tert-Butyl Ether	✔		1	8260	1.0		<1.0	70 µg/L	
tert-Butyl Alcohol	✔		1	624	10		<10	120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	✔		1	8260Oxy	1.0		<1.0	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	pH test	NA		7.0		
temperature			1	thermomet	NA		16.67		
hardness			1	E200.7	0.1		97.4		

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:

2. Provide a written description of all treatment system(s) or processes that will be applied to the effluent prior to discharge.
Water will be pumped into fractionation tanks, then through at minimum 50 micron bag filters, granular activated carbon units, and ion exchange resin unit. A flow meter will also be used.

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: TBD/pump Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	150
Provide the proposed maximum effluent flow in gpm.	150
Provide the average effluent flow in gpm.	50
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:

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

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

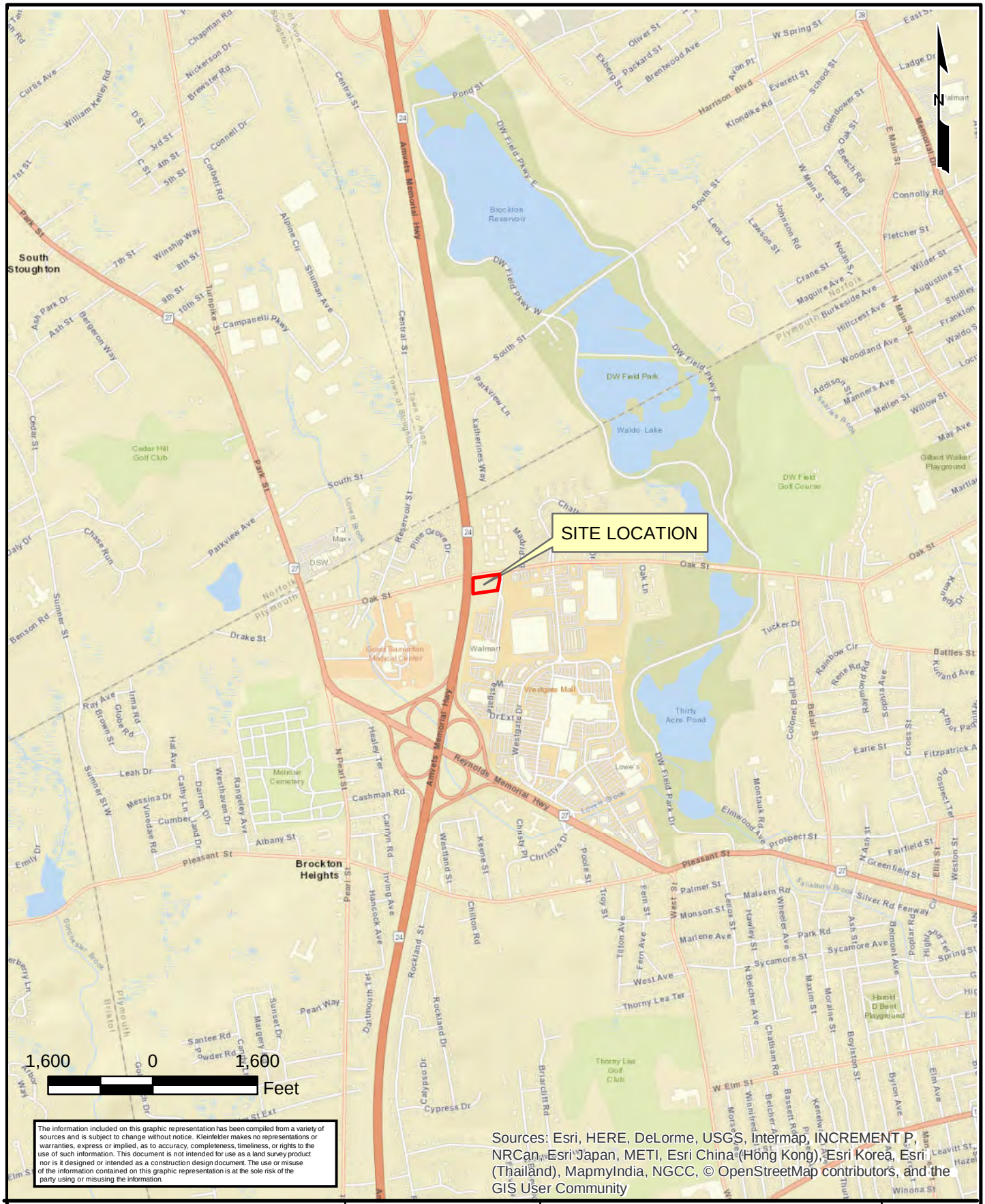
J. Certification requirement

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:	I certify that a BMPP meeting the requirements of this 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: 	Date: 7/19/19
Print Name and Title: Madeline Soule, Staff Professional II	

ATTACHMENT B

Figures



KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	MA8619
DRAWN:	FEB 2018
DRAWN BY:	ANG
CHECKED BY:	-----
FILE NAME:	MA8619_BROCKTON_LOC

SUBJECT PROPERTY
LOCATION MAP

CUMBERLAND FARMS INC. #MA8619
700 OAK STREET
BROCKTON, MASSACHUSETTS

FIGURE
1

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		PROPERTY LINE
		BUILDING SETBACK/ BUFFER
MAHW 10/A10		WETLAND LINE/FLAGS
		WETLAND/RESOURCE BUFFER
6		PARKING SPACES
2'R		CURB RADIUS
		ACCESSIBLE PAVEMENT MARKINGS
		RAMP UPSLOPE DIRECTION
		SIGN
		LIGHT
		UTILITY POLE
		FENCE
		WOODEN GUIDERAIL
		TREE LINE
		BUILDING COLUMN
		PAINTED ARROW
		DIRECTIONAL ARROW
		CONCRETE PAD/SIDEWALK
		BITUMINOUS CONCRETE
		ACCESSIBLE RAMP
I.P.		IRON PIPE/IRON PIN

GENERAL ABBREVIATIONS

ASSESSORS PARCEL	A.P.
BOTTOM OF CURB	BC
BITUMINOUS CONCRETE CURB	BCC
BITUMUNOUS CONCRETE	BIT. CONC
BOTTOM OF WALL	BW
CATCH BASIN	CB
CHAIN LINK FENCE	C.L.F.
CLEANOUT	CO
CONCRETE SURFACE	CONC
DRAIN MANHOLE	DMH
DOUBLE WALL FIBER GLASS	DWFG
DASHED WHITE LINE	DWL
DOUBLE YELLOW CENTERLINE	DYCL
EDGE OF PAVEMENT	EOP
EXTRUDED CONCRETE CURB	ECC
FINISHED FLOOR ELEVATION	FF=
FRONT YARD	FY
GRANITE CURB	GC
VERTICAL GRANITE CURB	VGC
SLOPED GRANITE CURB	SGC
GAS METER	GM
HIGH DENSITY POLYETHYLENE	HDPE
INVERT ELEVATION	I=
LINEAL FEET	LF
LANDSCAPED AREA	LA
MONOLITHIC CONCRETE CURB	MCC
MATCH EXISTING	ME
INVERT NOT AVAILABLE	N/A
NOW OR FORMERLY	N/F
ON CENTER	OC
PRECAST CONCRETE CURB	PCC
RIM ELEVATION	R=
ROOF DRAIN	RD
REMOVE	REM
REAR YARD	RY
SOLID WHITE EDGE LINE	SWEL
SOLID WHITE LINE	SWL
SIDE YARD	SY
SOLID YELLOW LINE	SYL
TOP OF CURB	TC
TOP OF WALL	TW
UTILITY POLE	UP

PARKING & LOADING INFORMATION

USE	REQUIRED	PROVIDED
PARKING: RETAIL STORES 1 SP/225 S.F. GFA; 4,384/225 = 19.5	20 SPACES	30 SPACES
LOADING: BUILDINGS MORE THAN 5,000 S.F. 1 SP 10'W x 40'L x 14'H	0 SPACES	1 SPACE

SITE LAYOUT NOTES

1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND EXTERIOR FEATURES INCLUDING UTILITY METERS, BOLLARDS, DOORS, PILASTERS, RAMPS, ETC.
2. ALL LIMITS OF PAVEMENT SHALL BE CURBED, UNLESS OTHERWISE NOTED.
3. ALL ONSITE CURB SHALL BE SLOPED GRANITE AND VERTICAL GRANITE AND OFFSITE CURB SHALL BE VERTICAL GRANITE, UNLESS OTHERWISE SPECIFIED. SLOPED GRANITE CURB SHALL MEET VERTICAL GRANITE CURB VIA A TRANSITIONAL CURB STONE INSTALLED FULLY WITHIN BITUMINOUS PAVEMENT LIMITS.
4. NON-ACCESSIBLE PARKING SPACE DIMENSIONS AS SHOWN ON THE PLAN ARE 10' WIDE x 20' LONG.
5. NON-ACCESSIBLE PAVEMENT MARKINGS AND STRIPING SHALL BE PAINTED WITH 2 COATS OF PAINT (WHITE OR YELLOW, SEE PLAN) PER FEDERAL SPECIFICATION TI-P-115 TYPE 1: ALKYD.
6. ON-SITE PAVEMENT LETTERS SHALL BE 2' WIDE X 2' LONG.
7. STOP BARS SHALL BE 12" WIDE AND SOLID/DASHED LINES SHALL BE 4" IN WIDTH (SEE SITE PLAN FOR LENGTH & COLOR).
8. ACCESSIBLE PARKING SPACES SHALL CONFORM TO THE LATEST EDITION OF THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND STATE SPECIFIC REQUIREMENTS AS SHOWN ON THE SITE LAYOUT PLAN.
9. DIAGONAL STRIPING SHALL CONSIST OF SOLID LINES ORIENTED AT A 45 DEGREE ANGLE AND SPACED 3' ON CENTER. ACCESSIBLE PARKING AISLE STRIPING SHALL BE AZURE BLUE AND OTHER DIAGONAL STRIPING SHALL BE THE COLOR NOTED ON THE PLANS.
10. DIRECTIONAL AND ACCESSIBLE SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR COLOR AND SIZE.
11. ACCESSIBLE RAMP LENGTHS MAY VARY. REFER TO SITE PLAN FOR ACTUAL DIMENSIONS.
12. ALL FLAT WORK WITHIN THE RIGHT OF WAY SHALL CONFORM TO MUNICIPAL/STATE STANDARDS.
13. SNOW SHALL NOT BE STORED IN ANY LANDSCAPED AREAS, EXCEPT FOR DESIGNATED SNOW STORAGE AREAS, AND SHALL NOT BE STORED IN ANY MANNER WHICH AFFECTS VISIBILITY FOR PEDESTRIANS AND VEHICLES. THE CLEARING OF SNOW MUST COMMENCE WHEN STOCKPILED SNOW EITHER IMPEDES THE SIDEWALK OR PARKING SPACE ACCESS, AT WHICH TIME, THE APPLICANT WOULD BE EXPECTED TO REMOVE THE SNOW.
14. REPLACEMENT PAVEMENT AS A RESULT OF UTILITY AND DRAINAGE TRENCHING WITHIN THE RIGHT-OF-WAY SHALL MATCH EXISTING PAVEMENT THICKNESS.
15. SITE LIGHTS SHALL BE INSTALLED PER DETAIL. CONTRACTOR SHALL NOTIFY THE ENGINEER IF THIS DISTANCE CANNOT BE ACHIEVED DUE TO DRAINAGE OR UTILITY CONFLICTS. REFER TO DETAILS FOR SITE LIGHT POLE BASE DETAILS AND SPECIFICATIONS.

ZONING INFORMATION

ZONING DISTRICT : GENERAL COMMERCIAL ZONE (C-2)

REGULATION	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA	15,000 SF (GAS STATIONS)	14.84± AC. (SITE)	2.09± AC. (CFI PARCEL)
MIN. LOT FRONTAGE	NONE	515.7'±	301.4'±
MIN. LOT DEPTH	NONE	1,349'±	261.6'±
MIN. FY SETBACK (BLDG)	NONE	NONE	125.3±
MIN. SY SETBACK (BLDG)	25' (GAS STATIONS)	NONE	110.9'±
MIN. RY SETBACK (BLDG)	20' (TO RES. ZONE)	NONE	65.9'± (CFI PARCEL)
MIN. FY SETBACK (CANOPY)	NONE	NONE	55.8'±
MIN. SY SETBACK (CANOPY)	25' (GAS STATIONS)	NONE	65.9'±
MIN. RY SETBACK (CANOPY)	10' (GAS STATIONS)	NONE	178.3'± (CFI PARCEL)
MIN. SETBACK (GAS PUMPS)	12'	NONE	65.3'±
MAX. BUILDING HEIGHT	5 STY/60 FT	1 STY	1 STY/ 34'±
MIN. GREEN SPACE	10%	100%± (CFI) 31%± (SITE)	48%± (CFI) 30%± (SITE)
MIN. INTERNAL LANDSCAPED OPEN SPACE FOR PARKING LOT	447± SF (2% OF 22,360 SF GROSS PARKING AREA)	N/A	2,189± SF (10%±)

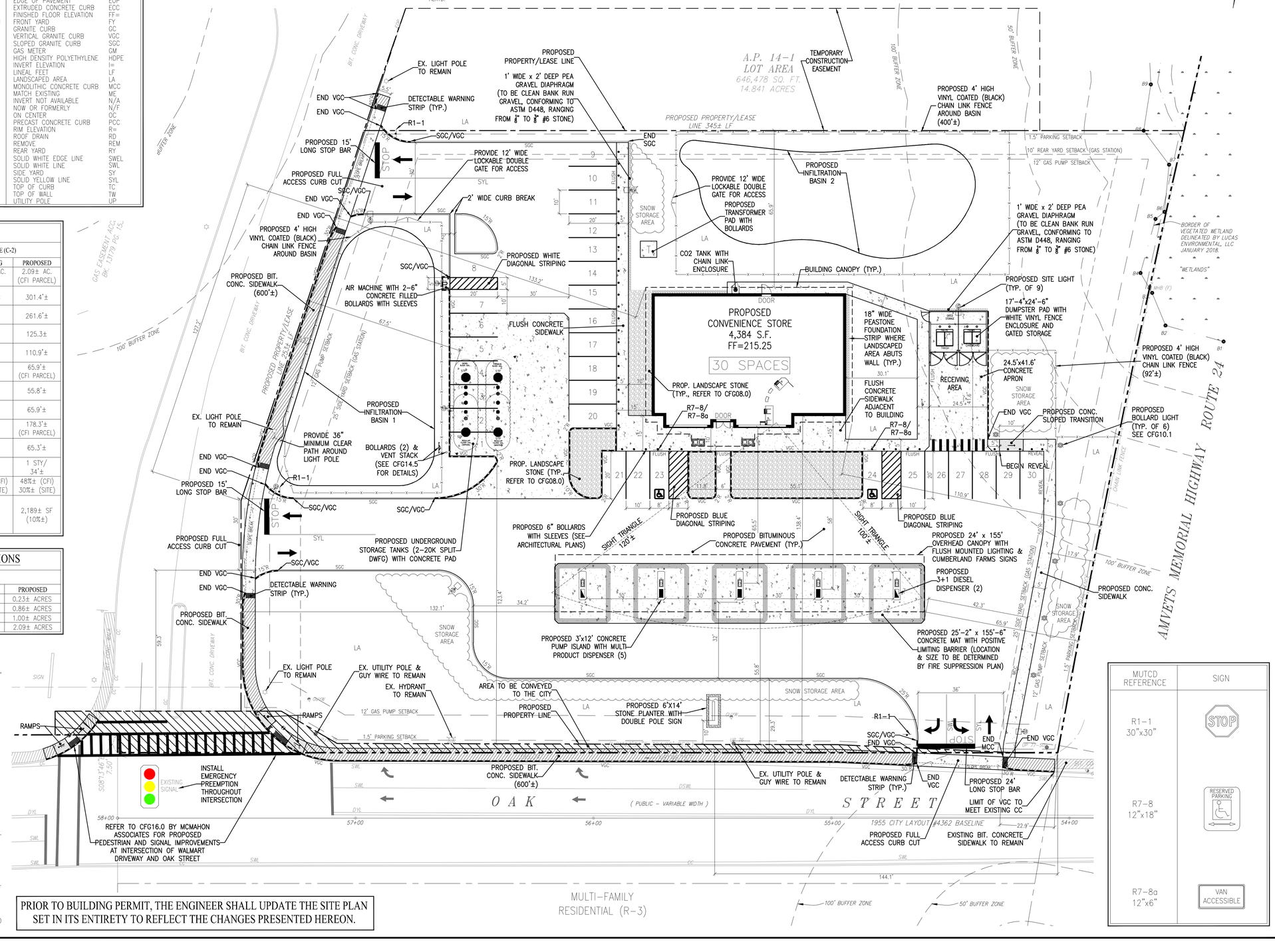
LAND COVERAGE CALCULATIONS

TOTAL AREA: 2.09± ACRES

COVER	EXISTING	PROPOSED
BUILDING/CANOPY	0.00± ACRES	0.23± ACRES
PAVEMENT	0.00± ACRES	0.86± ACRES
GRASS/PERVIOUS	2.09± ACRES	1.00± ACRES
TOTAL	2.09± ACRES	2.09± ACRES

GENERAL NOTES

1. ZONING INFORMATION OBTAINED FROM THE CITY OF BROCKTON ZONING BY-LAWS AS DOWNLOADED AUGUST 3, 2017.
2. THE PROJECT SITE INCLUDES A PROPOSED PARCEL AREA WITHIN ASSESSOR'S PARCEL 14-1, PROJECT AREA TOTALING 90,990± SF (2.09± ACRES).
3. THE PROJECT SITE LIES ENTIRELY WITHIN THE GENERAL COMMERCIAL (C-2) ZONING DISTRICT.
4. MODIFICATIONS TO THIS PLAN MAY OCCUR AS UNFORESEEN CONDITIONS ARISE. ALL CHANGES SHALL BE APPROVED BY THE ENGINEER.
5. ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE OWNER, SITE ENGINEER, AND APPROPRIATE REGULATORY AGENCY PRIOR TO INSTALLATION.
6. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, MATERIALS, AND PLANT SPECIFICATIONS TO THE OWNER AND SITE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.
7. THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE OWNER AT THE END OF THE CONSTRUCTION.
8. ALL DISTURBED OFF-SITE AREAS SHALL BE RESTORED TO PRE CONSTRUCTION CONDITION.



PRIOR TO BUILDING PERMIT, THE ENGINEER SHALL UPDATE THE SITE PLAN SET IN ITS ENTIRETY TO REFLECT THE CHANGES PRESENTED HEREON.

MUTCD REFERENCE	SIGN
R1-1 30"x30"	STOP
R7-8 12"x18"	RESERVED PARKING
R7-8a 12"x6"	VAN ACCESSIBLE

CONSTRUCTION PLANS

REVISIONS:

REV	DATE	COMMENT
1	11/13/18	REVISED PER TRC COMMENTS
2	12/05/18	90% PLANS
3	01/03/19	100% PLANS
4	05/13/19	REVISED TO 4,384 BUILDING
5	06/11/19	90% PLANS
6	06/14/19	100% PLANS

SCALE:
20 0 10 20 40
GRAPHIC SCALE IN FEET

DESIGNED BY: JBC
CHECK BY: MAL

SEAL:
COMMONWEALTH OF MASSACHUSETTS
MATTHEW A. LEIDNER
CIVIL
No. 45641
REGISTERED PROFESSIONAL ENGINEER
MATTHEW A. LEIDNER, P.E.

PREPARED FOR:
Cumberland FARMS
165 FLANDERS ROAD
WESTBOROUGH, MA 01581

T.M. CROWLEY & ASSOCIATES
501 PENNSYLVANIA PKWY, SUITE 160
INDIANAPOLIS, IN 46280

PROJECT:
710 OAK STREET
BROCKTON, MA 02301

NEW TO INDUSTRY
ORACLE # MA8619

PREPARED BY:
CIVIL DESIGN GROUP, LLC
21 HIGH STREET, SUITE 207
NORTH ANDOVER, MA 01845
www.cdgengineering.com
p: 978-794-5400 f: 978-965-3971

SHEET:
SITE PLAN
CFG04.0

CDG PROJECT #: 17062
DATE: 09/06/2018

U.S. Fish and Wildlife Service
National Wetlands Inventory

Figure 3 - NOI Plan

July 21, 2019

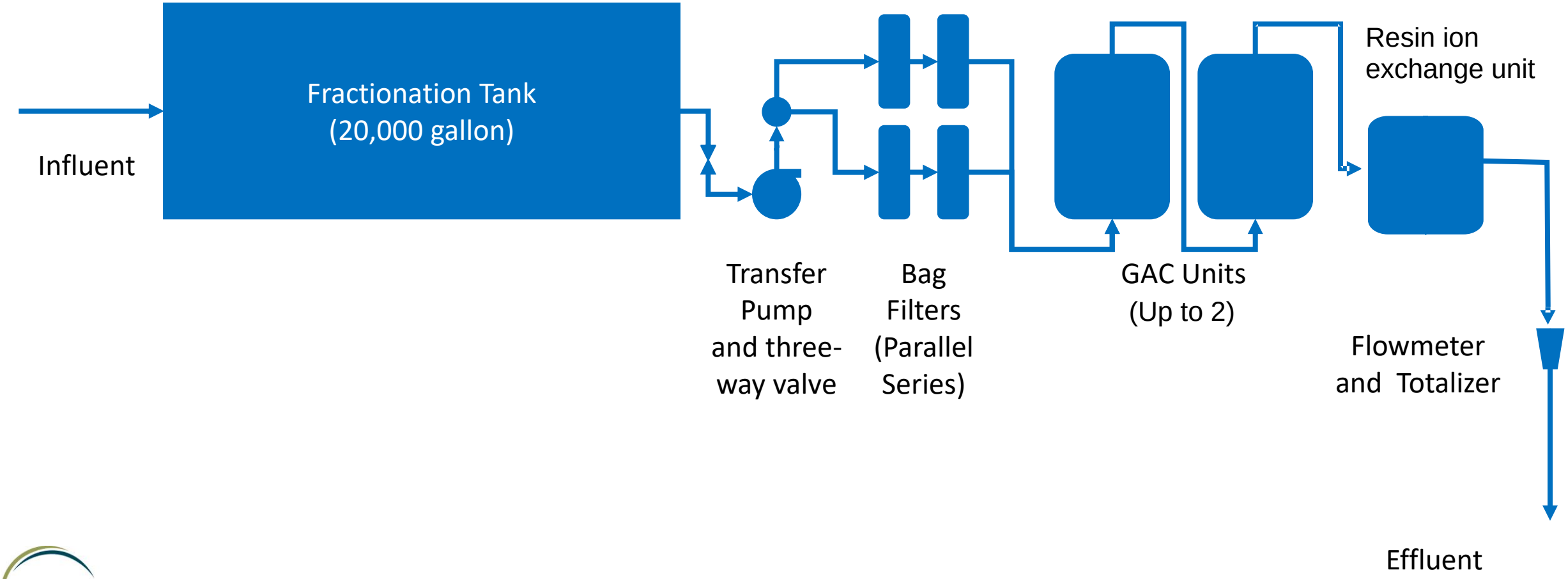
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Figure 4
Proposed Treatment System Schematic



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MassDEP - Bureau of Waste Site Cleanup

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

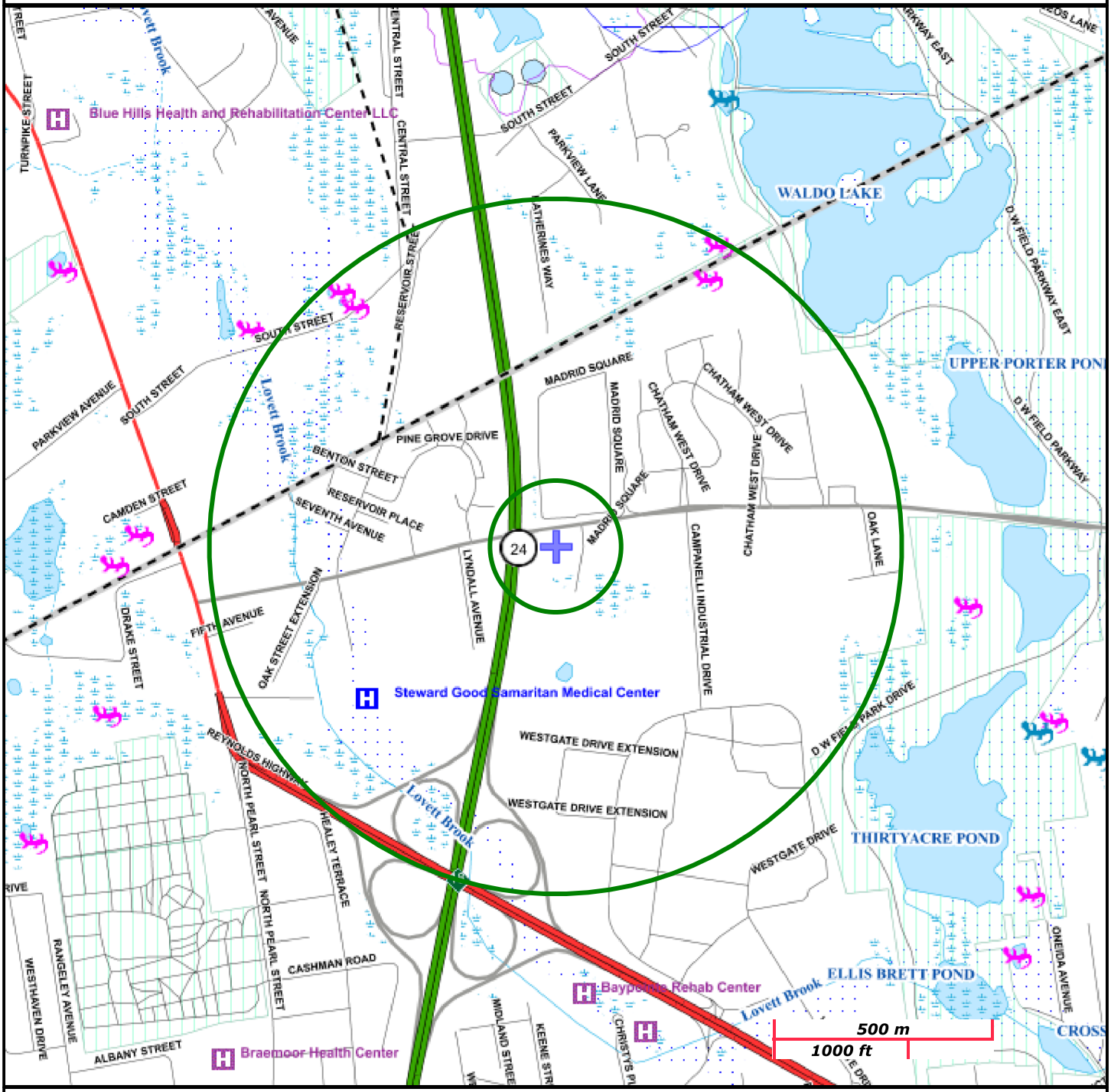
Site Information:

710 OAK STREET BROCKTON, MA

NAD83 UTM Meters:
4663026mN , 329957mE (Zone: 19)
July 23, 2019

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.

Figure 5 - MassDEP Priority Resource Map
710 Oak Street, Brockton, MA

ATTACHMENT C

Laboratory Analytical Data

eurofins | Spectrum Analytical

☑ Final Report
☐ Revised Report

Report Date:
10-Jul-19 15:16

Laboratory Report
SC55304

Kleinfelder, Inc.
4 Technology Drive, Suite 110
Westborough, MA 01851
Attn: Emily Straley

Project: CFI - 710 Oak Street - Brockton, MA
Project #: CFI Brockton MA8619

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

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

Authorized by:

Dawn Wojcik
Laboratory Director

Dawn E Wojcik

Eurofins Spectrum Analytical holds primary 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 21 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: SC55304

Project: CFI - 710 Oak Street - Brockton, MA

Project Number: CFI Brockton MA8619

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC55304-01	MW-1	Ground Water	21-Jun-19 11:25	21-Jun-19 17:15

CASE NARRATIVE:

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

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

The samples were received 1.0 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.

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

VOA Narration

CHEM23 06/24/19-2: CD40522
The following Initial Calibration compounds did not meet RSD% criteria: Carbon tetrachloride 23% (20%), Methylene chloride 30% (20%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.
Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

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

Calculation

Samples:

SC55304-01 *MW-1*

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

Trivalent Chromium

E335.4

Blanks:

CD39799-BLK

Cyanide blank spike recovery was 103 %.

Total Cyanide

Laboratory Control Samples:

CD39799-LCS

Cyanide blank spike recovery was 103 %.

Total Cyanide

E625.1 SIM

Laboratory Control Samples:

484843A BSD

% Terphenyl-d14 RPD 28.1% (20%) is outside individual acceptance criteria.

Benz(a)anthracene RPD 23.3% (20%) is outside individual acceptance criteria.

Benzo(a)pyrene RPD 33.3% (20%) is outside individual acceptance criteria.

E625.1 SIM

Laboratory Control Samples:

484843A BSD

Benzo(b)fluoranthene RPD 30.5% (20%) is outside individual acceptance criteria.

Benzo(ghi)perylene RPD 37.6% (20%) is outside individual acceptance criteria.

Benzo(k)fluoranthene RPD 35.7% (20%) is outside individual acceptance criteria.

Chrysene RPD 24.1% (20%) is outside individual acceptance criteria.

Dibenz(a,h)anthracene RPD 40.0% (20%) is outside individual acceptance criteria.

Fluoranthene RPD 21.1% (20%) is outside individual acceptance criteria.

Indeno(1,2,3-cd)pyrene RPD 36.8% (20%) is outside individual acceptance criteria.

Pyrene RPD 20.5% (20%) is outside individual acceptance criteria.

CD39378-LCS

This parameter is outside laboratory rpd specified recovery limits.

% Terphenyl-d14
Benz(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(ghi)perylene
Benzo(k)fluoranthene
Chrysene
Dibenz(a,h)anthracene
Fluoranthene
Indeno(1,2,3-cd)pyrene

CD39378-LCSD

This parameter is outside laboratory rpd specified recovery limits.

% Terphenyl-d14
Benz(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(ghi)perylene
Benzo(k)fluoranthene
Chrysene
Dibenz(a,h)anthracene
Fluoranthene
Indeno(1,2,3-cd)pyrene

Samples:

SC55304-01 *MW-1*

This parameter exceeds laboratory limits.

% Terphenyl-d14

SM3500-Cr-B (11)/7196A

Samples:

SM3500-Cr-B (11)/7196A

Samples:

SC55304-01 *MW-1*

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

Hexavalent Chromium

SM4500-Cl-G (11)

Spikes:

1900862-MS1 *Source: SC55304-01*

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.

Total Residual Chlorine

1900862-MSD1 *Source: SC55304-01*

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.

Total Residual Chlorine

Samples:

SC55304-01 *MW-1*

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.

Total Residual Chlorine

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

Total Residual Chlorine

SW8015D

Blanks:

CD40506-BLK

The MS/MSD was not reported due to matrix interference.

Ethanol

Laboratory Control Samples:

CD40506-LCS

The MS/MSD was not reported due to matrix interference.

Ethanol

CD40506-LCSD

The MS/MSD was not reported due to matrix interference.

Ethanol

This parameter is outside laboratory lcs/lcsd specified recovery limits.

Ethanol

Sample Acceptance Check Form

Client:	Kleinfelder, Inc. - Westborough, MA
Project:	CFI - 710 Oak Street - Brockton, MA / CFI Brockton MA8619
Work Order:	SC55304
Sample(s) received on:	6/21/2019

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

	Yes	No	N/A
Were custody seals present?	☐	☑	☐
Were custody seals intact?	☐	☐	☑
Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
Were samples cooled on ice upon transfer to laboratory representative?	☐	☑	☐
Were samples refrigerated 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: SC55304-01 **Client ID:** MW-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Cadmium	0.002		0.001	mg/l	E200.7
Chromium	0.012		0.001	mg/l	E200.7
Copper	0.016		0.005	mg/l	E200.7
Lead	0.009		0.002	mg/l	E200.7
Nickel	0.008		0.001	mg/l	E200.7
Zinc	0.055		0.004	mg/l	E200.7
Ammonia as Nitrogen	0.74		0.05	mg/l	E350.1
Total Suspended Solids	1200		17	mg/l	SM2540D-11
Chloride	132		6.0	mg/l	SM4500CLE

Lab ID: SC55304-01RE1 **Client ID:** MW-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron	43.6		0.10	mg/l	E200.7

Lab ID: SC55304-01RE2 **Client ID:** MW-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Hardness (CaCO3)	97.4		0.1	mg/l	E200.7

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

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SC55304-01	CFI Brockton MA8619	Ground Water	21-Jun-19 11:25	21-Jun-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
General Chemistry Parameters													
16065-83-1	Trivalent Chromium	< 0.0500	R01	mg/l	0.0500		1	Calculation	21-Jun-19	08-Jul-19	EDT	1900860	
7782-50-5	Total Residual Chlorine	< 1.00	ClHT, R01, D,ClHT	mg/l	1.00	0.218	50	SM4500-Cl-G (11)	21-Jun-19 17:45	21-Jun-19 18:23	ABW	1900862	X
18540-29-9	Hexavalent Chromium	< 0.050	R01, D	mg/l	0.050	0.041	10	SM3500-Cr-B (11)/7196A	21-Jun-19 16:30	21-Jun-19 17:53	ABW	1900860	
Subcontracted Analyses													
Prepared by method E1664A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
	O&G, Non-polar Material	< 1.6		mg/l	1.6	1.6	1.1	E1664A	25-Jun-19 07:57	25-Jun-19 07:57	M-CT007	484902A	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7440-36-0	Antimony	< 0.005		mg/l	0.005	0.005	1	E200.7	24-Jun-19	25-Jun-19 20:47	M-CT007	484835A	
7440-38-2	Arsenic	< 0.004		mg/l	0.004	0.004	1	"	"	"	"	"	
7440-43-9	Cadmium	**0.002**		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-47-3	Chromium	**0.012**		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-50-8	Copper	**0.016**		mg/l	0.005	0.005	1	"	"	"	"	"	
7439-92-1	Lead	**0.009**		mg/l	0.002	0.002	1	"	"	"	"	"	
7440-02-0	Nickel	**0.008**		mg/l	0.001	0.001	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.010		mg/l	0.010	0.010	1	"	"	"	"	"	
7440-22-4	Silver	< 0.001		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-66-6	Zinc	**0.055**		mg/l	0.004	0.004	1	"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
7439-89-6	Iron	**43.6**		mg/l	0.10	0.10	10	E200.7	24-Jun-19	26-Jun-19 19:37	M-CT007	484835A	
Re-analysis of Subcontracted Analyses													
	Hardness (CaCO3)	**97.4**		mg/l	0.1	0.1	1	E200.7	28-Jun-19 10:35	28-Jun-19 10:35	M-CT007	484835A	
Prepared by method SW7470A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7439-97-6	Mercury	< 0.0002		mg/l	0.0002	0.0002	1	E245.1	25-Jun-19	25-Jun-19 12:58	M-CT007	484923A	
Prepared by method SW9012B													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
57-12-5	Total Cyanide	< 0.010		mg/l	0.010	0.010	1	E335.4	26-Jun-19	27-Jun-19 12:20	M-CT007	485227A	
Prepared by method E350.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7664-41-7	Ammonia as Nitrogen	**0.74**		mg/l	0.05	0.05	1	E350.1	25-Jun-19 09:57	25-Jun-19 09:57	M-CT007	484858A	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
12674-11-2	PCB-1016	< 0.52		ug/l	0.52	0.52	1	E608	24-Jun-19	25-Jun-19 20:53	M-CT007	484864A	
11104-28-2	PCB-1221	< 0.52		ug/l	0.52	0.52	1	"	"	"	"	"	
11141-16-5	PCB-1232	< 0.52		ug/l	0.52	0.52	1	"	"	"	"	"	
53469-21-9	PCB-1242	< 0.52		ug/l	0.52	0.52	1	"	"	"	"	"	
12672-29-6	PCB-1248	< 0.52		ug/l	0.52	0.52	1	"	"	"	"	"	
11097-69-1	PCB-1254	< 0.52		ug/l	0.52	0.52	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1	CFI Brockton	Ground Water	21-Jun-19 11:25	21-Jun-19
SC55304-01	MA8619			

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
11096-82-5	PCB-1260	< 0.52		ug/l	0.52	0.52	1	E608	24-Jun-19	25-Jun-19 20:53	M-CT007	484864A	
37324-23-5	PCB-1262	< 0.52		ug/l	0.52	0.52	1	"	"	"	"	"	
11100-14-4	PCB-1268	< 0.52		ug/l	0.52	0.52	1	"	"	"	"	"	
Surrogate recoveries:													
2051-24-3	*% DCBP*	*106*			*30-150 %*			"	"	"	"	"	
877-09-8	*% TCMX*	*91*			*30-150 %*			"	"	"	"	"	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
71-55-6	1,1,1-Trichloroethane	< 0.50		ug/l	0.50	0.50	1	E624.1	24-Jun-19 16:16	24-Jun-19 20:20	M-CT007	484944A	
79-00-5	1,1,2-Trichloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
71-43-2	Benzene	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
179601-23-1	m&p-Xylene	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
95-47-6	o-Xylene	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
108-88-3	Toluene	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
Surrogate recoveries:													
2199-69-1	*% 1,2-dichlorobenzene-d4*	*101*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*93*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*99*			*70-130 %*			"	"	"	"	"	
2037-26-5	*% Toluene-d8*	*103*			*70-130 %*			"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
75-65-0	Tert-butyl alcohol	< 10		ug/l	10	10	1	E624.1	24-Jun-19 20:20	24-Jun-19 20:20	M-CT007	484943A	
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
67-64-1	Acetone	< 5.0		ug/l	5.0	5.0	1	E624.1/SW8260 C	24-Jun-19 20:20	24-Jun-19 20:20	M-CT007	484943B	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
91-57-6	2-Methylnaphthalene	< 0.10		ug/l	0.10	0.10	1	E625.1 SIM	24-Jun-19	25-Jun-19 15:37	M-CT007	484843A	
83-32-9	Acenaphthene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SC55304-01	CFI Brockton MA8619	Ground Water	21-Jun-19 11:25	21-Jun-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
208-96-8	Acenaphthylene	< 0.10		ug/l	0.10	0.10	1	E625.1 SIM	24-Jun-19	25-Jun-19 15:37	M-CT007	484843A	
120-12-7	Anthracene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
56-55-3	Benz(a)anthracene	< 0.05		ug/l	0.05	0.05	1	"	"	"	"	"	
50-32-8	Benzo(a)pyrene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
205-99-2	Benzo(b)fluoranthene	< 0.05		ug/l	0.05	0.05	1	"	"	"	"	"	
191-24-2	Benzo(ghi)perylene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
218-01-9	Chrysene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
53-70-3	Dibenz(a,h)anthracene	< 0.02		ug/l	0.02	0.02	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
86-73-7	Fluorene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
91-20-3	Naphthalene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 0.05		ug/l	0.05	0.05	1	"	"	"	"	"	
129-00-0	Pyrene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
Surrogate recoveries:													
321-60-8	*% 2-Fluorobiphenyl*	*45*			*30-130 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*40*			*30-130 %*			"	"	"	"	"	
98904-43-9	*% Terphenyl-d14*	*23*	*		*30-130 %*			"	"	"	"	"	
Prepared by method SM2540D-11													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
	Total Suspended Solids	**1,200**		mg/l	17	17	3.3	SM2540D-11	24-Jun-19 13:27	24-Jun-19 13:27	M-CT007	484800A	
Prepared by method SM4500CLE													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
16887-00-6	Chloride	**132**		mg/l	6.0	6.0	2	SM4500CLE	26-Jun-19 02:26	26-Jun-19 02:26	M-CT007	485404A	
Prepared by method SW8015D													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
64-17-5	Ethanol	< 1.0		mg/l	1.0	1.0	1	SW8015D	25-Jun-19	26-Jun-19 01:30	M-CT007	485037A	
Subcontracted Analyses													
Prepared by method SW8260C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
106-93-4	1,2-Dibromoethane	< 1.0		ug/l	1.0	1.0	1	SW8260C	24-Jun-19 16:16	24-Jun-19 20:20	M-CT007	484943C	
123-91-1	1,4-dioxane	< 100		ug/l	100	100	1	"	"	"	"	"	
67-64-1	Acetone	< 25		ug/l	25	25	1	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	
Surrogate recoveries:													
2199-69-1	*% 1,2-dichlorobenzene-d4*	*101*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*93*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*99*			*70-130 %*			"	"	"	"	"	
2037-26-5	*% Toluene-d8*	*103*			*70-130 %*			"	"	"	"	"	
Subcontracted Analyses													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SC55304-01	CFI Brockton MA8619	Ground Water	21-Jun-19 11:25	21-Jun-19

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW8260C (OXY)													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
123-91-1	1,4-Dioxane	< 100		ug/l	100	100	1	SW8260C (OXY)	24-Jun-19 16:16	24-Jun-19 20:20	M-CT007	484943D	
994-05-8	tert-amyl methyl ether	< 1.0		ug/l	1.0	1.0	1	"	"	"	"	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SM3500-Cr-B (11)/7196A										
Batch 1900860 - General Preparation										
Blank (1900860-BLK1)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	< 0.005		mg/l	0.005						
LCS (1900860-BS1)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.049**		mg/l	0.005	0.0500		98	90-111		
Calibration Blank (1900860-CCB1)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.001**		mg/l							
Calibration Blank (1900860-CCB2)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.001**		mg/l							
Calibration Blank (1900860-CCB3)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.0008**		mg/l							
Calibration Check (1900860-CCV1)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.049**		mg/l	0.005	0.0500		98	90-110		
Calibration Check (1900860-CCV2)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.049**		mg/l	0.005	0.0500		97	90-110		
Calibration Check (1900860-CCV3)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.048**		mg/l	0.005	0.0500		97	90-110		
MRL Check (1900860-MRL1)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.021**		mg/l	0.005	0.0200		103	70-130		
MRL Check (1900860-MRL2)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.020**		mg/l	0.005	0.0200		100	70-130		
Reference (1900860-SRM1)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.069**		mg/l	0.005	0.0742		93	83.3-116		
SM4500-Cl-G (11)										
Batch 1900862 - General Preparation										
Blank (1900862-BLK1)						Prepared & Analyzed: 21-Jun-19				
Total Residual Chlorine	< 0.020		mg/l	0.020						
LCS (1900862-BS1)						Prepared & Analyzed: 21-Jun-19				
Total Residual Chlorine	**0.046**		mg/l	0.020	0.0500		92	90-110		
Calibration Blank (1900862-CCB1)						Prepared & Analyzed: 21-Jun-19				
Total Residual Chlorine	**0.001**		mg/l							
Calibration Blank (1900862-CCB2)						Prepared & Analyzed: 21-Jun-19				
Total Residual Chlorine	**0.001**		mg/l							
Calibration Check (1900862-CCV1)						Prepared & Analyzed: 21-Jun-19				
Total Residual Chlorine	**0.046**		mg/l	0.020	0.0500		93	90-110		
Calibration Check (1900862-CCV2)						Prepared & Analyzed: 21-Jun-19				
Total Residual Chlorine	**0.046**		mg/l	0.020	0.0500		92	90-110		
Duplicate (1900862-DUP1)			**Source: SC55304-01**			Prepared & Analyzed: 21-Jun-19				
Total Residual Chlorine	< 1.00	D	mg/l	1.00		BRL				20
MRL Check (1900862-MRL1)						Prepared & Analyzed: 21-Jun-19				
Total Residual Chlorine	**0.020**		mg/l	0.020	0.0200		98	70-130		
Matrix Spike (1900862-MS1)			**Source: SC55304-01**			Prepared & Analyzed: 21-Jun-19				
Total Residual Chlorine	< 1.00	QM5, D	mg/l	1.00	0.0500	BRL	<1	80-120		
Matrix Spike Dup (1900862-MSD1)			**Source: SC55304-01**			Prepared & Analyzed: 21-Jun-19				
Total Residual Chlorine	< 1.00	QM5, D	mg/l	1.00	0.0500	BRL	<1	80-120		200
Reference (1900862-SRM1)						Prepared & Analyzed: 21-Jun-19				
Total Residual Chlorine	**0.116**		mg/l	0.020	0.112		104	90-110		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E1664A										
Batch 484902A - E1664A										
Blank (CD40551-BLK)						Prepared & Analyzed: 25-Jun-19				
O&G, Non-polar Material	< 1.4		mg/l	1.4	20		BRL	-		
LCS (CD40551-LCS)						Prepared & Analyzed: 25-Jun-19				
O&G, Non-polar Material	**19.00**		mg/l	1.4	20		95	85-115		20
LCS Dup (CD40551-LCSD)			**Source: CD40551-LCS**			Prepared & Analyzed: 25-Jun-19				
O&G, Non-polar Material	**18.30**		mg/l	1.4	20		92	85-115	3.2	20
E200.7										
Batch 484835A - 200.7										
Blank (CD38685-BLK)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Copper	< 0.005		mg/l	0.005			BRL	-		
Zinc	< 0.004		mg/l	0.004			BRL	-		
Silver	< 0.001		mg/l	0.001			BRL	-		
Selenium	< 0.010		mg/l	0.010			BRL	-		
Nickel	< 0.001		mg/l	0.001			BRL	-		
Iron	< 0.010		mg/l	0.010			BRL	-		
Chromium	< 0.001		mg/l	0.001			BRL	-		
Cadmium	< 0.001		mg/l	0.001			BRL	-		
Arsenic	< 0.004		mg/l	0.004			BRL	-		
Antimony	< 0.005		mg/l	0.005			BRL	-		
Lead	< 0.002		mg/l	0.002			BRL	-		
LCS (CD38685-LCS)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Lead	**2.090**		mg/l	0.002	2		105	75-125		20
Zinc	**1.024**		mg/l	0.004	1		102	75-125		20
Silver	**0.2511**		mg/l	0.001	0.25		100	75-125		20
Selenium	**0.9777**		mg/l	0.010	1		97.8	75-125		20
Nickel	**1.061**		mg/l	0.001	1		106	75-125		20
Copper	**1.023**		mg/l	0.005	1		102	75-125		20
Chromium	**1.063**		mg/l	0.001	1		106	75-125		20
Cadmium	**1.051**		mg/l	0.001	1		105	75-125		20
Arsenic	**2.053**		mg/l	0.004	2		103	75-125		20
Antimony	**2.178**		mg/l	0.005	2		109	75-125		20
Iron	**1.066**		mg/l	0.010	1		107	75-125		20
LCS Dup (CD38685-LCSD)			**Source: CD38685-LCS**			Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Silver	**0.2407**		mg/l	0.001	0.25		96.3	75-125	3.8	20
Zinc	**0.9767**		mg/l	0.004	1		97.7	75-125	4.3	20
Selenium	**0.9291**		mg/l	0.010	1		92.9	75-125	5.1	20
Nickel	**1.010**		mg/l	0.001	1		101	75-125	4.8	20
Lead	**2.000**		mg/l	0.002	2		100	75-125	4.9	20
Copper	**0.9981**		mg/l	0.005	1		99.8	75-125	2.2	20
Chromium	**1.007**		mg/l	0.001	1		101	75-125	4.8	20
Cadmium	**0.9989**		mg/l	0.001	1		99.9	75-125	5.0	20
Arsenic	**1.942**		mg/l	0.004	2		97.1	75-125	5.9	20
Antimony	**2.065**		mg/l	0.005	2		103	75-125	5.7	20
Iron	**1.015**		mg/l	0.010	1		102	75-125	4.8	20
E245.1										
Batch 484923A - SW7470A										
Blank (CD40630-BLK)						Prepared & Analyzed: 25-Jun-19				
Mercury	< 0.0002		mg/l	0.0002			BRL	-		
LCS (CD40630-LCS)						Prepared & Analyzed: 25-Jun-19				
Mercury	**0.002442**		mg/l	0.0002	0.0025		97.7	75-125		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E335.4										
Batch 485227A - SW9012B										
Blank (CD39799-BLK)						Prepared: 26-Jun-19 Analyzed: 27-Jun-19				
Total Cyanide	< 0.010	c9	mg/l	0.010			BRL	-		
LCS (CD39799-LCS)						Prepared: 26-Jun-19 Analyzed: 27-Jun-19				
Total Cyanide	**0.4070**	c9	mg/l	0.010	0.429		94.9	90-110		30
E350.1										
Batch 484858A - E350.1										
Blank (CD39689-BLK)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Ammonia as Nitrogen	< 0.05		mg/l	0.05			BRL	-		
LCS (CD39689-LCS)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Ammonia as Nitrogen	**4.900**		mg/l	0.05	4.72		104	90-110		20
E608										
Batch 484864A - SW3510C										
Blank (CD38736-BLK)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
PCB-1260	**ND**		ug/l	0.25			ND	-		
PCB-1268	**ND**		ug/l	0.25			ND	-		
PCB-1262	**ND**		ug/l	0.25			ND	-		
PCB-1016	**ND**		ug/l	0.25			ND	-		
PCB-1221	**ND**		ug/l	0.25			ND	-		
PCB-1232	**ND**		ug/l	0.25			ND	-		
PCB-1242	**ND**		ug/l	0.25			ND	-		
PCB-1248	**ND**		ug/l	0.25			ND	-		
PCB-1254	**ND**		ug/l	0.25			ND	-		
Surrogate: % DCBP	*105*		ug/l		*40*		*105*	*30-150*		
Surrogate: % TCMX	*92*		ug/l		*40*		*92*	*30-150*		
LCS (CD38736-LCS)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
PCB-1248	**ND**		ug/l	0.25	500			40-140		20
PCB-1268	**ND**		ug/l	0.25	500			40-140		20
PCB-1262	**ND**		ug/l	0.25				40-140		20
PCB-1254	**ND**		ug/l	0.25	500			40-140		20
PCB-1242	**ND**		ug/l	0.25	500			40-140		20
PCB-1232	**ND**		ug/l	0.25	500			40-140		20
PCB-1221	**ND**		ug/l	0.25	500			40-140		20
PCB-1016	**398.6**		ug/l	0.25	500		80	40-140		20
PCB-1260	**427.4**		ug/l	0.25	500		85	40-140		20
Surrogate: % TCMX	*30.73*		ug/l		*40*		*77*	*30-150*		
Surrogate: % DCBP	*37.39*		ug/l		*40*		*93*	*30-150*		
LCS Dup (CD38736-LCSD)			**Source: CD38736-LCS**			Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
PCB-1262	**ND**		ug/l	0.25				40-140		20
PCB-1248	**ND**		ug/l	0.25				40-140		20
PCB-1268	**ND**		ug/l	0.25				40-140		20
PCB-1260	**517.6**		ug/l	0.25	625		83	40-140	2.4	20
PCB-1254	**ND**		ug/l	0.25				40-140		20
PCB-1232	**ND**		ug/l	0.25				40-140		20
PCB-1221	**ND**		ug/l	0.25				40-140		20
PCB-1016	**493.1**		ug/l	0.25	625		79	40-140	1.3	20
PCB-1242	**ND**		ug/l	0.25				40-140		20
Surrogate: % TCMX	*39.44*		ug/l		*50*		*79*	*30-150*		
Surrogate: % DCBP	*41.46*		ug/l		*50*		*83*	*30-150*		
E624.1										

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E624.1										
Batch 484943A - E624.1										
Blank (CD39578-BLK)						Prepared & Analyzed: 24-Jun-19				
Tert-butyl alcohol	**ND**		ug/l	10			ND	-		
LCS (CD39578-LCS)						Prepared & Analyzed: 24-Jun-19				
Tert-butyl alcohol	**179.4**		ug/l	10	200		90	70-130		30
LCS Dup (CD39578-LCSD)			**Source: CD39578-LCS**			Prepared & Analyzed: 24-Jun-19				
Tert-butyl alcohol	**173.2**		ug/l	10	200		87	70-130	3.4	30
Batch 484944A - E624.1										
Blank (CD40986-BLK)						Prepared & Analyzed: 24-Jun-19				
Carbon tetrachloride	**ND**		ug/l	1.0			ND	-		
Chlorobenzene	**ND**		ug/l	1.0			ND	-		
cis-1,2-Dichloroethene	**ND**		ug/l	1.0			ND	-		
Benzene	**ND**		ug/l	0.70			ND	-		
m&p-Xylene	**ND**		ug/l	1.0			ND	-		
1,1-Dichloroethane	**ND**		ug/l	1.0			ND	-		
Methylene chloride	**ND**		ug/l	1.0			ND	-		
o-Xylene	**ND**		ug/l	1.0			ND	-		
Ethylbenzene	**ND**		ug/l	1.0			ND	-		
1,4-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
1,3-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
1,2-Dichloroethane	**ND**		ug/l	1.0			ND	-		
1,1-Dichloroethene	**ND**		ug/l	1.0			ND	-		
1,1,2-Trichloroethane	**ND**		ug/l	1.0			ND	-		
Toluene	**ND**		ug/l	1.0			ND	-		
Trichloroethene	**ND**		ug/l	1.0			ND	-		
Vinyl chloride	**ND**		ug/l	1.0			ND	-		
Tetrachloroethene	**ND**		ug/l	1.0			ND	-		
1,1,1-Trichloroethane	**ND**		ug/l	1.0			ND	-		
1,2-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
Surrogate: % Dibromofluoromethane	*100*		ug/l		*30*		*100*	*70-130*		
Surrogate: % Bromofluorobenzene	*93*		ug/l		*30*		*93*	*70-130*		
Surrogate: % 1,2-dichlorobenzene-d4	*102*		ug/l		*30*		*102*	*70-130*		
Surrogate: % Toluene-d8	*102*		ug/l		*30*		*102*	*70-130*		
LCS (CD40986-LCS)						Prepared & Analyzed: 24-Jun-19				
1,2-Dichlorobenzene	**18.85**		ug/l	1.0	20		94	65-135		20
1,1,1-Trichloroethane	**19.56**		ug/l	1.0	20		98	70-130		20
1,1,2-Trichloroethane	**19.91**		ug/l	1.0	20		100	70-130		20
1,1-Dichloroethane	**19.92**		ug/l	1.0	20		100	70-130		20
1,2-Dichloroethane	**19.96**		ug/l	1.0	20		100	70-130		20
o-Xylene	**20.18**		ug/l	1.0	20		101	70-130		30
1,3-Dichlorobenzene	**19.03**		ug/l	1.0	20		95	70-130		20
Vinyl chloride	**22.78**		ug/l	1.0	20		114	10-195		20
Trichloroethene	**19.31**		ug/l	1.0	20		97	65-135		20
Tetrachloroethene	**20.05**		ug/l	1.0	20		100	70-130		20
Methylene chloride	**18.29**		ug/l	1.0	20		91	60-140		20
m&p-Xylene	**40.38**		ug/l	1.0	40		101	70-130		30
Ethylbenzene	**19.54**		ug/l	1.0	20		98	60-140		20
1,4-Dichlorobenzene	**18.57**		ug/l	1.0	20		93	65-135		20
Toluene	**19.37**		ug/l	1.0	20		97	70-130		20
1,1-Dichloroethene	**21.17**		ug/l	1.0	20		106	50-150		20
Benzene	**19.51**		ug/l	0.70	20		98	65-135		20
Carbon tetrachloride	**17.95**		ug/l	1.0	20		90	70-130		20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E624.1										
Batch 484944A - E624.1										
LCS (CD40986-LCS)					Prepared & Analyzed: 24-Jun-19					
cis-1,2-Dichloroethene	**19.59**		ug/l	1.0	20		98	70-130		20
Chlorobenzene	**19.51**		ug/l	1.0	20		98	65-135		20
Surrogate: % Toluene-d8	*30.26*		ug/l		*30*		*101*	*70-130*		
Surrogate: % Dibromofluoromethane	*29.17*		ug/l		*30*		*97*	*70-130*		
Surrogate: % 1,2-dichlorobenzene-d4	*29.48*		ug/l		*30*		*98*	*70-130*		
Surrogate: % Bromofluorobenzene	*30.86*		ug/l		*30*		*103*	*70-130*		
LCS Dup (CD40986-LCSD)			**Source: CD40986-LCS**		Prepared & Analyzed: 24-Jun-19					
Toluene	**20.00**		ug/l	1.0	20		100	70-130	3.0	20
Carbon tetrachloride	**18.70**		ug/l	1.0	20		94	70-130	4.3	20
Chlorobenzene	**19.71**		ug/l	1.0	20		99	65-135	1.0	20
cis-1,2-Dichloroethene	**20.75**		ug/l	1.0	20		104	70-130	5.9	20
Ethylbenzene	**20.13**		ug/l	1.0	20		101	60-140	3.0	20
m&p-Xylene	**40.99**		ug/l	1.0	40		102	70-130	1.0	30
Methylene chloride	**18.44**		ug/l	1.0	20		92	60-140	1.1	20
Vinyl chloride	**23.65**		ug/l	1.0	20		118	10-195	3.4	20
Tetrachloroethene	**20.53**		ug/l	1.0	20		103	70-130	3.0	20
Benzene	**19.73**		ug/l	0.70	20		99	65-135	1.0	20
Trichloroethene	**19.98**		ug/l	1.0	20		100	65-135	3.0	20
o-Xylene	**20.37**		ug/l	1.0	20		102	70-130	1.0	30
1,3-Dichlorobenzene	**19.94**		ug/l	1.0	20		100	70-130	5.1	20
1,2-Dichloroethane	**19.65**		ug/l	1.0	20		98	70-130	2.0	20
1,2-Dichlorobenzene	**19.51**		ug/l	1.0	20		98	65-135	4.2	20
1,1-Dichloroethene	**22.18**		ug/l	1.0	20		111	50-150	4.6	20
1,1-Dichloroethane	**20.83**		ug/l	1.0	20		104	70-130	3.9	20
1,1,2-Trichloroethane	**20.30**		ug/l	1.0	20		101	70-130	1.0	20
1,1,1-Trichloroethane	**20.53**		ug/l	1.0	20		103	70-130	5.0	20
1,4-Dichlorobenzene	**19.46**		ug/l	1.0	20		97	65-135	4.2	20
Surrogate: % Bromofluorobenzene	*29.70*		ug/l		*30*		*99*	*70-130*		
Surrogate: % Toluene-d8	*29.91*		ug/l		*30*		*100*	*70-130*		
Surrogate: % Dibromofluoromethane	*29.10*		ug/l		*30*		*97*	*70-130*		
Surrogate: % 1,2-dichlorobenzene-d4	*30.38*		ug/l		*30*		*101*	*70-130*		
E624.1/SW8260C										
Batch 484943B - E624.1/SW8260C										
Blank (CD39578-BLK)					Prepared & Analyzed: 24-Jun-19					
Acetone	**ND**		ug/l	5.0			ND	-		
LCS (CD39578-LCS)					Prepared & Analyzed: 24-Jun-19					
Acetone	**19.98**		ug/l	5.0	20		100	40-160		30
LCS Dup (CD39578-LCSD)			**Source: CD39578-LCS**		Prepared & Analyzed: 24-Jun-19					
Acetone	**20.76**		ug/l	5.0	20		104	40-160	3.9	30
E625.1 SIM										
Batch 484843A - SW3520C										
Blank (CD39378-BLK)					Prepared: 24-Jun-19 Analyzed: 25-Jun-19					
Phenanthrene	**ND**		ug/l	0.06			ND	-		
Naphthalene	**ND**		ug/l	0.50			ND	-		
Indeno(1,2,3-cd)pyrene	**ND**		ug/l	0.10			ND	-		
Fluorene	**ND**		ug/l	0.10			ND	-		
Fluoranthene	**ND**		ug/l	0.50			ND	-		
Dibenz(a,h)anthracene	**ND**		ug/l	0.02			ND	-		
Benzo(ghi)perylene	**ND**		ug/l	0.02			ND	-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E625.1 SIM										
Batch 484843A - SW3520C										
Blank (CD39378-BLK)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Benzo(k)fluoranthene	**ND**		ug/l	0.10			ND	-		
Pyrene	**ND**		ug/l	0.07			ND	-		
Benzo(a)pyrene	**ND**		ug/l	0.20			ND	-		
Benz(a)anthracene	**ND**		ug/l	0.05			ND	-		
Anthracene	**ND**		ug/l	0.10			ND	-		
Acenaphthylene	**ND**		ug/l	0.10			ND	-		
Acenaphthene	**ND**		ug/l	0.50			ND	-		
2-Methylnaphthalene	**ND**		ug/l	0.50			ND	-		
Chrysene	**ND**		ug/l	0.05			ND	-		
Benzo(b)fluoranthene	**ND**		ug/l	0.07			ND	-		
Surrogate: % 2-Fluorobiphenyl	*45*		ug/l		*5*		*45*	*30-130*		
Surrogate: % Terphenyl-d14	*51*		ug/l		*5*		*51*	*30-130*		
Surrogate: % Nitrobenzene-d5	*50*		ug/l		*5*		*50*	*30-130*		
LCS (CD39378-LCS)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Benzo(ghi)perylene	**4.144**	r	ug/l	0.02	10		41	30-130		20
Benzo(k)fluoranthene	**4.608**	r	ug/l	0.10	10		46	30-130		20
Chrysene	**5.067**	r	ug/l	0.05	10		51	30-130		20
Dibenz(a,h)anthracene	**4.971**	r	ug/l	0.02	10		50	30-130		20
Fluoranthene	**5.542**	r	ug/l	0.50	10		55	30-130		20
Benzo(b)fluoranthene	**4.951**	r	ug/l	0.07	10		50	30-130		20
Indeno(1,2,3-cd)pyrene	**5.053**	r	ug/l	0.10	10		51	30-130		20
Pyrene	**5.657**		ug/l	0.07	10		57	30-130		20
Fluorene	**5.597**		ug/l	0.10	10		56	30-130		20
Benzo(a)pyrene	**4.462**	r	ug/l	0.20	10		45	30-130		20
Benz(a)anthracene	**5.270**	r	ug/l	0.05	10		53	30-130		20
Anthracene	**5.536**		ug/l	0.10	10		55	30-130		20
Acenaphthylene	**4.970**		ug/l	0.10	10		50	30-130		20
2-Methylnaphthalene	**5.363**		ug/l	0.50	10		54	30-130		20
Phenanthrene	**5.169**		ug/l	0.06	10		52	30-130		20
Naphthalene	**4.387**		ug/l	0.50	10		44	30-130		20
Acenaphthene	**5.312**		ug/l	0.50	10		53	30-130		20
Surrogate: % 2-Fluorobiphenyl	*2.358*		ug/l		*5*		*47*	*30-130*		
Surrogate: % Terphenyl-d14	*2.441*	r	ug/l		*5*		*49*	*30-130*		
Surrogate: % Nitrobenzene-d5	*2.385*		ug/l		*5*		*48*	*30-130*		
LCS Dup (CD39378-LCSD)			**Source: CD39378-LCS**			Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Benzo(b)fluoranthene	**6.781**	r	ug/l	0.07	10		68	30-130	30.5	20
Pyrene	**6.989**		ug/l	0.07	10		70	30-130	20.5	20
Phenanthrene	**6.162**		ug/l	0.06	10		62	30-130	17.5	20
Naphthalene	**4.664**		ug/l	0.50	10		47	30-130	6.6	20
Indeno(1,2,3-cd)pyrene	**7.449**	r	ug/l	0.10	10		74	30-130	36.8	20
Fluorene	**6.553**		ug/l	0.10	10		66	30-130	16.4	20
Fluoranthene	**6.827**	r	ug/l	0.50	10		68	30-130	21.1	20
Dibenz(a,h)anthracene	**7.484**	r	ug/l	0.02	10		75	30-130	40.0	20
Chrysene	**6.550**	r	ug/l	0.05	10		65	30-130	24.1	20
Benzo(ghi)perylene	**6.023**	r	ug/l	0.02	10		60	30-130	37.6	20
Benzo(a)pyrene	**6.270**	r	ug/l	0.20	10		63	30-130	33.3	20
Benz(a)anthracene	**6.655**	r	ug/l	0.05	10		67	30-130	23.3	20
Anthracene	**6.640**		ug/l	0.10	10		66	30-130	18.2	20
Acenaphthylene	**5.712**		ug/l	0.10	10		57	30-130	13.1	20
Acenaphthene	**6.190**		ug/l	0.50	10		62	30-130	15.7	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E625.1 SIM										
Batch 484843A - SW3520C										
LCS Dup (CD39378-LCSD)			**Source: CD39378-LCS**			Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
2-Methylnaphthalene	**6.049**		ug/l	0.50	10		60	30-130	10.5	20
Benzo(k)fluoranthene	**6.628**	r	ug/l	0.10	10		66	30-130	35.7	20
Surrogate: % Terphenyl-d14	*3.255*	r	ug/l		*5*		*65*	*30-130*		
Surrogate: % Nitrobenzene-d5	*2.629*		ug/l		*5*		*53*	*30-130*		
Surrogate: % 2-Fluorobiphenyl	*2.676*		ug/l		*5*		*54*	*30-130*		
SM2540D-11										
Batch 484800A - SM2540D-11										
Blank (CD39572-BLK)						Prepared & Analyzed: 24-Jun-19				
Total Suspended Solids	< 5.0		mg/l	5.0	87.1		BRL	-		
LCS (CD39572-LCS)						Prepared & Analyzed: 24-Jun-19				
Total Suspended Solids	**78.00**		mg/l	5.0	87.1		90	85-115		
SM4500CLE										
Batch 485404A - SM4500CLE										
Blank (CD41669-BLK)						Prepared & Analyzed: 26-Jun-19				
Chloride	< 3.0		mg/l	3.0			BRL	-		
LCS (CD41669-LCS)						Prepared & Analyzed: 26-Jun-19				
Chloride	**27.39**		mg/l	3.0	30		91.3	90-110		20
SW8015D										
Batch 485037A - SW8015D										
Blank (CD40506-BLK)						Prepared: 25-Jun-19 Analyzed: 26-Jun-19				
Ethanol	**ND**	c8	mg/l	1.0			ND	-		
LCS (CD40506-LCS)						Prepared: 25-Jun-19 Analyzed: 26-Jun-19				
Ethanol	**8.344**	c8	mg/l	1.0	10		83	70-130		30
LCS Dup (CD40506-LCSD)			**Source: CD40506-LCS**			Prepared: 25-Jun-19 Analyzed: 26-Jun-19				
Ethanol	**6.347**	l, c8	mg/l	1.0	10		63	70-130	27.4	30
SW8260C										
Batch 484943C - SW8260C										
Blank (CD39578-BLK)						Prepared & Analyzed: 24-Jun-19				
1,2-Dibromoethane	**ND**		ug/l	1.0			ND	-		
Methyl t-butyl ether (MTBE)	**ND**		ug/l	1.0			ND	-		
Surrogate: % 1,2-dichlorobenzene-d4	*102*		ug/l		*30*		*102*	*70-130*		
Surrogate: % Bromofluorobenzene	*93*		ug/l		*30*		*93*	*70-130*		
Surrogate: % Dibromofluoromethane	*100*		ug/l		*30*		*100*	*70-130*		
Surrogate: % Toluene-d8	*102*		ug/l		*30*		*102*	*70-130*		
LCS (CD39578-LCS)						Prepared & Analyzed: 24-Jun-19				
Methyl t-butyl ether (MTBE)	**19.48**		ug/l	1.0	20		97	70-130		30
1,2-Dibromoethane	**19.94**		ug/l	1.0	20		100	70-130		30
Surrogate: % Bromofluorobenzene	*30.86*		ug/l		*30*		*103*	*70-130*		
Surrogate: % Dibromofluoromethane	*29.17*		ug/l		*30*		*97*	*70-130*		
Surrogate: % 1,2-dichlorobenzene-d4	*29.48*		ug/l		*30*		*98*	*70-130*		
Surrogate: % Toluene-d8	*30.26*		ug/l		*30*		*101*	*70-130*		
LCS Dup (CD39578-LCSD)			**Source: CD39578-LCS**			Prepared & Analyzed: 24-Jun-19				
1,2-Dibromoethane	**19.48**		ug/l	1.0	20		97	70-130	3.0	30
Methyl t-butyl ether (MTBE)	**20.14**		ug/l	1.0	20		101	70-130	4.0	30
Surrogate: % 1,2-dichlorobenzene-d4	*30.38*		ug/l		*30*		*101*	*70-130*		
Surrogate: % Bromofluorobenzene	*29.70*		ug/l		*30*		*99*	*70-130*		
Surrogate: % Dibromofluoromethane	*29.10*		ug/l		*30*		*97*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 484943C - SW8260C										
LCS Dup (CD39578-LCSD)			**Source: CD39578-LCS**			Prepared & Analyzed: 24-Jun-19				
Surrogate: % Toluene-d8	*29.91*		ug/l		*30*		*100*	*70-130*		
SW8260C (OXY)										
Batch 484943D - SW8260C (OXY)										
Blank (CD39578-BLK)						Prepared & Analyzed: 24-Jun-19				
1,4-Dioxane	**ND**		ug/l	100			ND	-		
LCS (CD39578-LCS)						Prepared & Analyzed: 24-Jun-19				
1,4-Dioxane	**464.4**		ug/l	100	400		116	40-160		30
LCS Dup (CD39578-LCSD)			**Source: CD39578-LCS**			Prepared & Analyzed: 24-Jun-19				
1,4-Dioxane	**435.3**		ug/l	100	400		109	40-160	6.2	30

Notes and Definitions

*	This parameter exceeds laboratory limits.
c8	The MS/MSD was not reported due to matrix interference.
c9	Cyanide blank spike recovery was 103 %.
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.
D	Data reported from a dilution
l	This parameter is outside laboratory lcs/lcsd specified recovery limits.
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.
r	This parameter is outside laboratory rpd specified recovery limits.
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.
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.

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.

SL55304 EM

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- [x] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval
- Min. 24-hr notification needed for rushes
- Samples disposed after 60 days unless otherwise instructed

Report To: Kleinfelder
4 Technology Drive, Suite 110
Westborough, MA 01581
Telephone #: 508-370-8256 Fax: 508-68-1401
Project Mgr: Emily Straley

Invoice To: Cumberland Farms
Mr. Matt Young
165 Flanders Road
Westbough, MA 01581
P.O No.: TBD RQN

Project No: CFI Brockton MA8619
Site Name: 710 Oak Street
Location: Brockton State MA
Sampler(s): A. Bayliss

1=Na_2S2O_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= none 12= _____

DW=Dinking Water GW= Groundwater WW= Waste Water
O= Oil SW= surface Water SO=Soil SL= Sludge A= Air
X1= _____ X2= _____ X3= _____

G= Grab C=Composite

Lab ID	Sample ID	Date	Time	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Ammonia via method 350.1; Hardness 130.1	Analysis: Chloride-300.0; Total Residual Chlorine-4500-Cl G and E	Total Suspended Solids via SM2540D	Total Metals via 200.7***	Cyanide via 335.4	USEPA VOCs via 624* VOCs via 8260*	PAHs & phenols via 625 SIM**	Total PCBs 8082	TPH via 1664A Ethanol via 1666, 1671~
						List Preservative Code below:					11	11	4	5	2			
SL55304-01	MW-1	6/21/19	1125	G	GW	7	6		6	X	X	X	X	X	X	X	X	X

QA/QC Reporting Notes:
*additional charges may appply

MA DEP MCP CAM Report [x] yes [ ] no
CT DPH RCP Report [ ] yes [ ] no
[x] Standard [ ] No QC
[x] QA*
[ ] ASP A* [ ] ASP B*
[ ] NJ Reduced* [ ] NJ Full
[ ] Tier II* [ ] Tier IV*
[x] Other: NJDES RGP
State-specific reporting standards:

Please run TCLP if analyte > 20x rule

Relinquished by:	Received by:	Date	Time	Temp °C
Amy Bayliss		6/21/19	2:45	1.0
		6/21/19	17:15	0
				1.0
				0

[ ] EDD format: _____
[x] E-mail to: estraley@kleinfelder.com

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

Batch Summary

1900860

General Chemistry Parameters

1900860-BLK1
1900860-BS1
1900860-CCB1
1900860-CCB2
1900860-CCB3
1900860-CCV1
1900860-CCV2
1900860-CCV3
1900860-MRL1
1900860-MRL2
1900860-SRM1
SC55304-01 (MW-1)

1900862

General Chemistry Parameters

1900862-BLK1
1900862-BS1
1900862-CCB1
1900862-CCB2
1900862-CCV1
1900862-CCV2
1900862-DUP1
1900862-MRL1
1900862-MS1
1900862-MSD1
1900862-SRM1
SC55304-01 (MW-1)

484800A

Subcontracted Analyses

CD39572-BLK
CD39572-LCS
SC55304-01 (MW-1)

484835A

Subcontracted Analyses

CD38685-BLK
CD38685-LCS
CD38685-LCSD
SC55304-01 (MW-1)
SC55304-01RE1 (MW-1)
SC55304-01RE2 (MW-1)

484843A

Subcontracted Analyses

CD39378-BLK
CD39378-LCS
CD39378-LCSD
SC55304-01 (MW-1)

484858A

Subcontracted Analyses

CD39689-BLK
CD39689-LCS
SC55304-01 (MW-1)

484864A

Subcontracted Analyses

CD38736-BLK
CD38736-LCS
CD38736-LCSD
SC55304-01 (MW-1)

484902A

Subcontracted Analyses

CD40551-BLK
CD40551-LCS
CD40551-LCSD
SC55304-01 (MW-1)

484923A

Subcontracted Analyses

CD40630-BLK
CD40630-LCS
SC55304-01 (MW-1)

484943A

Subcontracted Analyses

CD39578-BLK
CD39578-LCS
CD39578-LCSD
SC55304-01RE1 (MW-1)

484943B

Subcontracted Analyses

CD39578-BLK
CD39578-LCS
CD39578-LCSD
SC55304-01 (MW-1)

484943C

Subcontracted Analyses

CD39578-BLK
CD39578-LCS
CD39578-LCSD
SC55304-01 (MW-1)

484943D

Subcontracted Analyses

CD39578-BLK
CD39578-LCS
CD39578-LCSD
SC55304-01 (MW-1)

484944A

Subcontracted Analyses

CD40986-BLK
CD40986-LCS
CD40986-LCSD
SC55304-01 (MW-1)

485037A

Subcontracted Analyses

CD40506-BLK
CD40506-LCS
CD40506-LCSD
SC55304-01 (MW-1)

485227A

Subcontracted Analyses

CD39799-BLK
CD39799-LCS
SC55304-01 (MW-1)

485404A

Subcontracted Analyses

CD41669-BLK
CD41669-LCS
SC55304-01 (MW-1)

eurofins | Spectrum Analytical

☑ Final Report
☐ Revised Report

Report Date:
09-Jul-19 09:49

Laboratory Report
SC55318

Kleinfelder, Inc.
4 Technology Drive, Suite 110
Westborough, MA 01851
Attn: Emily Straley

Project: CFI - 710 Oak Street - Brockton, MA
Project #: CFI Brockton MA8619

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

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

Authorized by:

Erica Troy
Quality Services Manager

Eurofins Spectrum Analytical holds primary 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 10 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: SC55318

Project: CFI - 710 Oak Street - Brockton, MA

Project Number: CFI Brockton MA8619

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC55318-01	MW-1	Ground Water	21-Jun-19 12:11	21-Jun-19 17:15

MassDEP Analytical Protocol Certification Form

Laboratory Name: Eurofins Spectrum Analytical, Inc.	**Project #:** CFI Brockton MA8619
Project Location: CFI - 710 Oak Street - Brockton, MA	**RTN:**
This form provides certifications for the following data set: SC55318-01	
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

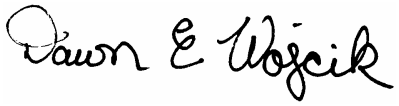
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	✓ Yes No

***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: 7/9/2019

CASE NARRATIVE:

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

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

The samples were received 1.0 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.

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

Sample Acceptance Check Form

Client:	Kleinfelder, Inc. - Westborough, MA
Project:	CFI - 710 Oak Street - Brockton, MA / CFI Brockton MA8619
Work Order:	SC55318
Sample(s) received on:	6/21/2019

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

	Yes	No	N/A
Were custody seals present?	☐	☑	☐
Were custody seals intact?	☐	☐	☑
Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
Were samples cooled on ice upon transfer to laboratory representative?	☐	☑	☐
Were samples refrigerated 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: SC55318-01 **Client ID:** MW-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron (Dissolved)	25.5		0.011	mg/l	E200.7

Lab ID: SC55318-01RE1 **Client ID:** MW-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Nickel (Dissolved)	0.0011		0.0005	mg/l	E200.8-5.4

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

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SC55318-01	CFI Brockton MA8619	Ground Water	21-Jun-19 12:11	21-Jun-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7439-89-6	Iron (Dissolved)	**25.5**		mg/l	0.011	0.011	1	E200.7	25-Jun-19	27-Jun-19 01:12	M-CT007	485060A	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7440-38-2	Arsenic, Dissolved	< 0.0011		mg/l	0.0011	0.0011	1	E200.8-5.4	"	27-Jun-19 21:15	M-CT007	485059A	
7440-43-9	Cadmium (Dissolved)	< 0.0002		mg/l	0.0002	0.0002	1	"	"	"	"	"	
7439-92-1	Lead (Dissolved) LDL	< 0.0011		mg/l	0.0011	0.0011	1	"	"	"	"	"	
7782-49-2	Selenium (Dissolved)-LDL	< 0.002		mg/l	0.002	0.002	1	"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
7440-36-0	Antimony (Dissolved)-LDL	< 0.0003		mg/l	0.0003	0.0003	1	E200.8-5.4	25-Jun-19	28-Jun-19 21:41	M-CT007	485059A	
7440-47-3	Chromium (Dissolved)	< 0.0011		mg/l	0.0011	0.0011	1	"	"	"	"	"	
7440-50-8	Copper (Dissolved)	< 0.005		mg/l	0.005	0.005	1	"	"	"	"	"	
7440-02-0	Nickel (Dissolved)	**0.0011**		mg/l	0.0005	0.0005	1	"	"	"	"	"	
7440-22-4	Silver (Dissolved)	< 0.0002		mg/l	0.0002	0.0002	1	"	"	"	"	"	
7440-66-6	Zinc (Dissolved)	< 0.004		mg/l	0.004	0.004	1	"	"	"	"	"	
Prepared by method SW7470A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7439-97-6	Mercury (Dissolved)	< 0.0002		mg/l	0.0002	0.0002	1	E245.1	26-Jun-19	27-Jun-19 08:32	M-CT007	485083A	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E200.7										
Batch 485060A - SW3005A										
Blank (CD41039-BLK)						Prepared: 25-Jun-19 Analyzed: 27-Jun-19				
Iron (Dissolved)	< 0.011		mg/l	0.011			BRL	-		
LCS (CD41039-LCS)						Prepared: 25-Jun-19 Analyzed: 27-Jun-19				
Iron (Dissolved)	**0.9640**		mg/l	0.011	1.067		90.3	75-125		20
LCS Dup (CD41039-LCSD)			**Source: CD41039-LCS**			Prepared: 25-Jun-19 Analyzed: 27-Jun-19				
Iron (Dissolved)	**0.9725**		mg/l	0.011	1.067		91.1	75-125	0.9	20
E200.8-5.4										
Batch 485059A - SW3005A										
Blank (CD41039-BLK)						Prepared: 25-Jun-19 Analyzed: 27-Jun-19				
Antimony (Dissolved)-LDL	< 0.0003		mg/l	0.0003			BRL	-		
Copper (Dissolved)	< 0.005		mg/l	0.005			BRL	-		
Lead (Dissolved) LDL	< 0.0011		mg/l	0.0011			BRL	-		
Selenium (Dissolved)-LDL	< 0.002		mg/l	0.002			BRL	-		
Zinc (Dissolved)	< 0.004		mg/l	0.004			BRL	-		
LCS (CD41039-LCS)						Prepared: 25-Jun-19 Analyzed: 27-Jun-19				
Selenium (Dissolved)-LDL	**0.04490**		mg/l	0.002	0.0543		82.7	75-125		20
Arsenic, Dissolved	**0.04570**		mg/l	0.0011	0.0543		84.2	75-125		20
Cadmium (Dissolved)	**0.04860**		mg/l	0.0002	0.0543		89.5	75-125		20
Chromium (Dissolved)	**0.04990**		mg/l	0.003	0.0543		91.9	75-125		20
Lead (Dissolved) LDL	**0.05140**		mg/l	0.0011	0.0543		94.7	75-125		20
LCS Dup (CD41039-LCSD)			**Source: CD41039-LCS**			Prepared: 25-Jun-19 Analyzed: 27-Jun-19				
Selenium (Dissolved)-LDL	**0.04510**		mg/l	0.002	0.0543		83.1	75-125	0.5	20
Lead (Dissolved) LDL	**0.05170**		mg/l	0.0011	0.0543		95.2	75-125	0.5	20
Arsenic, Dissolved	**0.04570**		mg/l	0.0011	0.0543		84.2	75-125	0.0	20
Cadmium (Dissolved)	**0.04850**		mg/l	0.0002	0.0543		89.3	75-125	0.2	20
Chromium (Dissolved)	**0.05100**		mg/l	0.003	0.0543		93.9	75-125	2.2	20
Blank (CE41039-BLK)						Prepared: 25-Jun-19 Analyzed: 27-Jun-19				
Silver (Dissolved)	< 0.0002		mg/l	0.0002			BRL	-		
Arsenic, Dissolved	< 0.0011		mg/l	0.0011			BRL	-		
Cadmium (Dissolved)	< 0.0002		mg/l	0.0002			BRL	-		
LCS (CE41039-LCS)						Prepared: 25-Jun-19 Analyzed: 28-Jun-19				
Zinc (Dissolved)	**0.04790**		mg/l	0.004	0.0543		88.2	75-125		20
Silver (Dissolved)	**0.05360**		mg/l	0.0002	0.0543		98.7	75-125		20
Antimony (Dissolved)-LDL	**0.05110**		mg/l	0.0003	0.0543		94.1	75-125		20
Copper (Dissolved)	**0.06050**		mg/l	0.005	0.0543		111	75-125		20
Nickel (Dissolved)	**0.05090**		mg/l	0.0005	0.0543		93.7	75-125		20
LCS Dup (CE41039-LCSD)			**Source: CD41039-LCS**			Prepared: 25-Jun-19 Analyzed: 28-Jun-19				
Antimony (Dissolved)-LDL	**0.05110**		mg/l	0.0003	0.0543		94.1	75-125	0.0	20
Copper (Dissolved)	**0.05970**		mg/l	0.005	0.0543		110	75-125	0.9	20
Nickel (Dissolved)	**0.05100**		mg/l	0.0005	0.0543		93.9	75-125	0.2	20
Silver (Dissolved)	**0.05430**		mg/l	0.0002	0.0543		100	75-125	1.3	20
Zinc (Dissolved)	**0.04820**		mg/l	0.004	0.0543		88.8	75-125	0.7	20
Blank (CF41039-BLK)						Prepared: 25-Jun-19 Analyzed: 28-Jun-19				
Nickel (Dissolved)	< 0.0005		mg/l	0.0005			BRL	-		
Chromium (Dissolved)	< 0.003		mg/l	0.003			BRL	-		
E245.1										
Batch 485083A - SW7470A										
Blank (CD41971-BLK)						Prepared: 26-Jun-19 Analyzed: 27-Jun-19				
Mercury (Dissolved)	< 0.0002		mg/l	0.0002			BRL	-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E245.1										
Batch 485083A - SW7470A										
LCS (CD41971-LCS)					Prepared: 26-Jun-19 Analyzed: 27-Jun-19					
Mercury (Dissolved)	**0.002439**		mg/l	0.0002	0.0025		97.6	75-125		30

Notes and Definitions

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

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

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

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

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

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

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

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

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

SC55318

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

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

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 60 days unless otherwise instructed

Report To: Kleinfelder
4 Technology Drive, Suite 110
Westborough, MA 01581
Telephone #: 508-370-8256 Fax: 508-68-1401
Project Mgr: Emily Straley

Invoice To: Cumberland Farms
Mr. Matt Young
165 Flanders Road
Westbough, MA 01581
P.O No.: TBD RQN

Project No: CFI Brockton MA8619
Site Name: 710 Oak Street
Location: Brockton State MA
Sampler(s): A. Bayliss

1=Na_2S2O_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**= none **12**= _____

List Preservative Code below: 4

QA/QC Reporting Notes:
*additional charges may appply

DW=Dinking Water **GW**= Groundwater **WW**= Waste Water
O= Oil **SW**= surface Water **SO**=Soil **SL**= Sludge **A**= Air
X1= _____ **X2**= _____ **X3**= _____

G= Grab **C**=Compsite

Lab ID	Sample ID	Date	Time	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: Total Metals via 200.7***							
SC55318-01	MW-1	6/21/19	1211	G	GW				1	X							

MA DEP MCP CAM Report [x] yes [ ] no
CT DPH RCP Report [ ] yes [ ] no
[x] Standard [ ] No QC
[x] QA*
[ ] ASP A* [ ] ASP B*
[ ] NJ Reduced* [ ] NJ Full
[ ] Tier II* [ ] Tier IV*
[x] Other: NPDES RGP
State-specific reporting standards:

Field Filtered

Relinquished by:	Received by:	Date	Time	Temp °C
		6-21-19	2:45	1.0
		6/21/19	17:15	0
				1.0
				0

[ ] EDD format: _____
[x] E-mail to: estraley@kleinfelder.com

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

SC55318

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

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

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 60 days unless otherwise instructed

Report To: Kleinfelder
4 Technology Drive, Suite 110
Westborough, MA 01581
Telephone #: 508-370-8256 Fax: 508-68-1401
Project Mgr: Emily Straley

Invoice To: Cumberland Farms
Mr. Matt Young
165 Flanders Road
Westbough, MA 01581
P.O No.: TBD RQN

Project No: CFI Brockton MA8619
Site Name: 710 Oak Street
Location: Brockton State MA
Sampler(s): A. Bayliss

1=Na_2S2O_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**= none **12**= _____

List Preservative Code below: 4

QA/QC Reporting Notes:
*additional charges may appply

DW=Dinking Water **GW**= Groundwater **WW**= Waste Water
O= Oil **SW**= surface Water **SO**=Soil **SL**= Sludge **A**= Air
X1= _____ **X2**= _____ **X3**= _____

G= Grab **C**=Compsite

Lab ID	Sample ID	Date	Time	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Diss 6/26	Analysis: Total Metals via 200.7***
SC55318-01	MW-1	6/21/19	1211	G	GW				1		X

MA DEP MCP CAM Report [x] yes [ ] no
CT DPH RCP Report [ ] yes [ ] no
[x] Standard [ ] No QC
[ ] DQA*
[ ] ASP A* [ ] ASP B*
[ ] NJ Reduced* [ ] NJ Full
[ ] Tier II* [ ] Tier IV*
[x] Other: NPDES RGP
State-specific reporting standards:

Field Filtered

*** Sb, As, Cd, Cr, Cu, Fe, Pb, Hg, Ni, Se, Ag, Zn per client

Dm 6/26

Relinquished by:	Received by:	Date	Time	Temp °C
		6-21-19	2:45	1.0
		6/21/19	17:15	0
				1.0
				0

[ ] EDD format: _____
[x] E-mail to: estraley@kleinfelder.com

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

Batch Summary

485059A

Subcontracted Analyses

CD41039-BLK
CD41039-LCS
CD41039-LCSD
CE41039-BLK
CE41039-LCS
CE41039-LCSD
CF41039-BLK
SC55318-01 (MW-1)
SC55318-01RE1 (MW-1)

485060A

Subcontracted Analyses

CD41039-BLK
CD41039-LCS
CD41039-LCSD
SC55318-01 (MW-1)

485083A

Subcontracted Analyses

CD41971-BLK
CD41971-LCS
SC55318-01 (MW-1)

eurofins | Spectrum Analytical

☑ Final Report
☐ Revised Report

Report Date:
08-Jul-19 14:39

Laboratory Report
SC55305

Kleinfelder, Inc.
4 Technology Drive, Suite 110
Westborough, MA 01851
Attn: Emily Straley

Project: CFI - 710 Oak Street - Brockton, MA
Project #: CFI Brockton MA8619

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

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

Authorized by:

Dawn Wojcik
Laboratory Director

Dawn E Wojcik

Eurofins Spectrum Analytical holds primary 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 12 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: SC55305

Project: CFI - 710 Oak Street - Brockton, MA

Project Number: CFI Brockton MA8619

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC55305-01	700 Oak Receiving Water	Surface Water	21-Jun-19 14:00	21-Jun-19 17:15

MassDEP Analytical Protocol Certification Form

Laboratory Name: Eurofins Spectrum Analytical, Inc.	**Project #:** CFI Brockton MA8619
Project Location: CFI - 710 Oak Street - Brockton, MA	**RTN:**
This form provides certifications for the following data set: SC55305-01	
Matrices: Surface 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

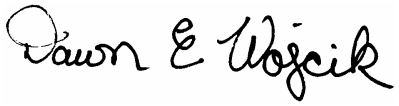
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	Yes ✓ No

***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: 7/8/2019

CASE NARRATIVE:

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

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

The samples were received 1.0 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.

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

SM3500-Cr-B (11)/7196A

Spikes:

1900860-MS1 *Source: SC55305-01*

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

1900860-MSD1 *Source: SC55305-01*

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:

SC55305-01 *700 Oak Receiving Water*

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

Hexavalent Chromium

Sample Acceptance Check Form

Client:	Kleinfelder, Inc. - Westborough, MA
Project:	CFI - 710 Oak Street - Brockton, MA / CFI Brockton MA8619
Work Order:	SC55305
Sample(s) received on:	6/21/2019

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

	Yes	No	N/A
Were custody seals present?	☐	☑	☐
Were custody seals intact?	☐	☐	☑
Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
Were samples cooled on ice upon transfer to laboratory representative?	☐	☑	☐
Were samples refrigerated 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: SC55305-01 **Client ID:** 700 Oak Receiving Water

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Hardness (CaCO3)	44.8		0.1	mg/l	E200.7
Ammonia as Nitrogen	0.15		0.05	mg/l	E350.1
Chromium	0.001		0.001	mg/l	SW6010D
Nickel	0.002		0.001	mg/l	SW6010D
Zinc	0.018		0.004	mg/l	SW6010D

Lab ID: SC55305-01RE1 **Client ID:** 700 Oak Receiving Water

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron	2.78		0.10	mg/l	E200.7

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
700 Oak Receiving Water SC55305-01	CFI Brockton MA8619	Surface Water	21-Jun-19 14:00	21-Jun-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
General Chemistry Parameters													
16065-83-1	Trivalent Chromium	< 0.0250		mg/l	0.0250		1	Calculation	21-Jun-19	08-Jul-19	EDT	1900860	
18540-29-9	Hexavalent Chromium	< 0.025	R01, D	mg/l	0.025	0.020	5	SM3500-Cr-B (11)/7196A	21-Jun-19 16:30	21-Jun-19 17:58	ABW	"	
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
	Hardness (CaCO3)	**44.8**		mg/l	0.1	0.1	1	E200.7	28-Jun-19 10:37	28-Jun-19 10:37	M-CT007	484835A	
Re-analysis of Subcontracted Analyses													
7439-89-6	Iron	**2.78**		mg/l	0.10	0.10	10	E200.7	24-Jun-19	26-Jun-19 19:40	M-CT007	484835A	
Prepared by method E350.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7664-41-7	Ammonia as Nitrogen	**0.15**		mg/l	0.05	0.05	1	E350.1	25-Jun-19 09:58	25-Jun-19 09:58	M-CT007	484858A	
Subcontracted Analyses Prepared by method SW3005A/SW3010A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7440-38-2	Arsenic	< 0.004		mg/l	0.004	0.004	1	SW6010D	24-Jun-19	25-Jun-19 20:50	M-CT007	484835B	
7440-43-9	Cadmium	< 0.001		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-47-3	Chromium	**0.001**		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-50-8	Copper	< 0.005		mg/l	0.005	0.005	1	"	"	"	"	"	
7439-92-1	Lead	< 0.002		mg/l	0.002	0.002	1	"	"	"	"	"	
7440-02-0	Nickel	**0.002**		mg/l	0.001	0.001	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.010		mg/l	0.010	0.010	1	"	"	"	"	"	
7440-22-4	Silver	< 0.001		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-66-6	Zinc	**0.018**		mg/l	0.004	0.004	1	"	"	"	"	"	
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7440-36-0	Antimony	< 0.005		mg/l	0.005	0.005	1	SW-7.3	"	"	M-CT007	484835C	
Prepared by method SW7470A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7439-97-6	Mercury	< 0.0002		mg/l	0.0002	0.0002	1	SW7470A	25-Jun-19	25-Jun-19 13:00	M-CT007	484923A	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SM3500-Cr-B (11)/7196A										
Batch 1900860 - General Preparation										
Blank (1900860-BLK1)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	< 0.005		mg/l	0.005						
LCS (1900860-BS1)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.049**		mg/l	0.005	0.0500		98	90-111		
Calibration Blank (1900860-CCB1)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.001**		mg/l							
Calibration Blank (1900860-CCB2)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.001**		mg/l							
Calibration Blank (1900860-CCB3)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.0008**		mg/l							
Calibration Check (1900860-CCV1)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.049**		mg/l	0.005	0.0500		98	90-110		
Calibration Check (1900860-CCV2)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.049**		mg/l	0.005	0.0500		97	90-110		
Calibration Check (1900860-CCV3)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.048**		mg/l	0.005	0.0500		97	90-110		
Duplicate (1900860-DUP1)			**Source: SC55305-01**			Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	< 0.025	D	mg/l	0.025		BRL				20
MRL Check (1900860-MRL1)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.021**		mg/l	0.005	0.0200		103	70-130		
MRL Check (1900860-MRL2)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.020**		mg/l	0.005	0.0200		100	70-130		
Matrix Spike (1900860-MS1)			**Source: SC55305-01**			Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.138**	QM5, D	mg/l	0.025	0.250	BRL	55	85-115		
Matrix Spike Dup (1900860-MSD1)			**Source: SC55305-01**			Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.136**	QM5, D	mg/l	0.025	0.250	BRL	54	85-115	1	20
Reference (1900860-SRM1)						Prepared & Analyzed: 21-Jun-19				
Hexavalent Chromium	**0.069**		mg/l	0.005	0.0742		93	83.3-116		

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E200.7										
Batch 484835A - SW3005A/SW3010A										
Blank (CD38685-BLK)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Lead	< 0.002		mg/l	0.002			BRL	-		
Zinc	< 0.004		mg/l	0.004			BRL	-		
Silver	< 0.001		mg/l	0.001			BRL	-		
Antimony	< 0.005		mg/l	0.005			BRL	-		
Selenium	< 0.010		mg/l	0.010			BRL	-		
Nickel	< 0.001		mg/l	0.001			BRL	-		
Copper	< 0.005		mg/l	0.005			BRL	-		
Chromium	< 0.001		mg/l	0.001			BRL	-		
Arsenic	< 0.004		mg/l	0.004			BRL	-		
Cadmium	< 0.001		mg/l	0.001			BRL	-		
Iron	< 0.010		mg/l	0.010			BRL	-		
LCS (CD38685-LCS)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Chromium	**1.063**		mg/l	0.001	1		106	75-125		20
Zinc	**1.024**		mg/l	0.004	1		102	75-125		20
Silver	**0.2511**		mg/l	0.001	0.25		100	75-125		20
Selenium	**0.9777**		mg/l	0.010	1		97.8	75-125		20
Nickel	**1.061**		mg/l	0.001	1		106	75-125		20
Lead	**2.090**		mg/l	0.002	2		105	75-125		20
Cadmium	**1.051**		mg/l	0.001	1		105	75-125		20
Arsenic	**2.053**		mg/l	0.004	2		103	75-125		20
Antimony	**2.178**		mg/l	0.005	2		109	75-125		20
Copper	**1.023**		mg/l	0.005	1		102	75-125		20
Iron	**1.066**		mg/l	0.010	1		107	75-125		20
LCS Dup (CD38685-LCSD)			**Source: CD38685-LCS**			Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Nickel	**1.010**		mg/l	0.001	1		101	75-125	4.8	20
Zinc	**0.9767**		mg/l	0.004	1		97.7	75-125	4.3	20
Selenium	**0.9291**		mg/l	0.010	1		92.9	75-125	5.1	20
Lead	**2.000**		mg/l	0.002	2		100	75-125	4.9	20
Chromium	**1.007**		mg/l	0.001	1		101	75-125	4.8	20
Cadmium	**0.9989**		mg/l	0.001	1		99.9	75-125	5.0	20
Arsenic	**1.942**		mg/l	0.004	2		97.1	75-125	5.9	20
Antimony	**2.065**		mg/l	0.005	2		103	75-125	5.7	20
Copper	**0.9981**		mg/l	0.005	1		99.8	75-125	2.2	20
Silver	**0.2407**		mg/l	0.001	0.25		96.3	75-125	3.8	20
Iron	**1.015**		mg/l	0.010	1		102	75-125	4.8	20
E350.1										
Batch 484858A - E350.1										
Blank (CD39689-BLK)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Ammonia as Nitrogen	< 0.05		mg/l	0.05			BRL	-		
LCS (CD39689-LCS)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Ammonia as Nitrogen	**4.900**		mg/l	0.05	4.72		104	90-110		20
SW6010D										
Batch 484835B - SW3005A/SW3010A										
Blank (CD38685-BLK)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Iron	< 0.010		mg/l	0.010			BRL	-		
Antimony	< 0.005		mg/l	0.005			BRL	-		
Cadmium	< 0.001		mg/l	0.001			BRL	-		
Chromium	< 0.001		mg/l	0.001			BRL	-		
Copper	< 0.005		mg/l	0.005			BRL	-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW6010D										
Batch 484835B - SW3005A/SW3010A										
Blank (CD38685-BLK)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Zinc	< 0.004		mg/l	0.004			BRL	-		
Lead	< 0.002		mg/l	0.002			BRL	-		
Nickel	< 0.001		mg/l	0.001			BRL	-		
Arsenic	< 0.004		mg/l	0.004			BRL	-		
Selenium	< 0.010		mg/l	0.010			BRL	-		
Silver	< 0.001		mg/l	0.001			BRL	-		
LCS (CD38685-LCS)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Antimony	**2.178**		mg/l	0.005	2		109	75-125		20
Iron	**1.066**		mg/l	0.010	1		107	75-125		20
Lead	**2.090**		mg/l	0.002	2		105	75-125		20
Zinc	**1.024**		mg/l	0.004	1		102	75-125		20
Silver	**0.2511**		mg/l	0.001	0.25		100	75-125		20
Nickel	**1.061**		mg/l	0.001	1		106	75-125		20
Copper	**1.023**		mg/l	0.005	1		102	75-125		20
Chromium	**1.063**		mg/l	0.001	1		106	75-125		20
Cadmium	**1.051**		mg/l	0.001	1		105	75-125		20
Arsenic	**2.053**		mg/l	0.004	2		103	75-125		20
Selenium	**0.9777**		mg/l	0.010	1		97.8	75-125		20
LCS Dup (CD38685-LCSD)			**Source: CD38685-LCS**			Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Antimony	**2.065**		mg/l	0.005	2		103	75-125	5.7	20
Iron	**1.015**		mg/l	0.010	1		102	75-125	4.8	20
Zinc	**0.9767**		mg/l	0.004	1		97.7	75-125	4.3	20
Silver	**0.2407**		mg/l	0.001	0.25		96.3	75-125	3.8	20
Selenium	**0.9291**		mg/l	0.010	1		92.9	75-125	5.1	20
Nickel	**1.010**		mg/l	0.001	1		101	75-125	4.8	20
Lead	**2.000**		mg/l	0.002	2		100	75-125	4.9	20
Copper	**0.9981**		mg/l	0.005	1		99.8	75-125	2.2	20
Chromium	**1.007**		mg/l	0.001	1		101	75-125	4.8	20
Arsenic	**1.942**		mg/l	0.004	2		97.1	75-125	5.9	20
Cadmium	**0.9989**		mg/l	0.001	1		99.9	75-125	5.0	20
SW-7.3										
Batch 484835C - SW3005A/SW3010A										
Blank (CD38685-BLK)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Copper	< 0.005		mg/l	0.005			BRL	-		
Silver	< 0.001		mg/l	0.001			BRL	-		
Selenium	< 0.010		mg/l	0.010			BRL	-		
Nickel	< 0.001		mg/l	0.001			BRL	-		
Zinc	< 0.004		mg/l	0.004			BRL	-		
Chromium	< 0.001		mg/l	0.001			BRL	-		
Cadmium	< 0.001		mg/l	0.001			BRL	-		
Arsenic	< 0.004		mg/l	0.004			BRL	-		
Lead	< 0.002		mg/l	0.002			BRL	-		
Iron	< 0.010		mg/l	0.010			BRL	-		
Antimony	< 0.005		mg/l	0.005			BRL	-		
LCS (CD38685-LCS)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Selenium	**0.9777**		mg/l	0.010	1		97.8	75-125		20
Silver	**0.2511**		mg/l	0.001	0.25		100	75-125		20
Nickel	**1.061**		mg/l	0.001	1		106	75-125		20
Lead	**2.090**		mg/l	0.002	2		105	75-125		20
Iron	**1.066**		mg/l	0.010	1		107	75-125		20

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-7.3										
Batch 484835C - SW3005A/SW3010A										
LCS (CD38685-LCS)						Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Chromium	**1.063**		mg/l	0.001	1		106	75-125		20
Cadmium	**1.051**		mg/l	0.001	1		105	75-125		20
Arsenic	**2.053**		mg/l	0.004	2		103	75-125		20
Copper	**1.023**		mg/l	0.005	1		102	75-125		20
Zinc	**1.024**		mg/l	0.004	1		102	75-125		20
Antimony	**2.178**		mg/l	0.005	2		109	75-125		20
LCS Dup (CD38685-LCSD)			**Source: CD38685-LCS**			Prepared: 24-Jun-19 Analyzed: 25-Jun-19				
Cadmium	**0.9989**		mg/l	0.001	1		99.9	75-125	5.0	20
Zinc	**0.9767**		mg/l	0.004	1		97.7	75-125	4.3	20
Silver	**0.2407**		mg/l	0.001	0.25		96.3	75-125	3.8	20
Selenium	**0.9291**		mg/l	0.010	1		92.9	75-125	5.1	20
Nickel	**1.010**		mg/l	0.001	1		101	75-125	4.8	20
Lead	**2.000**		mg/l	0.002	2		100	75-125	4.9	20
Iron	**1.015**		mg/l	0.010	1		102	75-125	4.8	20
Chromium	**1.007**		mg/l	0.001	1		101	75-125	4.8	20
Arsenic	**1.942**		mg/l	0.004	2		97.1	75-125	5.9	20
Copper	**0.9981**		mg/l	0.005	1		99.8	75-125	2.2	20
Antimony	**2.065**		mg/l	0.005	2		103	75-125	5.7	20
SW7470A										
Batch 484923A - SW7470A										
Blank (CD40630-BLK)						Prepared & Analyzed: 25-Jun-19				
Mercury	< 0.0002		mg/l	0.0002			BRL	-		
LCS (CD40630-LCS)						Prepared & Analyzed: 25-Jun-19				
Mercury	**0.002442**		mg/l	0.0002	0.0025		97.7	75-125		30

Notes and Definitions

D	Data reported from a dilution
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.
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

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.

SL553050

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

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

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 60 days unless otherwise instructed

Report To: Kleinfelder
4 Technology Drive, Suite 110
Westborough, MA 01581
Telephone #: 508-370-8256 Fax: 508-68-1401
Project Mgr: Emily Straley

Invoice To: Cumberland Farms
Mr. Matt Young
165 Flanders Road
Westbough, MA 01581
P.O No.: TBD RQN

Project No: CFI Brockton MA8619
Site Name: 710 Oak Street
Location: Brockton State MA
Sampler(s): A. Bay 1,3,5

1=Na_2S2O_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= none 12= _____

DW=Dinking Water GW= Groundwater WW= Waste Water
O= Oil SW= surface Water SO=Soil SL= Sludge A= Air
X1= _____ X2= _____ X3= _____

G= Grab C=Compsite

Lab ID	Sample ID	Date	Time	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: Ammonia via method 350.1	Hardness via method 130.1	Total Metals via 200.7***						
SL553050	700 Oak Receiving Water	6/21/19	1400	G	SW				4	X	X	X						

List Preservative Code below:

QA/QC Reporting Notes:
*additional charges may appply

MA DEP MCP CAM Report [x] yes [ ] no
CT DPH RCP Report [ ] yes [ ] no
[x] Standard [ ] No QC
[x] DQA*
[ ] ASP A* [ ] ASP B*
[ ] NJ Reduced* [ ] NJ Full
[ ] Tier II* [ ] Tier IV*
[x] Other: NPDES RGP
State-specific reporting standards:

* See attached for analytes to be reported

** Total Phthalates, Diethylhexyl phthalate, Benzo(a)anthracene

**Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene

**Chrysene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene

**Napthalene, phenol, pentachlorophenol

***Sb, As, Cd, Cr3, Cr6, Cu, Fe, Pb, Hg

***Ni, Se, Ag, Zn

~ or D3695

Relinquished by:	Received by:	Date	Time	Temp °C
Amy Bay		6-21-19	2:45	1.0
		6/21/19	17:15	0
				1.0
				0

[ ] EDD format: _____
[x] E-mail to: estraley@kleinfelder.com

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

Batch Summary

1900860

General Chemistry Parameters

1900860-BLK1
1900860-BS1
1900860-CCB1
1900860-CCB2
1900860-CCB3
1900860-CCV1
1900860-CCV2
1900860-CCV3
1900860-DUP1
1900860-MRL1
1900860-MRL2
1900860-MS1
1900860-MSD1
1900860-SRM1
SC55305-01 (700 Oak Receiving Water)

484835A

Subcontracted Analyses

CD38685-BLK
CD38685-LCS
CD38685-LCSD
SC55305-01 (700 Oak Receiving Water)
SC55305-01RE1 (700 Oak Receiving Water)

484835B

Subcontracted Analyses

CD38685-BLK
CD38685-LCS
CD38685-LCSD
SC55305-01 (700 Oak Receiving Water)

484835C

Subcontracted Analyses

CD38685-BLK
CD38685-LCS
CD38685-LCSD
SC55305-01 (700 Oak Receiving Water)

484858A

Subcontracted Analyses

CD39689-BLK
CD39689-LCS
SC55305-01 (700 Oak Receiving Water)

484923A

Subcontracted Analyses

CD40630-BLK
CD40630-LCS
SC55305-01 (700 Oak Receiving Water)

eurofins | Spectrum Analytical

☑ Final Report
☐ Revised Report

Report Date:
09-Jul-19 09:47

Laboratory Report
SC55317

Kleinfelder, Inc.
4 Technology Drive, Suite 110
Westborough, MA 01851
Attn: Emily Straley

Project: CFI - 710 Oak Street - Brockton, MA
Project #: CFI Brockton MA8619

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

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

Authorized by:

Erica Troy
Quality Services Manager

Eurofins Spectrum Analytical holds primary 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 9 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: SC55317

Project: CFI - 710 Oak Street - Brockton, MA

Project Number: CFI Brockton MA8619

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC55317-01	700 Oak Receiving Water	Surface Water	21-Jun-19 14:05	21-Jun-19 17:15

MassDEP Analytical Protocol Certification Form

Laboratory Name: Eurofins Spectrum Analytical, Inc.	**Project #:** CFI Brockton MA8619
Project Location: CFI - 710 Oak Street - Brockton, MA	**RTN:**
This form provides certifications for the following data set: SC55317-01	
Matrices: Surface 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

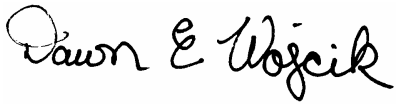
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	✓ Yes No

***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: 7/9/2019

CASE NARRATIVE:

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

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

The samples were received 1.0 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.

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

Sample Acceptance Check Form

Client:	Kleinfelder, Inc. - Westborough, MA
Project:	CFI - 710 Oak Street - Brockton, MA / CFI Brockton MA8619
Work Order:	SC55317
Sample(s) received on:	6/21/2019

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

	Yes	No	N/A
Were custody seals present?	☐	☑	☐
Were custody seals intact?	☐	☐	☑
Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
Were samples cooled on ice upon transfer to laboratory representative?	☐	☑	☐
Were samples refrigerated 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: SC55317-01 **Client ID:** 700 Oak Receiving Water

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron (Dissolved)	1.95		0.011	mg/l	E200.7
Nickel (Dissolved)	0.001		0.001	mg/l	E200.7
Zinc (Dissolved)	0.013		0.002	mg/l	E200.7

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
700 Oak Receiving Water SC55317-01	CFI Brockton MA8619	Surface Water	21-Jun-19 14:05	21-Jun-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7440-36-0	Antimony (Dissolved)	< 0.005		mg/l	0.005	0.005	1	E200.7	25-Jun-19	27-Jun-19 01:09	M-CT007	485060A	
7440-38-2	Arsenic (Dissolved)	< 0.004		mg/l	0.004	0.004	1	"	"	"	"	"	
7440-43-9	Cadmium (Dissolved)	< 0.001		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-47-3	Chromium (Dissolved)	< 0.001		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-50-8	Copper (Dissolved)	< 0.005		mg/l	0.005	0.005	1	"	"	"	"	"	
7439-89-6	Iron (Dissolved)	**1.95**		mg/l	0.011	0.011	1	"	"	"	"	"	
7439-92-1	Lead (Dissolved)	< 0.002		mg/l	0.002	0.002	1	"	"	"	"	"	
7440-02-0	Nickel (Dissolved)	**0.001**		mg/l	0.001	0.001	1	"	"	"	"	"	
7782-49-2	Selenium (Dissolved)	< 0.011		mg/l	0.011	0.011	1	"	"	"	"	"	
7440-66-6	Zinc (Dissolved)	**0.013**		mg/l	0.002	0.002	1	"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
7440-22-4	Silver (Dissolved)	< 0.001		mg/l	0.001	0.001	1	E200.7	25-Jun-19	29-Jun-19 15:45	M-CT007	485060A	
Prepared by method SW7470A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7439-97-6	Mercury (Dissolved)	< 0.0002		mg/l	0.0002	0.0002	1	E245.1	26-Jun-19	27-Jun-19 08:30	M-CT007	485083A	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E200.7										
Batch 485060A - SW3005A										
Blank (CD41039-BLK)						Prepared: 25-Jun-19 Analyzed: 27-Jun-19				
Selenium (Dissolved)	< 0.011		mg/l	0.011			BRL	-		
Antimony (Dissolved)	< 0.005		mg/l	0.005			BRL	-		
Zinc (Dissolved)	< 0.002		mg/l	0.002			BRL	-		
Nickel (Dissolved)	< 0.001		mg/l	0.001			BRL	-		
Lead (Dissolved)	< 0.002		mg/l	0.002			BRL	-		
Iron (Dissolved)	< 0.011		mg/l	0.011			BRL	-		
Copper (Dissolved)	< 0.005		mg/l	0.005			BRL	-		
Chromium (Dissolved)	< 0.001		mg/l	0.001			BRL	-		
Cadmium (Dissolved)	< 0.001		mg/l	0.001			BRL	-		
Arsenic (Dissolved)	< 0.004		mg/l	0.004			BRL	-		
LCS (CD41039-LCS)						Prepared: 25-Jun-19 Analyzed: 27-Jun-19				
Selenium (Dissolved)	**0.9216**		mg/l	0.011	1.067		86.4	75-125		20
Nickel (Dissolved)	**0.9470**		mg/l	0.001	1.067		88.8	75-125		20
Arsenic (Dissolved)	**1.843**		mg/l	0.004	2.133		86.4	75-125		20
Cadmium (Dissolved)	**0.9653**		mg/l	0.001	1.067		90.5	75-125		20
Chromium (Dissolved)	**0.9578**		mg/l	0.001	1.067		89.8	75-125		20
Copper (Dissolved)	**0.9641**		mg/l	0.005	1.067		90.4	75-125		20
Iron (Dissolved)	**0.9640**		mg/l	0.011	1.067		90.3	75-125		20
Antimony (Dissolved)	**1.978**		mg/l	0.005	2.133		92.7	75-125		20
Silver (Dissolved)	**0.2367**		mg/l	0.001	0.2667		88.8	75-125		20
Zinc (Dissolved)	**0.9643**		mg/l	0.002	1.067		90.4	75-125		20
Lead (Dissolved)	**1.889**		mg/l	0.002	2.133		88.6	75-125		20
LCS Dup (CD41039-LCSD)			**Source: CD41039-LCS**			Prepared: 25-Jun-19 Analyzed: 27-Jun-19				
Iron (Dissolved)	**0.9725**		mg/l	0.011	1.067		91.1	75-125	0.9	20
Zinc (Dissolved)	**0.9716**		mg/l	0.002	1.067		91.1	75-125	0.8	20
Silver (Dissolved)	**0.2375**		mg/l	0.001	0.2667		89.1	75-125	0.3	20
Selenium (Dissolved)	**0.9253**		mg/l	0.011	1.067		86.7	75-125	0.3	20
Nickel (Dissolved)	**0.9561**		mg/l	0.001	1.067		89.6	75-125	0.9	20
Lead (Dissolved)	**1.905**		mg/l	0.002	2.133		89.3	75-125	0.8	20
Copper (Dissolved)	**0.9784**		mg/l	0.005	1.067		91.7	75-125	1.4	20
Chromium (Dissolved)	**0.9598**		mg/l	0.001	1.067		90.0	75-125	0.2	20
Cadmium (Dissolved)	**0.9714**		mg/l	0.001	1.067		91.0	75-125	0.6	20
Arsenic (Dissolved)	**1.855**		mg/l	0.004	2.133		87.0	75-125	0.7	20
Antimony (Dissolved)	**1.993**		mg/l	0.005	2.133		93.4	75-125	0.8	20
Blank (CE41039-BLK)						Prepared: 25-Jun-19 Analyzed: 29-Jun-19				
Silver (Dissolved)	< 0.001		mg/l	0.001			BRL	-		
E245.1										
Batch 485083A - SW7470A										
Blank (CD41971-BLK)						Prepared: 26-Jun-19 Analyzed: 27-Jun-19				
Mercury (Dissolved)	< 0.0002		mg/l	0.0002			BRL	-		
Duplicate (CD41971-DUP)			**Source: SC55317-01**			Prepared: 26-Jun-19 Analyzed: 27-Jun-19				
Mercury (Dissolved)	< 0.0003		mg/l	0.0003		brl		-		30
LCS (CD41971-LCS)						Prepared: 26-Jun-19 Analyzed: 27-Jun-19				
Mercury (Dissolved)	**0.002439**		mg/l	0.0002	0.0025		97.6	75-125		30
Matrix Spike (CD41971-MS)			**Source: SC55317-01**			Prepared: 26-Jun-19 Analyzed: 27-Jun-19				
Mercury (Dissolved)	**0.002312**		mg/l	0.0002	0.0025	brl	92.5	75-125		30

Notes and Definitions

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

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

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

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

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

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

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

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

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

SC553170 By

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
☑ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed: _____
All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 60 days unless otherwise instructed

Report To: Kleinfelder
4 Technology Drive, Suite 110
Westborough, MA 01581
Telephone #: 508-370-8256 Fax: 508-68-1401
Project Mgr: Emily Straley

Invoice To: Cumberland Farms
Mr. Matt Young
165 Flanders Road
Westbough, MA 01581
P.O No.: TBD RQN

Project No: CFI Brockton MA8619
Site Name: 710 Oak Street
Location: Brockton State MA
Sampler(s): A. Bay 1/3 5

1=Na_2S2O_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= none 12= _____

DW=Dinking Water GW= Groundwater WW= Waste Water
O= Oil SW= surface Water SO=Soil SL= Sludge A= Air
X1= _____ X2= _____ X3= _____

G= Grab C=Compsite

Lab ID	Sample ID	Date	Time	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		Analysis: Total Metals via 200.7***								List Preservative Code below:	QA/QC Reporting Notes: *additional charges may appply
																			4	
SC553170	700 Oak Receiving Water	6/21/19	1405	G	SW				1		X									Field Filtered

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: NPDES RGP
State-specific reporting standards:

Relinquished by:	Received by:	Date	Time	Temp °C
[signature]	[signature]	6-21-19	2:45	1.0
[signature]	[signature]	6/21/19	17:15	0
				1.0
				0

☐ EDD format: _____
☑ E-mail to: estraley@kleinfelder.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☑ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

SC55317

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

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

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 60 days unless otherwise instructed

Report To: Kleinfelder
4 Technology Drive, Suite 110
Westborough, MA 01581
Telephone #: 508-370-8256 Fax: 508-68-1401
Project Mgr: Emily Straley

Invoice To: Cumberland Farms
Mr. Matt Young
165 Flanders Road
Westbough, MA 01581
P.O No.: TBD RQN

Project No: CFI Brockton MA8619
Site Name: 710 Oak Street
Location: Brockton State MA
Sampler(s): A. Bay 6/25

1=Na_2S2O_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= none 12= _____

List Preservative Code below: 4

QA/QC Reporting Notes:
*additional charges may appply

DW=Dinking Water GW= Groundwater WW= Waste Water
O= Oil SW= surface Water SO=Soil SL= Sludge A= Air
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	Diss Sb 6/26	Total Metals via 200.7***	Analysis	Field Filtered
SC55317-01	700 Oak Receiving Water	6/21/19	1405	G	SW				1		X		*** Sb, As, Cd, Cr, Cu, Fe, Pb, Hg, Ni, Se, Ag, Zn. per client

Containers | Analysis

MA DEP MCP CAM Report [x] yes [ ] no
CT DPH RCP Report [ ] yes [ ] no
[x] Standard [ ] No QC
[x] DQA*
[ ] ASP A* [ ] ASP B*
[ ] NJ Reduced* [ ] NJ Full
[ ] Tier II* [ ] Tier IV*
[x] Other: NPDES RGP
State-specific reporting standards:

Rv 6/26

Relinquished by:	Received by:	Date	Time	Temp °C
		6-21-19	2:45	1.0
		6/21/19	17:15	0
				1.0
				01

[ ] EDD format: _____
[x] E-mail to: estraley@kleinfelder.com

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

Batch Summary

485060A

Subcontracted Analyses

CD41039-BLK
CD41039-LCS
CD41039-LCSD
CE41039-BLK
SC55317-01 (700 Oak Receiving Water)
SC55317-01RE1 (700 Oak Receiving Water)

485083A

Subcontracted Analyses

CD41971-BLK
CD41971-DUP
CD41971-LCS
CD41971-MS
SC55317-01 (700 Oak Receiving Water)

☑ Final Report
☐ Revised Report

Report Date:
26-Feb-18 16:36

Laboratory Report
SC44122

Kleinfelder, Inc.
4 Technology Drive, Suite 110
Westborough, MA 01851
Attn: Emily Straley

Project: CFI - 700 Oak Street - Brockton, MA
Project #: CFI Brockton MA8619

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:

Christina White
Technical 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 59 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: SC44122

Project: CFI - 700 Oak Street - Brockton, MA

Project Number: CFI Brockton MA8619

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC44122-01	MW-1	Ground Water	20-Feb-18 10:00	20-Feb-18 16:25
SC44122-02	MW-5	Ground Water	20-Feb-18 10:30	20-Feb-18 16:25

MassDEP Analytical Protocol Certification Form

Laboratory Name: Eurofins Spectrum Analytical, Inc.	**Project #:** CFI Brockton MA8619
Project Location: CFI - 700 Oak Street - Brockton, MA	**RTN:**
This form provides certifications for the following data set:	SC44122-01 through SC44122-02
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: 2/26/2018

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 0.0 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.

Samples:

SC44122-01 *MW-1*

The pH of this sample has been adjusted in the laboratory for the tests listed below in accordance with the preservation requirements of the applicable methods.

Fingerprinting by GC

SW846 8260C

Calibration:

1802046

SW846 8260C

Calibration:

1802046

Analyte quantified by quadratic equation type calibration.

1,2,3-Trichlorobenzene
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
2-Hexanone (MBK)
4-Isopropyltoluene
Bromodichloromethane
Bromoform
Carbon tetrachloride
cis-1,3-Dichloropropene
Dibromochloromethane
Naphthalene
n-Propylbenzene
sec-Butylbenzene
Styrene
tert-Butylbenzene
trans-1,3-Dichloropropene
trans-1,4-Dichloro-2-butene

This affected the following samples:

1802514-BLK1
1802514-BS1
1802514-BSD1
1802636-BLK1
1802636-BS1
1802636-BSD1
1802714-BLK1
1802714-BS1
1802714-BSD1
MW-1
MW-5
S816807-ICV1
S816984-CCV1
S817076-CCV1
S817130-CCV1

Samples:

S816984-CCV1

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

1,1,2-Trichlorotrifluoroethane (Freon 113) (26.6%)
1,1-Dichloroethane (20.1%)
1,2-Dichloroethane (25.3%)
2,2-Dichloropropane (20.2%)
4-Methyl-2-pentanone (MIBK) (20.1%)
Trichlorofluoromethane (Freon 11) (27.6%)
Vinyl chloride (23.7%)

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

2-Hexanone (MBK) (20.1%)
Acetone (23.1%)

SW846 8260C

Samples:

S816984-CCV1

This affected the following samples:

1802514-BLK1
1802514-BS1
1802514-BSD1
MW-1
MW-5

S817076-CCV1

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

1,1,2-Trichlorotrifluoroethane (Freon 113) (27.6%)
1,1-Dichloroethane (25.7%)
1,2-Dichloroethane (20.4%)
2,2-Dichloropropane (25.2%)
Chloroform (20.1%)
Trichlorofluoromethane (Freon 11) (27.8%)
Vinyl chloride (27.1%)

This affected the following samples:

1802636-BLK1
1802636-BS1
1802636-BSD1
MW-1
MW-5

S817130-CCV1

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

1,1-Dichloroethane (22.7%)
1,2-Dibromo-3-chloropropane (20.8%)
1,2-Dibromoethane (EDB) (21.8%)
4-Methyl-2-pentanone (MIBK) (23.0%)
Bromochloromethane (22.1%)
Carbon disulfide (23.9%)
Di-isopropyl ether (21.0%)
Tert-Butanol / butyl alcohol (23.9%)

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

Acetone (26.8%)

This affected the following samples:

1802714-BLK1
1802714-BS1
1802714-BSD1
MW-5

SC44122-01 *MW-1*

This compound is a common laboratory contaminant.

Acetone
Chloromethane
Ethanol

SC44122-01RE1 *MW-1*

SW846 8260C

Samples:

SC44122-01RE1 *MW-1*

This compound is a common laboratory contaminant.

Acetone
Chloromethane
Ethanol

SC44122-02 *MW-5*

This compound is a common laboratory contaminant.

Acetone
Chloromethane
Ethanol

SC44122-02RE1 *MW-5*

This compound is a common laboratory contaminant.

Acetone
Chloromethane
Ethanol

SC44122-02RE2 *MW-5*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

This compound is a common laboratory contaminant.

Acetone
Chloromethane
Ethanol

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:

1802550-BLK1
1802550-BS1
1802550-BSD1
MW-1
MW-5
S815859-ICV1
S817101-CCV1

Laboratory Control Samples:

SW846 8270D

Laboratory Control Samples:

1802550 BS/BSD

Aniline percent recoveries (38/37) 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:

MW-1
MW-5

Benzoic acid percent recoveries (25/25) 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:

MW-1
MW-5

Pyridine percent recoveries (26/27) 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:

MW-1
MW-5

1802550-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
Benzoic acid
Pyridine

1802550-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
Benzoic acid
Pyridine

Samples:

S817101-CCV1

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

Pentachlorophenol (-22.6%)

This affected the following samples:

1802550-BLK1
1802550-BS1
1802550-BSD1
MW-1
MW-5

S817145-CCV1

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

3,3´-Dichlorobenzidine (-29.6%)
3-Nitroaniline (-36.6%)
4-Chloroaniline (-43.5%)
Aniline (-71.4%)
N-Nitrosodiphenylamine (-27.7%)

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

4-Nitrophenol (28.8%)
Benzidine (-64.1%)

SW846 8270D

Samples:

S817145-CCV1

This affected the following samples:

1802550-DUP1

Sample Acceptance Check Form

Client:	Kleinfelder, Inc. - Westborough, MA
Project:	CFI - 700 Oak Street - Brockton, MA / CFI Brockton MA8619
Work Order:	SC44122
Sample(s) received on:	2/20/2018

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 samples refrigerated 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: SC44122-01 **Client ID:** MW-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Total Dissolved Solids	259		5	mg/l	SM18-22 2540C
Total Suspended Solids	1970		10.0	mg/l	SM2540D (11)
Arsenic	0.00595		0.00400	mg/l	SW846 6010C
Barium	0.204		0.0050	mg/l	SW846 6010C
Barium (dissolved)	0.101		0.0050	mg/l	SW846 6010C
Cadmium	0.0027		0.0025	mg/l	SW846 6010C
Chromium	0.0224		0.0050	mg/l	SW846 6010C
Lead	0.0229		0.0075	mg/l	SW846 6010C
Other Oil	Calculated as		0.2	mg/l	SW846 8100Mod.
Total Petroleum Hydrocarbons	3.2		0.2	mg/l	SW846 8100Mod.
Unidentified	3.2		0.2	mg/l	SW846 8100Mod.
1,2,4-Trimethylbenzene	9.50		1.00	µg/l	SW846 8260C
1,3,5-Trimethylbenzene	1.11		1.00	µg/l	SW846 8260C
2-Butanone (MEK)	2.45		2.00	µg/l	SW846 8260C
Chloroform	1.30		1.00	µg/l	SW846 8260C
Naphthalene	23.3		1.00	µg/l	SW846 8260C
n-Butylbenzene	1.75		1.00	µg/l	SW846 8260C
Naphthalene	5.47		5.32	µg/l	SW846 8270D

Lab ID: SC44122-01RE1 **Client ID:** MW-1

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,2,4-Trimethylbenzene	9.52		1.00	µg/l	SW846 8260C
1,3,5-Trimethylbenzene	1.08		1.00	µg/l	SW846 8260C
2-Butanone (MEK)	2.69		2.00	µg/l	SW846 8260C
Chloroform	1.43		1.00	µg/l	SW846 8260C
Naphthalene	24.5		1.00	µg/l	SW846 8260C
n-Butylbenzene	1.63		1.00	µg/l	SW846 8260C

Lab ID: SC44122-02 **Client ID:** MW-5

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Barium	0.402		0.0050	mg/l	SW846 6010C
Barium (dissolved)	0.368		0.0050	mg/l	SW846 6010C
Chromium	0.0118		0.0050	mg/l	SW846 6010C
Lead	0.0120		0.0075	mg/l	SW846 6010C
1,2,4-Trimethylbenzene	1.48		1.00	µg/l	SW846 8260C
2-Butanone (MEK)	3.08		2.00	µg/l	SW846 8260C
Acetone	31.0	O01	10.0	µg/l	SW846 8260C
Naphthalene	4.98		1.00	µg/l	SW846 8260C
Tetrachloroethene	1.06		1.00	µg/l	SW846 8260C

Lab ID: SC44122-02RE1 **Client ID:** MW-5

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,2,4-Trimethylbenzene	1.50		1.00	µg/l	SW846 8260C
2-Butanone (MEK)	3.46		2.00	µg/l	SW846 8260C
Acetone	38.2	O01	10.0	µg/l	SW846 8260C
Ethanol	3020	O01, E	200	µg/l	SW846 8260C
Naphthalene	4.63		1.00	µg/l	SW846 8260C
Tetrachloroethene	1.05		1.00	µg/l	SW846 8260C

Lab ID: SC44122-02RE2 **Client ID:** MW-5

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Ethanol	4340	O01, D	1000	µg/l	SW846 8260C

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

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1	CFI Brockton	Ground Water	20-Feb-18 10:00	20-Feb-18
SC44122-01	MA8619			

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 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	21-Feb-18	21-Feb-18	EK	1802514	
67-64-1	Acetone	< 80.0	O01	µg/l	80.0	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	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	
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)	**2.45**		µg/l	2.00	1.07	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	**1.75**		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	**1.30**		µg/l	1.00	0.33	1	"	"	"	"	"	
74-87-3	Chloromethane	< 4.00	O01	µg/l	4.00	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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SC44122-01	CFI Brockton MA8619	Ground Water	20-Feb-18 10:00	20-Feb-18

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													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.36	1	SW846 8260C	21-Feb-18	21-Feb-18	EK	1802514	
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	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.66	1	"	"	"	"	"	
91-20-3	Naphthalene	**23.3**		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	**9.50**		µg/l	1.00	0.36	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	**1.11**		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	< 550	O01	µg/l	550	30.9	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*100*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*104*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*118*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*121*			*70-130 %*			"	"	"	"	"	
Re-analysis of 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	23-Feb-18	23-Feb-18	EK	1802636	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1	CFI Brockton	Ground Water	20-Feb-18 10:00	20-Feb-18
SC44122-01	MA8619			

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846 8260													
67-64-1	Acetone	< 30.0	O01	µg/l	30.0	0.80	1	SW846 8260C	23-Feb-18	23-Feb-18	EK	1802636	
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	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	
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)	**2.69**		µg/l	2.00	1.07	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	**1.63**		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	**1.43**		µg/l	1.00	0.33	1	"	"	"	"	"	
74-87-3	Chloromethane	< 2.00	O01	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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SC44122-01	CFI Brockton MA8619	Ground Water	20-Feb-18 10:00	20-Feb-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846 8260													
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.28	1	SW846 8260C	23-Feb-18	23-Feb-18	EK	1802636	
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	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.66	1	"	"	"	"	"	
91-20-3	Naphthalene	**24.5**		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	**9.52**		µg/l	1.00	0.36	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	**1.08**		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-buten e	< 5.00		µg/l	5.00	0.82	1	"	"	"	"	"	
64-17-5	Ethanol	< 260	O01	µg/l	260	30.9	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*101*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*103*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*117*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*117*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													
83-32-9	Acenaphthene	< 5.32		µg/l	5.32	0.735	1	SW846 8270D	22-Feb-18	23-Feb-18	MSL	1802550	
208-96-8	Acenaphthylene	< 5.32		µg/l	5.32	0.727	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1	CFI Brockton	Ground Water	20-Feb-18 10:00	20-Feb-18
SC44122-01	MA8619			

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													
62-53-3	Aniline	< 5.32		µg/l	5.32	1.88	1	SW846 8270D	22-Feb-18	23-Feb-18	MSL	1802550	
120-12-7	Anthracene	< 5.32		µg/l	5.32	0.647	1	"	"	"	"	"	
103-33-3	Azobenzene/Diphenyldiazene	< 5.32		µg/l	5.32	0.796	1	"	"	"	"	"	
92-87-5	Benzidine	< 10.6		µg/l	10.6	1.22	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	< 5.32		µg/l	5.32	0.570	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	< 5.32		µg/l	5.32	0.598	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	< 5.32		µg/l	5.32	0.465	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	< 5.32		µg/l	5.32	0.564	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	< 5.32		µg/l	5.32	0.511	1	"	"	"	"	"	
65-85-0	Benzoic acid	< 5.32		µg/l	5.32	0.561	1	"	"	"	"	"	
100-51-6	Benzyl alcohol	< 5.32		µg/l	5.32	0.830	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 5.32		µg/l	5.32	0.709	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 5.32		µg/l	5.32	0.781	1	"	"	"	"	"	
108-60-1	Bis(2-chloroisopropyl)ether	< 5.32		µg/l	5.32	0.828	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 5.32		µg/l	5.32	0.679	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 5.32		µg/l	5.32	0.640	1	"	"	"	"	"	
85-68-7	Butyl benzyl phthalate	< 5.32		µg/l	5.32	0.466	1	"	"	"	"	"	
86-74-8	Carbazole	< 5.32		µg/l	5.32	1.66	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 5.32		µg/l	5.32	0.533	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 5.32		µg/l	5.32	1.19	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 5.32		µg/l	5.32	0.628	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 5.32		µg/l	5.32	0.796	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 5.32		µg/l	5.32	0.641	1	"	"	"	"	"	
218-01-9	Chrysene	< 5.32		µg/l	5.32	0.566	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	< 5.32		µg/l	5.32	0.479	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 5.32		µg/l	5.32	0.787	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5.32		µg/l	5.32	0.598	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5.32		µg/l	5.32	0.688	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5.32		µg/l	5.32	0.653	1	"	"	"	"	"	
91-94-1	3,3´-Dichlorobenzidine	< 5.32		µg/l	5.32	2.11	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 5.32		µg/l	5.32	0.564	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 5.32		µg/l	5.32	0.663	1	"	"	"	"	"	
131-11-3	Dimethyl phthalate	< 5.32		µg/l	5.32	0.806	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 5.32		µg/l	5.32	0.695	1	"	"	"	"	"	
84-74-2	Di-n-butyl phthalate	< 5.32		µg/l	5.32	0.486	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 5.32		µg/l	5.32	0.339	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 5.32		µg/l	5.32	0.597	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 5.32		µg/l	5.32	0.716	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 5.32		µg/l	5.32	0.631	1	"	"	"	"	"	
117-84-0	Di-n-octyl phthalate	< 5.32		µg/l	5.32	0.432	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 5.32		µg/l	5.32	0.679	1	"	"	"	"	"	
86-73-7	Fluorene	< 5.32		µg/l	5.32	0.651	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SC44122-01	CFI Brockton MA8619	Ground Water	20-Feb-18 10:00	20-Feb-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													
118-74-1	Hexachlorobenzene	< 5.32		µg/l	5.32	0.607	1	SW846 8270D	22-Feb-18	23-Feb-18	MSL	1802550	
87-68-3	Hexachlorobutadiene	< 5.32		µg/l	5.32	0.413	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 5.32		µg/l	5.32	1.10	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 5.32		µg/l	5.32	0.680	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	< 5.32		µg/l	5.32	0.617	1	"	"	"	"	"	
78-59-1	Isophorone	< 5.32		µg/l	5.32	0.623	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 5.32		µg/l	5.32	0.611	1	"	"	"	"	"	
95-48-7	2-Methylphenol	< 5.32		µg/l	5.32	0.707	1	"	"	"	"	"	
108-39-4, 106-44-5	3 & 4-Methylphenol	< 10.6		µg/l	10.6	0.654	1	"	"	"	"	"	
91-20-3	Naphthalene	**5.47**		µg/l	5.32	0.729	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 5.32		µg/l	5.32	0.645	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 5.32		µg/l	5.32	0.578	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 5.32		µg/l	5.32	0.398	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 5.32		µg/l	5.32	0.734	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 5.32		µg/l	5.32	0.495	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 21.3		µg/l	21.3	0.891	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 5.32		µg/l	5.32	0.716	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 5.32		µg/l	5.32	0.615	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 5.32		µg/l	5.32	0.693	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 21.3		µg/l	21.3	0.397	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 5.32		µg/l	5.32	0.623	1	"	"	"	"	"	
108-95-2	Phenol	< 5.32		µg/l	5.32	0.686	1	"	"	"	"	"	
129-00-0	Pyrene	< 5.32		µg/l	5.32	0.649	1	"	"	"	"	"	
110-86-1	Pyridine	< 5.32		µg/l	5.32	0.871	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5.32		µg/l	5.32	0.731	1	"	"	"	"	"	
90-12-0	1-Methylnaphthalene	< 5.32		µg/l	5.32	0.780	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 5.32		µg/l	5.32	0.553	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 5.32		µg/l	5.32	0.551	1	"	"	"	"	"	
82-68-8	Pentachloronitrobenzene	< 5.32		µg/l	5.32	0.740	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 5.32		µg/l	5.32	0.771	1	"	"	"	"	"	
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*40*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*26*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*40*			*30-130 %*			"	"	"	"	"	
4165-62-2	*Phenol-d5*	*19*			*15-110 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*55*			*30-130 %*			"	"	"	"	"	
118-79-6	*2,4,6-Tribromophenol*	*52*			*15-110 %*			"	"	"	"	"	
Extractable Petroleum Hydrocarbons													
Fingerprinting by GC Prepared by method SW846 3510C													
8006-61-9	Gasoline	< 0.2		mg/l	0.2	0.2	1	SW846 8100Mod.	23-Feb-18	25-Feb-18	DJS	1802625	
68476-30-2	Fuel Oil #2	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SC44122-01	CFI Brockton MA8619	Ground Water	20-Feb-18 10:00	20-Feb-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Extractable Petroleum Hydrocarbons													
Fingerprinting by GC													
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.2	1	SW846 8100Mod.	23-Feb-18	25-Feb-18	DJS	1802625	
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
	Hydraulic Oil	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
	Dielectric Fluid	< 0.2		mg/l	0.2	0.2	1	"	"	"	"	"	
	Unidentified	**3.2**		mg/l	0.2	0.2	1	"	"	"	"	"	
	Other Oil	**Calculated as**		mg/l	0.2	0.2	1	"	"	"	"	"	
	Total Petroleum Hydrocarbons	**3.2**		mg/l	0.2	0.2	1	"	"	"	"	"	
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*102*			*40-140 %*			"	"	"	"	"	
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	21-Feb-18		KT	1802536	
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3005A													
7440-22-4	Silver	< 0.0050		mg/l	0.0050	0.0006	1	SW846 6010C	22-Feb-18	23-Feb-18	SJR/TBC	1802569	
7440-38-2	Arsenic	**0.00595**		mg/l	0.00400	0.00138	1	"	"	"	"	"	
7440-39-3	Barium	**0.204**		mg/l	0.0050	0.0007	1	"	"	"	"	"	
7440-43-9	Cadmium	**0.0027**		mg/l	0.0025	0.0004	1	"	"	"	"	"	
7440-47-3	Chromium	**0.0224**		mg/l	0.0050	0.0009	1	"	"	"	"	"	
7439-92-1	Lead	**0.0229**		mg/l	0.0075	0.0062	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0042	1	"	"	"	"	"	
Total Metals by EPA 200 Series Methods													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00013	1	EPA 245.1/7470A	22-Feb-18	23-Feb-18	ABW	1802570	X
Soluble Metals by EPA 200/6000 Series Methods													
Prepared by method General Prep-Metal													
	Filtration	**Field Filtered**		N/A			1	EPA 200.7/3005A/6010			KT	1802534	
Soluble Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3005A													
7440-22-4	Silver	< 0.0050		mg/l	0.0050	0.0006	1	SW846 6010C	22-Feb-18	22-Feb-18	SJR/TBC	1802315	
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0014	1	"	"	"	"	"	
7440-39-3	Barium	**0.101**		mg/l	0.0050	0.0007	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0004	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0062	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0042	1	"	"	"	"	"	
Soluble Metals by EPA 200 Series Methods													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00013	1	EPA 245.1/7470A	22-Feb-18	22-Feb-18	ABW	1802316	X
General Chemistry Parameters													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SC44122-01	CFI Brockton MA8619	Ground Water	20-Feb-18 10:00	20-Feb-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
General Chemistry Parameters													
	Flashpoint	**>150**		°F			1	SW846 1010A	21-Feb-18	21-Feb-18	BD	1802527	
	pH	**6.32**	pH	pH Units			1	ASTM D 1293-99B	20-Feb-18 17:00	20-Feb-18 17:30	BD	1802491	X
Reactivity Cyanide/Sulfide													
	Reactivity	**See Narrative**		mg/l			1	SW846 Ch. 7.3	21-Feb-18	21-Feb-18	TN	1802531	
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	**259**		mg/l	5	3	1	SM18-22 2540C	22-Feb-18	24-Feb-18	CMB	1802605	X
	Total Suspended Solids	**1,970**	LIV	mg/l	10.0	4.3	1	SM2540D (11)	21-Feb-18	23-Feb-18	CMB	1802529	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5	CFI Brockton	Ground Water	20-Feb-18 10:30	20-Feb-18
SC44122-02	MA8619			

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 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	21-Feb-18	21-Feb-18	EK	1802514	
67-64-1	Acetone	**31.0**	O01	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	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	
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)	**3.08**		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	O01	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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5	CFI Brockton	Ground Water	20-Feb-18 10:30	20-Feb-18
SC44122-02	MA8619			

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													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.36	1	SW846 8260C	21-Feb-18	21-Feb-18	EK	1802514	
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	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.66	1	"	"	"	"	"	
91-20-3	Naphthalene	**4.98**		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	**1.06**		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	**1.48**		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	< 3300	O01, E	µg/l	3300	30.9	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*99*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*102*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*119*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*119*			*70-130 %*			"	"	"	"	"	
Re-analysis of 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	23-Feb-18	23-Feb-18	EK	1802636	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5	CFI Brockton	Ground Water	20-Feb-18 10:30	20-Feb-18
SC44122-02	MA8619			

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846 8260													
67-64-1	Acetone	**38.2**	O01	µg/l	10.0	0.80	1	SW846 8260C	23-Feb-18	23-Feb-18	EK	1802636	
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	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.33	1	"	"	"	"	"	
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)	**3.46**		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	O01	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	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5	CFI Brockton	Ground Water	20-Feb-18 10:30	20-Feb-18
SC44122-02	MA8619			

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846 8260													
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.28	1	SW846 8260C	23-Feb-18	23-Feb-18	EK	1802636	
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	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.66	1	"	"	"	"	"	
91-20-3	Naphthalene	**4.63**		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	**1.05**		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	**1.50**		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	**3,020**	O01, E	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*	*117*			*70-130 %*			"	"	"	"	"	
Re-analysis of Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS			GS1										
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 5.00	D	µg/l	5.00	2.66	5	SW846 8260C	26-Feb-18	26-Feb-18	GMA	1802714	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5	CFI Brockton	Ground Water	20-Feb-18 10:30	20-Feb-18
SC44122-02	MA8619			

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846 8260			GS1										
67-64-1	Acetone	< 50.0	O01, D	µg/l	50.0	4.02	5	SW846 8260C	26-Feb-18	26-Feb-18	GMA	1802714	
107-13-1	Acrylonitrile	< 2.50	D	µg/l	2.50	2.33	5	"	"	"	"	"	
71-43-2	Benzene	< 5.00	D	µg/l	5.00	1.42	5	"	"	"	"	"	
108-86-1	Bromobenzene	< 5.00	D	µg/l	5.00	1.66	5	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5.00	D	µg/l	5.00	1.69	5	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 2.50	D	µg/l	2.50	2.08	5	"	"	"	"	"	
75-25-2	Bromoform	< 5.00	D	µg/l	5.00	2.12	5	"	"	"	"	"	
74-83-9	Bromomethane	< 10.0	D	µg/l	10.0	4.48	5	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	< 10.0	D	µg/l	10.0	5.35	5	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5.00	D	µg/l	5.00	2.06	5	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5.00	D	µg/l	5.00	1.63	5	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5.00	D	µg/l	5.00	1.58	5	"	"	"	"	"	
75-15-0	Carbon disulfide	< 10.0	D	µg/l	10.0	2.06	5	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 5.00	D	µg/l	5.00	2.18	5	"	"	"	"	"	
108-90-7	Chlorobenzene	< 5.00	D	µg/l	5.00	1.24	5	"	"	"	"	"	
75-00-3	Chloroethane	< 10.0	D	µg/l	10.0	2.94	5	"	"	"	"	"	
67-66-3	Chloroform	< 5.00	D	µg/l	5.00	1.63	5	"	"	"	"	"	
74-87-3	Chloromethane	< 10.0	O01, D	µg/l	10.0	1.84	5	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5.00	D	µg/l	5.00	1.58	5	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 5.00	D	µg/l	5.00	1.58	5	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 10.0	D	µg/l	10.0	4.32	5	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 2.50	D	µg/l	2.50	1.58	5	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	< 2.50	D	µg/l	2.50	1.01	5	"	"	"	"	"	
74-95-3	Dibromomethane	< 5.00	D	µg/l	5.00	1.54	5	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5.00	D	µg/l	5.00	1.38	5	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5.00	D	µg/l	5.00	1.57	5	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5.00	D	µg/l	5.00	1.36	5	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	< 10.0	D	µg/l	10.0	2.92	5	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 5.00	D	µg/l	5.00	1.62	5	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 5.00	D	µg/l	5.00	1.38	5	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 5.00	D	µg/l	5.00	3.46	5	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 5.00	D	µg/l	5.00	1.64	5	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 5.00	D	µg/l	5.00	1.88	5	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 5.00	D	µg/l	5.00	1.46	5	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 5.00	D	µg/l	5.00	1.07	5	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 5.00	D	µg/l	5.00	2.09	5	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 5.00	D	µg/l	5.00	2.89	5	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	1.80	5	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	1.74	5	"	"	"	"	"	
100-41-4	Ethylbenzene	< 5.00	D	µg/l	5.00	1.64	5	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 2.50	D	µg/l	2.50	2.35	5	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	< 10.0	D	µg/l	10.0	2.64	5	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5.00	D	µg/l	5.00	1.80	5	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5	CFI Brockton	Ground Water	20-Feb-18 10:30	20-Feb-18
SC44122-02	MA8619			

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846 8260			GS1										
99-87-6	4-Isopropyltoluene	< 5.00	D	µg/l	5.00	1.40	5	SW846 8260C	26-Feb-18	26-Feb-18	GMA	1802714	
1634-04-4	Methyl tert-butyl ether	< 5.00	D	µg/l	5.00	1.18	5	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0	D	µg/l	10.0	2.58	5	"	"	"	"	"	
75-09-2	Methylene chloride	< 10.0	D	µg/l	10.0	3.30	5	"	"	"	"	"	
91-20-3	Naphthalene	< 5.00	D	µg/l	5.00	1.76	5	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5.00	D	µg/l	5.00	1.72	5	"	"	"	"	"	
100-42-5	Styrene	< 5.00	D	µg/l	5.00	2.02	5	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 5.00	D	µg/l	5.00	1.89	5	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 2.50	D	µg/l	2.50	1.65	5	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 5.00	D	µg/l	5.00	2.85	5	"	"	"	"	"	
108-88-3	Toluene	< 5.00	D	µg/l	5.00	1.50	5	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.88	5	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.89	5	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.48	5	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 5.00	D	µg/l	5.00	2.54	5	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 5.00	D	µg/l	5.00	1.65	5	"	"	"	"	"	
79-01-6	Trichloroethene	< 5.00	D	µg/l	5.00	2.48	5	"	"	"	"	"	
75-69-4	Trichlorofluoromethane (Freon 11)	< 5.00	D	µg/l	5.00	2.44	5	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 5.00	D	µg/l	5.00	1.46	5	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5.00	D	µg/l	5.00	1.78	5	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 5.00	D	µg/l	5.00	2.16	5	"	"	"	"	"	
75-01-4	Vinyl chloride	< 5.00	D	µg/l	5.00	2.36	5	"	"	"	"	"	
179601-23-1	m,p-Xylene	< 10.0	D	µg/l	10.0	1.90	5	"	"	"	"	"	
95-47-6	o-Xylene	< 5.00	D	µg/l	5.00	1.42	5	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10.0	D	µg/l	10.0	5.30	5	"	"	"	"	"	
60-29-7	Ethyl ether	< 5.00	D	µg/l	5.00	1.87	5	"	"	"	"	"	
994-05-8	Tert-amyl methyl ether	< 5.00	D	µg/l	5.00	2.46	5	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	< 5.00	D	µg/l	5.00	1.66	5	"	"	"	"	"	
108-20-3	Di-isopropyl ether	< 5.00	D	µg/l	5.00	1.43	5	"	"	"	"	"	
75-65-0	Tert-Butanol / butyl alcohol	< 50.0	D	µg/l	50.0	29.5	5	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 100	D	µg/l	100	57.0	5	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 25.0	D	µg/l	25.0	4.10	5	"	"	"	"	"	
64-17-5	Ethanol	**4,340**	O01, D	µg/l	1000	154	5	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*99*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*103*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*120*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*125*			*70-130 %*			"	"	"	"	"	
Semivolatile Organic Compounds by GCMS													
Semivolatile Organic Compounds Prepared by method SW846 3510C													
83-32-9	Acenaphthene	< 5.32		µg/l	5.32	0.735	1	SW846 8270D	22-Feb-18	23-Feb-18	MSL	1802550	
208-96-8	Acenaphthylene	< 5.32		µg/l	5.32	0.727	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5	CFI Brockton	Ground Water	20-Feb-18 10:30	20-Feb-18
SC44122-02	MA8619			

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													
62-53-3	Aniline	< 5.32		µg/l	5.32	1.88	1	SW846 8270D	22-Feb-18	23-Feb-18	MSL	1802550	
120-12-7	Anthracene	< 5.32		µg/l	5.32	0.647	1	"	"	"	"	"	
103-33-3	Azobenzene/Diphenyldiazene	< 5.32		µg/l	5.32	0.796	1	"	"	"	"	"	
92-87-5	Benzidine	< 10.6		µg/l	10.6	1.22	1	"	"	"	"	"	
56-55-3	Benzo (a) anthracene	< 5.32		µg/l	5.32	0.570	1	"	"	"	"	"	
50-32-8	Benzo (a) pyrene	< 5.32		µg/l	5.32	0.598	1	"	"	"	"	"	
205-99-2	Benzo (b) fluoranthene	< 5.32		µg/l	5.32	0.465	1	"	"	"	"	"	
191-24-2	Benzo (g,h,i) perylene	< 5.32		µg/l	5.32	0.564	1	"	"	"	"	"	
207-08-9	Benzo (k) fluoranthene	< 5.32		µg/l	5.32	0.511	1	"	"	"	"	"	
65-85-0	Benzoic acid	< 5.32		µg/l	5.32	0.561	1	"	"	"	"	"	
100-51-6	Benzyl alcohol	< 5.32		µg/l	5.32	0.830	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 5.32		µg/l	5.32	0.709	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 5.32		µg/l	5.32	0.781	1	"	"	"	"	"	
108-60-1	Bis(2-chloroisopropyl)ether	< 5.32		µg/l	5.32	0.828	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 5.32		µg/l	5.32	0.679	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 5.32		µg/l	5.32	0.640	1	"	"	"	"	"	
85-68-7	Butyl benzyl phthalate	< 5.32		µg/l	5.32	0.466	1	"	"	"	"	"	
86-74-8	Carbazole	< 5.32		µg/l	5.32	1.66	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 5.32		µg/l	5.32	0.533	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 5.32		µg/l	5.32	1.19	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 5.32		µg/l	5.32	0.628	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 5.32		µg/l	5.32	0.796	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 5.32		µg/l	5.32	0.641	1	"	"	"	"	"	
218-01-9	Chrysene	< 5.32		µg/l	5.32	0.566	1	"	"	"	"	"	
53-70-3	Dibenzo (a,h) anthracene	< 5.32		µg/l	5.32	0.479	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 5.32		µg/l	5.32	0.787	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5.32		µg/l	5.32	0.598	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5.32		µg/l	5.32	0.688	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5.32		µg/l	5.32	0.653	1	"	"	"	"	"	
91-94-1	3,3´-Dichlorobenzidine	< 5.32		µg/l	5.32	2.11	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 5.32		µg/l	5.32	0.564	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 5.32		µg/l	5.32	0.663	1	"	"	"	"	"	
131-11-3	Dimethyl phthalate	< 5.32		µg/l	5.32	0.806	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 5.32		µg/l	5.32	0.695	1	"	"	"	"	"	
84-74-2	Di-n-butyl phthalate	< 5.32		µg/l	5.32	0.486	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 5.32		µg/l	5.32	0.339	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 5.32		µg/l	5.32	0.597	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 5.32		µg/l	5.32	0.716	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 5.32		µg/l	5.32	0.631	1	"	"	"	"	"	
117-84-0	Di-n-octyl phthalate	< 5.32		µg/l	5.32	0.432	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 5.32		µg/l	5.32	0.679	1	"	"	"	"	"	
86-73-7	Fluorene	< 5.32		µg/l	5.32	0.651	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5 SC44122-02	CFI Brockton MA8619	Ground Water	20-Feb-18 10:30	20-Feb-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													
118-74-1	Hexachlorobenzene	< 5.32		µg/l	5.32	0.607	1	SW846 8270D	22-Feb-18	23-Feb-18	MSL	1802550	
87-68-3	Hexachlorobutadiene	< 5.32		µg/l	5.32	0.413	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 5.32		µg/l	5.32	1.10	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 5.32		µg/l	5.32	0.680	1	"	"	"	"	"	
193-39-5	Indeno (1,2,3-cd) pyrene	< 5.32		µg/l	5.32	0.617	1	"	"	"	"	"	
78-59-1	Isophorone	< 5.32		µg/l	5.32	0.623	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 5.32		µg/l	5.32	0.611	1	"	"	"	"	"	
95-48-7	2-Methylphenol	< 5.32		µg/l	5.32	0.707	1	"	"	"	"	"	
108-39-4, 106-44-5	3 & 4-Methylphenol	< 10.6		µg/l	10.6	0.654	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5.32		µg/l	5.32	0.729	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 5.32		µg/l	5.32	0.645	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 5.32		µg/l	5.32	0.578	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 5.32		µg/l	5.32	0.398	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 5.32		µg/l	5.32	0.734	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 5.32		µg/l	5.32	0.495	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 21.3		µg/l	21.3	0.891	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 5.32		µg/l	5.32	0.716	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 5.32		µg/l	5.32	0.615	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 5.32		µg/l	5.32	0.693	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 21.3		µg/l	21.3	0.397	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 5.32		µg/l	5.32	0.623	1	"	"	"	"	"	
108-95-2	Phenol	< 5.32		µg/l	5.32	0.686	1	"	"	"	"	"	
129-00-0	Pyrene	< 5.32		µg/l	5.32	0.649	1	"	"	"	"	"	
110-86-1	Pyridine	< 5.32		µg/l	5.32	0.871	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5.32		µg/l	5.32	0.731	1	"	"	"	"	"	
90-12-0	1-Methylnaphthalene	< 5.32		µg/l	5.32	0.780	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 5.32		µg/l	5.32	0.553	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 5.32		µg/l	5.32	0.551	1	"	"	"	"	"	
82-68-8	Pentachloronitrobenzene	< 5.32		µg/l	5.32	0.740	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 5.32		µg/l	5.32	0.771	1	"	"	"	"	"	
Surrogate recoveries:													
321-60-8	*2-Fluorobiphenyl*	*45*			*30-130 %*			"	"	"	"	"	
367-12-4	*2-Fluorophenol*	*28*			*15-110 %*			"	"	"	"	"	
4165-60-0	*Nitrobenzene-d5*	*45*			*30-130 %*			"	"	"	"	"	
4165-62-2	*Phenol-d5*	*19*			*15-110 %*			"	"	"	"	"	
1718-51-0	*Terphenyl-dl4*	*58*			*30-130 %*			"	"	"	"	"	
118-79-6	*2,4,6-Tribromophenol*	*55*			*15-110 %*			"	"	"	"	"	
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	21-Feb-18		KT	1802536	
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3005A													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-5 SC44122-02	CFI Brockton MA8619	Ground Water	20-Feb-18 10:30	20-Feb-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3005A													
7440-22-4	Silver	< 0.0050		mg/l	0.0050	0.0006	1	SW846 6010C	22-Feb-18	23-Feb-18	SJR/TBC	1802569	
7440-38-2	Arsenic	< 0.00400		mg/l	0.00400	0.00138	1	"	"	"	"	"	
7440-39-3	Barium	**0.402**		mg/l	0.0050	0.0007	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0004	1	"	"	"	"	"	
7440-47-3	Chromium	**0.0118**		mg/l	0.0050	0.0009	1	"	"	"	"	"	
7439-92-1	Lead	**0.0120**		mg/l	0.0075	0.0062	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0042	1	"	"	"	"	"	
Total Metals by EPA 200 Series Methods													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00013	1	EPA 245.1/7470A	22-Feb-18	23-Feb-18	ABW	1802570	X
Soluble Metals by EPA 200/6000 Series Methods													
Prepared by method General Prep-Metal													
	Filtration	**Field Filtered**		N/A			1	EPA 200.7/3005A/6010			KT	1802534	
Soluble Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3005A													
7440-22-4	Silver	< 0.0050		mg/l	0.0050	0.0006	1	SW846 6010C	22-Feb-18	22-Feb-18	SJR/TBC	1802315	
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0014	1	"	"	"	"	"	
7440-39-3	Barium	**0.368**		mg/l	0.0050	0.0007	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0004	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0062	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0150		mg/l	0.0150	0.0042	1	"	"	"	"	"	
Soluble Metals by EPA 200 Series Methods													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00013	1	EPA 245.1/7470A	22-Feb-18	22-Feb-18	ABW	1802316	X

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1802514 - SW846 5030 Water MS										
Blank (1802514-BLK1)					Prepared & Analyzed: 21-Feb-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						
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						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1802514 - SW846 5030 Water MS										
Blank (1802514-BLK1)					Prepared & Analyzed: 21-Feb-18					
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						
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						
Surrogate: 4-Bromofluorobenzene	*47.4*		µg/l		*50.0*		*95*	*70-130*		
Surrogate: Toluene-d8	*49.5*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*58.7*		µg/l		*50.0*		*117*	*70-130*		
Surrogate: Dibromofluoromethane	*58.9*		µg/l		*50.0*		*118*	*70-130*		
LCS (1802514-BS1)					Prepared & Analyzed: 21-Feb-18					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**25.3**		µg/l		20.0		126	70-130		
Acetone	**25.4**		µg/l		20.0		127	70-130		
Acrylonitrile	**23.0**		µg/l		20.0		115	70-130		
Benzene	**21.3**		µg/l		20.0		106	70-130		
Bromobenzene	**20.6**		µg/l		20.0		103	70-130		
Bromochloromethane	**23.5**		µg/l		20.0		117	70-130		
Bromodichloromethane	**20.9**		µg/l		20.0		104	70-130		
Bromoform	**20.6**		µg/l		20.0		103	70-130		
Bromomethane	**20.8**		µg/l		20.0		104	70-130		
2-Butanone (MEK)	**21.6**		µg/l		20.0		108	70-130		
n-Butylbenzene	**19.4**		µg/l		20.0		97	70-130		
sec-Butylbenzene	**21.5**		µg/l		20.0		108	70-130		
tert-Butylbenzene	**20.6**		µg/l		20.0		103	70-130		
Carbon disulfide	**22.6**		µg/l		20.0		113	70-130		
Carbon tetrachloride	**21.0**		µg/l		20.0		105	70-130		
Chlorobenzene	**19.9**		µg/l		20.0		99	70-130		
Chloroethane	**21.5**		µg/l		20.0		108	70-130		
Chloroform	**23.6**		µg/l		20.0		118	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1802514 - SW846 5030 Water MS										
LCS (1802514-BS1)					Prepared & Analyzed: 21-Feb-18					
Chloromethane	**21.8**		µg/l		20.0		109	70-130		
2-Chlorotoluene	**21.5**		µg/l		20.0		107	70-130		
4-Chlorotoluene	**21.8**		µg/l		20.0		109	70-130		
1,2-Dibromo-3-chloropropane	**23.5**		µg/l		20.0		117	70-130		
Dibromochloromethane	**21.3**		µg/l		20.0		107	70-130		
1,2-Dibromoethane (EDB)	**23.9**		µg/l		20.0		120	70-130		
Dibromomethane	**23.4**		µg/l		20.0		117	70-130		
1,2-Dichlorobenzene	**19.8**		µg/l		20.0		99	70-130		
1,3-Dichlorobenzene	**23.1**		µg/l		20.0		116	70-130		
1,4-Dichlorobenzene	**19.5**		µg/l		20.0		97	70-130		
Dichlorodifluoromethane (Freon12)	**22.1**		µg/l		20.0		110	70-130		
1,1-Dichloroethane	**24.0**		µg/l		20.0		120	70-130		
1,2-Dichloroethane	**24.0**		µg/l		20.0		120	70-130		
1,1-Dichloroethene	**22.4**		µg/l		20.0		112	70-130		
cis-1,2-Dichloroethene	**23.4**		µg/l		20.0		117	70-130		
trans-1,2-Dichloroethene	**23.6**		µg/l		20.0		118	70-130		
1,2-Dichloropropane	**21.1**		µg/l		20.0		106	70-130		
1,3-Dichloropropane	**22.2**		µg/l		20.0		111	70-130		
2,2-Dichloropropane	**23.2**		µg/l		20.0		116	70-130		
1,1-Dichloropropene	**21.0**		µg/l		20.0		105	70-130		
cis-1,3-Dichloropropene	**19.8**		µg/l		20.0		99	70-130		
trans-1,3-Dichloropropene	**20.7**		µg/l		20.0		103	70-130		
Ethylbenzene	**20.3**		µg/l		20.0		102	70-130		
Hexachlorobutadiene	**18.2**		µg/l		20.0		91	70-130		
2-Hexanone (MBK)	**24.3**		µg/l		20.0		122	70-130		
Isopropylbenzene	**21.0**		µg/l		20.0		105	70-130		
4-Isopropyltoluene	**18.8**		µg/l		20.0		94	70-130		
Methyl tert-butyl ether	**23.4**		µg/l		20.0		117	70-130		
4-Methyl-2-pentanone (MIBK)	**25.0**		µg/l		20.0		125	70-130		
Methylene chloride	**22.7**		µg/l		20.0		113	70-130		
Naphthalene	**20.4**		µg/l		20.0		102	70-130		
n-Propylbenzene	**19.8**		µg/l		20.0		99	70-130		
Styrene	**19.8**		µg/l		20.0		99	70-130		
1,1,1,2-Tetrachloroethane	**20.7**		µg/l		20.0		104	70-130		
1,1,2,2-Tetrachloroethane	**23.7**		µg/l		20.0		118	70-130		
Tetrachloroethene	**21.4**		µg/l		20.0		107	70-130		
Toluene	**20.5**		µg/l		20.0		103	70-130		
1,2,3-Trichlorobenzene	**18.8**		µg/l		20.0		94	70-130		
1,2,4-Trichlorobenzene	**17.7**		µg/l		20.0		89	70-130		
1,3,5-Trichlorobenzene	**19.0**		µg/l		20.0		95	70-130		
1,1,1-Trichloroethane	**21.8**		µg/l		20.0		109	70-130		
1,1,2-Trichloroethane	**23.0**		µg/l		20.0		115	70-130		
Trichloroethene	**21.0**		µg/l		20.0		105	70-130		
Trichlorofluoromethane (Freon 11)	**24.7**		µg/l		20.0		123	70-130		
1,2,3-Trichloropropane	**23.9**		µg/l		20.0		120	70-130		
1,2,4-Trimethylbenzene	**20.8**		µg/l		20.0		104	70-130		
1,3,5-Trimethylbenzene	**20.4**		µg/l		20.0		102	70-130		
Vinyl chloride	**23.7**		µg/l		20.0		118	70-130		
m,p-Xylene	**20.7**		µg/l		20.0		103	70-130		
o-Xylene	**22.0**		µg/l		20.0		110	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1802514 - SW846 5030 Water MS										
LCS (1802514-BS1)					Prepared & Analyzed: 21-Feb-18					
Tetrahydrofuran	**20.6**		µg/l		20.0		103	70-130		
Ethyl ether	**22.1**		µg/l		20.0		110	70-130		
Tert-amyl methyl ether	**20.5**		µg/l		20.0		103	70-130		
Ethyl tert-butyl ether	**21.7**		µg/l		20.0		108	70-130		
Di-isopropyl ether	**23.5**		µg/l		20.0		117	70-130		
Tert-Butanol / butyl alcohol	**235**		µg/l		200		118	70-130		
1,4-Dioxane	**225**		µg/l		200		112	70-130		
trans-1,4-Dichloro-2-butene	**23.6**		µg/l		20.0		118	70-130		
Ethanol	**466**		µg/l		400		117	70-130		
Surrogate: 4-Bromofluorobenzene	*53.2*		µg/l		*50.0*		*106*	*70-130*		
Surrogate: Toluene-d8	*51.4*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*56.4*		µg/l		*50.0*		*113*	*70-130*		
Surrogate: Dibromofluoromethane	*60.0*		µg/l		*50.0*		*120*	*70-130*		
LCS Dup (1802514-BSD1)					Prepared & Analyzed: 21-Feb-18					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**26.0**		µg/l		20.0		130	70-130	3	20
Acetone	**25.2**		µg/l		20.0		126	70-130	0.6	20
Acrylonitrile	**24.0**		µg/l		20.0		120	70-130	5	20
Benzene	**23.1**		µg/l		20.0		115	70-130	8	20
Bromobenzene	**22.0**		µg/l		20.0		110	70-130	7	20
Bromochloromethane	**24.0**		µg/l		20.0		120	70-130	2	20
Bromodichloromethane	**22.6**		µg/l		20.0		113	70-130	8	20
Bromoform	**20.5**		µg/l		20.0		102	70-130	0.4	20
Bromomethane	**19.1**		µg/l		20.0		95	70-130	9	20
2-Butanone (MEK)	**22.7**		µg/l		20.0		114	70-130	5	20
n-Butylbenzene	**21.0**		µg/l		20.0		105	70-130	8	20
sec-Butylbenzene	**22.9**		µg/l		20.0		114	70-130	6	20
tert-Butylbenzene	**22.4**		µg/l		20.0		112	70-130	8	20
Carbon disulfide	**25.0**		µg/l		20.0		125	70-130	10	20
Carbon tetrachloride	**23.0**		µg/l		20.0		115	70-130	9	20
Chlorobenzene	**21.2**		µg/l		20.0		106	70-130	6	20
Chloroethane	**23.6**		µg/l		20.0		118	70-130	9	20
Chloroform	**25.9**		µg/l		20.0		129	70-130	9	20
Chloromethane	**23.9**		µg/l		20.0		120	70-130	9	20
2-Chlorotoluene	**23.7**		µg/l		20.0		118	70-130	10	20
4-Chlorotoluene	**23.8**		µg/l		20.0		119	70-130	9	20
1,2-Dibromo-3-chloropropane	**23.1**		µg/l		20.0		116	70-130	1	20
Dibromochloromethane	**22.1**		µg/l		20.0		111	70-130	4	20
1,2-Dibromoethane (EDB)	**23.6**		µg/l		20.0		118	70-130	1	20
Dibromomethane	**23.9**		µg/l		20.0		119	70-130	2	20
1,2-Dichlorobenzene	**21.2**		µg/l		20.0		106	70-130	6	20
1,3-Dichlorobenzene	**24.9**		µg/l		20.0		124	70-130	7	20
1,4-Dichlorobenzene	**20.2**		µg/l		20.0		101	70-130	4	20
Dichlorodifluoromethane (Freon12)	**24.0**		µg/l		20.0		120	70-130	8	20
1,1-Dichloroethane	**25.8**		µg/l		20.0		129	70-130	8	20
1,2-Dichloroethane	**23.9**		µg/l		20.0		119	70-130	0.4	20
1,1-Dichloroethene	**23.9**		µg/l		20.0		119	70-130	6	20
cis-1,2-Dichloroethene	**25.0**		µg/l		20.0		125	70-130	6	20
trans-1,2-Dichloroethene	**25.0**		µg/l		20.0		125	70-130	6	20
1,2-Dichloropropane	**22.6**		µg/l		20.0		113	70-130	7	20
1,3-Dichloropropane	**22.6**		µg/l		20.0		113	70-130	2	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1802514 - SW846 5030 Water MS										
LCS Dup (1802514-BSD1)					Prepared & Analyzed: 21-Feb-18					
2,2-Dichloropropane	**25.8**		µg/l		20.0		129	70-130	10	20
1,1-Dichloropropene	**23.0**		µg/l		20.0		115	70-130	9	20
cis-1,3-Dichloropropene	**20.9**		µg/l		20.0		105	70-130	6	20
trans-1,3-Dichloropropene	**21.0**		µg/l		20.0		105	70-130	2	20
Ethylbenzene	**22.0**		µg/l		20.0		110	70-130	8	20
Hexachlorobutadiene	**19.8**		µg/l		20.0		99	70-130	8	20
2-Hexanone (MBK)	**21.8**		µg/l		20.0		109	70-130	11	20
Isopropylbenzene	**23.4**		µg/l		20.0		117	70-130	11	20
4-Isopropyltoluene	**20.6**		µg/l		20.0		103	70-130	9	20
Methyl tert-butyl ether	**24.4**		µg/l		20.0		122	70-130	4	20
4-Methyl-2-pentanone (MIBK)	**25.2**		µg/l		20.0		126	70-130	0.7	20
Methylene chloride	**25.5**		µg/l		20.0		127	70-130	12	20
Naphthalene	**20.7**		µg/l		20.0		104	70-130	1	20
n-Propylbenzene	**22.0**		µg/l		20.0		110	70-130	11	20
Styrene	**20.8**		µg/l		20.0		104	70-130	5	20
1,1,1,2-Tetrachloroethane	**22.6**		µg/l		20.0		113	70-130	9	20
1,1,2,2-Tetrachloroethane	**24.1**		µg/l		20.0		120	70-130	2	20
Tetrachloroethene	**23.2**		µg/l		20.0		116	70-130	8	20
Toluene	**21.8**		µg/l		20.0		109	70-130	6	20
1,2,3-Trichlorobenzene	**20.1**		µg/l		20.0		101	70-130	7	20
1,2,4-Trichlorobenzene	**19.2**		µg/l		20.0		96	70-130	8	20
1,3,5-Trichlorobenzene	**19.8**		µg/l		20.0		99	70-130	4	20
1,1,1-Trichloroethane	**23.8**		µg/l		20.0		119	70-130	9	20
1,1,2-Trichloroethane	**23.6**		µg/l		20.0		118	70-130	3	20
Trichloroethene	**22.6**		µg/l		20.0		113	70-130	7	20
Trichlorofluoromethane (Freon 11)	**25.9**		µg/l		20.0		130	70-130	5	20
1,2,3-Trichloropropane	**23.5**		µg/l		20.0		117	70-130	2	20
1,2,4-Trimethylbenzene	**22.0**		µg/l		20.0		110	70-130	5	20
1,3,5-Trimethylbenzene	**22.1**		µg/l		20.0		110	70-130	8	20
Vinyl chloride	**25.6**		µg/l		20.0		128	70-130	8	20
m,p-Xylene	**22.5**		µg/l		20.0		113	70-130	9	20
o-Xylene	**23.3**		µg/l		20.0		116	70-130	6	20
Tetrahydrofuran	**21.2**		µg/l		20.0		106	70-130	3	20
Ethyl ether	**23.1**		µg/l		20.0		115	70-130	4	20
Tert-amyl methyl ether	**21.5**		µg/l		20.0		107	70-130	5	20
Ethyl tert-butyl ether	**22.3**		µg/l		20.0		112	70-130	3	20
Di-isopropyl ether	**25.4**		µg/l		20.0		127	70-130	8	20
Tert-Butanol / butyl alcohol	**238**		µg/l		200		119	70-130	1	20
1,4-Dioxane	**204**		µg/l		200		102	70-130	10	20
trans-1,4-Dichloro-2-butene	**21.6**		µg/l		20.0		108	70-130	9	20
Ethanol	**435**		µg/l		400		109	70-130	7	20
Surrogate: 4-Bromofluorobenzene	*55.1*		µg/l		*50.0*		*110*	*70-130*		
Surrogate: Toluene-d8	*52.2*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*58.5*		µg/l		*50.0*		*117*	*70-130*		
Surrogate: Dibromofluoromethane	*59.9*		µg/l		*50.0*		*120*	*70-130*		
Batch 1802636 - SW846 5030 Water MS										
Blank (1802636-BLK1)					Prepared & Analyzed: 23-Feb-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 1802636 - SW846 5030 Water MS										
Blank (1802636-BLK1)					Prepared & Analyzed: 23-Feb-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 1802636 - SW846 5030 Water MS										
Blank (1802636-BLK1)					Prepared & Analyzed: 23-Feb-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						
Surrogate: 4-Bromofluorobenzene	*49.1*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*50.4*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*59.2*		µg/l		*50.0*		*118*	*70-130*		
Surrogate: Dibromofluoromethane	*60.0*		µg/l		*50.0*		*120*	*70-130*		
LCS (1802636-BS1)					Prepared & Analyzed: 23-Feb-18					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**25.5**		µg/l		20.0		128	70-130		
Acetone	**23.9**		µg/l		20.0		120	70-130		
Acrylonitrile	**23.5**		µg/l		20.0		118	70-130		
Benzene	**21.6**		µg/l		20.0		108	70-130		
Bromobenzene	**21.5**		µg/l		20.0		107	70-130		
Bromochloromethane	**23.7**		µg/l		20.0		118	70-130		
Bromodichloromethane	**22.3**		µg/l		20.0		111	70-130		
Bromoform	**19.8**		µg/l		20.0		99	70-130		
Bromomethane	**19.2**		µg/l		20.0		96	70-130		
2-Butanone (MEK)	**23.7**		µg/l		20.0		118	70-130		
n-Butylbenzene	**18.9**		µg/l		20.0		95	70-130		
sec-Butylbenzene	**21.3**		µg/l		20.0		107	70-130		
tert-Butylbenzene	**20.9**		µg/l		20.0		105	70-130		
Carbon disulfide	**23.9**		µg/l		20.0		120	70-130		
Carbon tetrachloride	**22.3**		µg/l		20.0		112	70-130		
Chlorobenzene	**20.4**		µg/l		20.0		102	70-130		
Chloroethane	**22.3**		µg/l		20.0		112	70-130		
Chloroform	**24.0**		µg/l		20.0		120	70-130		
Chloromethane	**22.7**		µg/l		20.0		113	70-130		
2-Chlorotoluene	**21.4**		µg/l		20.0		107	70-130		
4-Chlorotoluene	**22.1**		µg/l		20.0		111	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1802636 - SW846 5030 Water MS										
LCS (1802636-BS1)					Prepared & Analyzed: 23-Feb-18					
1,2-Dibromo-3-chloropropane	**22.3**		µg/l		20.0		112	70-130		
Dibromochloromethane	**21.5**		µg/l		20.0		108	70-130		
1,2-Dibromoethane (EDB)	**23.3**		µg/l		20.0		116	70-130		
Dibromomethane	**23.8**		µg/l		20.0		119	70-130		
1,2-Dichlorobenzene	**20.0**		µg/l		20.0		100	70-130		
1,3-Dichlorobenzene	**23.9**		µg/l		20.0		119	70-130		
1,4-Dichlorobenzene	**19.1**		µg/l		20.0		96	70-130		
Dichlorodifluoromethane (Freon12)	**23.8**		µg/l		20.0		119	70-130		
1,1-Dichloroethane	**25.1**		µg/l		20.0		126	70-130		
1,2-Dichloroethane	**24.1**		µg/l		20.0		120	70-130		
1,1-Dichloroethene	**23.2**		µg/l		20.0		116	70-130		
cis-1,2-Dichloroethene	**23.8**		µg/l		20.0		119	70-130		
trans-1,2-Dichloroethene	**23.9**		µg/l		20.0		120	70-130		
1,2-Dichloropropane	**22.0**		µg/l		20.0		110	70-130		
1,3-Dichloropropane	**22.5**		µg/l		20.0		112	70-130		
2,2-Dichloropropane	**25.0**		µg/l		20.0		125	70-130		
1,1-Dichloropropene	**22.0**		µg/l		20.0		110	70-130		
cis-1,3-Dichloropropene	**20.5**		µg/l		20.0		102	70-130		
trans-1,3-Dichloropropene	**20.5**		µg/l		20.0		102	70-130		
Ethylbenzene	**20.8**		µg/l		20.0		104	70-130		
Hexachlorobutadiene	**17.9**		µg/l		20.0		90	70-130		
2-Hexanone (MBK)	**23.1**		µg/l		20.0		116	70-130		
Isopropylbenzene	**21.8**		µg/l		20.0		109	70-130		
4-Isopropyltoluene	**18.9**		µg/l		20.0		95	70-130		
Methyl tert-butyl ether	**23.2**		µg/l		20.0		116	70-130		
4-Methyl-2-pentanone (MIBK)	**23.6**		µg/l		20.0		118	70-130		
Methylene chloride	**23.9**		µg/l		20.0		120	70-130		
Naphthalene	**18.2**		µg/l		20.0		91	70-130		
n-Propylbenzene	**20.6**		µg/l		20.0		103	70-130		
Styrene	**19.5**		µg/l		20.0		97	70-130		
1,1,1,2-Tetrachloroethane	**22.0**		µg/l		20.0		110	70-130		
1,1,2,2-Tetrachloroethane	**23.1**		µg/l		20.0		116	70-130		
Tetrachloroethene	**21.4**		µg/l		20.0		107	70-130		
Toluene	**20.8**		µg/l		20.0		104	70-130		
1,2,3-Trichlorobenzene	**18.1**		µg/l		20.0		90	70-130		
1,2,4-Trichlorobenzene	**17.7**		µg/l		20.0		88	70-130		
1,3,5-Trichlorobenzene	**18.6**		µg/l		20.0		93	70-130		
1,1,1-Trichloroethane	**23.9**		µg/l		20.0		120	70-130		
1,1,2-Trichloroethane	**23.4**		µg/l		20.0		117	70-130		
Trichloroethene	**22.5**		µg/l		20.0		112	70-130		
Trichlorofluoromethane (Freon 11)	**25.6**		µg/l		20.0		128	70-130		
1,2,3-Trichloropropane	**23.5**		µg/l		20.0		118	70-130		
1,2,4-Trimethylbenzene	**21.1**		µg/l		20.0		106	70-130		
1,3,5-Trimethylbenzene	**20.8**		µg/l		20.0		104	70-130		
Vinyl chloride	**25.4**		µg/l		20.0		127	70-130		
m,p-Xylene	**20.8**		µg/l		20.0		104	70-130		
o-Xylene	**21.7**		µg/l		20.0		109	70-130		
Tetrahydrofuran	**20.4**		µg/l		20.0		102	70-130		
Ethyl ether	**22.4**		µg/l		20.0		112	70-130		
Tert-amyl methyl ether	**19.7**		µg/l		20.0		99	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1802636 - SW846 5030 Water MS										
LCS (1802636-BS1)					Prepared & Analyzed: 23-Feb-18					
Ethyl tert-butyl ether	**22.2**		µg/l		20.0		111	70-130		
Di-isopropyl ether	**23.6**		µg/l		20.0		118	70-130		
Tert-Butanol / butyl alcohol	**232**		µg/l		200		116	70-130		
1,4-Dioxane	**191**		µg/l		200		95	70-130		
trans-1,4-Dichloro-2-butene	**21.3**		µg/l		20.0		107	70-130		
Ethanol	**477**		µg/l		400		119	70-130		
Surrogate: 4-Bromofluorobenzene	*53.6*		µg/l		*50.0*		*107*	*70-130*		
Surrogate: Toluene-d8	*51.8*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*56.8*		µg/l		*50.0*		*114*	*70-130*		
Surrogate: Dibromofluoromethane	*59.7*		µg/l		*50.0*		*119*	*70-130*		
LCS Dup (1802636-BSD1)					Prepared & Analyzed: 23-Feb-18					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**25.2**		µg/l		20.0		126	70-130	1	20
Acetone	**25.3**		µg/l		20.0		126	70-130	6	20
Acrylonitrile	**25.3**		µg/l		20.0		127	70-130	7	20
Benzene	**21.6**		µg/l		20.0		108	70-130	0.2	20
Bromobenzene	**21.1**		µg/l		20.0		105	70-130	2	20
Bromochloromethane	**24.4**		µg/l		20.0		122	70-130	3	20
Bromodichloromethane	**22.4**		µg/l		20.0		112	70-130	0.4	20
Bromoform	**20.4**		µg/l		20.0		102	70-130	3	20
Bromomethane	**20.7**		µg/l		20.0		104	70-130	8	20
2-Butanone (MEK)	**24.2**		µg/l		20.0		121	70-130	2	20
n-Butylbenzene	**19.7**		µg/l		20.0		99	70-130	4	20
sec-Butylbenzene	**20.5**		µg/l		20.0		103	70-130	4	20
tert-Butylbenzene	**20.1**		µg/l		20.0		100	70-130	4	20
Carbon disulfide	**25.2**		µg/l		20.0		126	70-130	5	20
Carbon tetrachloride	**22.2**		µg/l		20.0		111	70-130	0.4	20
Chlorobenzene	**19.8**		µg/l		20.0		99	70-130	3	20
Chloroethane	**22.9**		µg/l		20.0		115	70-130	3	20
Chloroform	**25.2**		µg/l		20.0		126	70-130	5	20
Chloromethane	**22.3**		µg/l		20.0		111	70-130	2	20
2-Chlorotoluene	**20.6**		µg/l		20.0		103	70-130	4	20
4-Chlorotoluene	**20.8**		µg/l		20.0		104	70-130	6	20
1,2-Dibromo-3-chloropropane	**24.5**		µg/l		20.0		123	70-130	9	20
Dibromochloromethane	**21.8**		µg/l		20.0		109	70-130	1	20
1,2-Dibromoethane (EDB)	**23.7**		µg/l		20.0		119	70-130	2	20
Dibromomethane	**25.1**		µg/l		20.0		125	70-130	5	20
1,2-Dichlorobenzene	**20.9**		µg/l		20.0		105	70-130	4	20
1,3-Dichlorobenzene	**22.2**		µg/l		20.0		111	70-130	7	20
1,4-Dichlorobenzene	**19.2**		µg/l		20.0		96	70-130	0.3	20
Dichlorodifluoromethane (Freon12)	**23.4**		µg/l		20.0		117	70-130	2	20
1,1-Dichloroethane	**25.0**		µg/l		20.0		125	70-130	0.6	20
1,2-Dichloroethane	**25.3**		µg/l		20.0		127	70-130	5	20
1,1-Dichloroethene	**23.5**		µg/l		20.0		118	70-130	1	20
cis-1,2-Dichloroethene	**24.0**		µg/l		20.0		120	70-130	0.9	20
trans-1,2-Dichloroethene	**24.0**		µg/l		20.0		120	70-130	0.6	20
1,2-Dichloropropane	**21.3**		µg/l		20.0		107	70-130	3	20
1,3-Dichloropropane	**22.0**		µg/l		20.0		110	70-130	2	20
2,2-Dichloropropane	**23.9**		µg/l		20.0		119	70-130	5	20
1,1-Dichloropropene	**21.9**		µg/l		20.0		109	70-130	0.6	20
cis-1,3-Dichloropropene	**20.8**		µg/l		20.0		104	70-130	1	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1802636 - SW846 5030 Water MS										
LCS Dup (1802636-BSD1)					Prepared & Analyzed: 23-Feb-18					
trans-1,3-Dichloropropene	**21.1**		µg/l		20.0		106	70-130	3	20
Ethylbenzene	**19.9**		µg/l		20.0		99	70-130	4	20
Hexachlorobutadiene	**18.7**		µg/l		20.0		94	70-130	4	20
2-Hexanone (MBK)	**24.2**		µg/l		20.0		121	70-130	5	20
Isopropylbenzene	**21.2**		µg/l		20.0		106	70-130	3	20
4-Isopropyltoluene	**19.4**		µg/l		20.0		97	70-130	2	20
Methyl tert-butyl ether	**25.1**		µg/l		20.0		125	70-130	8	20
4-Methyl-2-pentanone (MIBK)	**24.8**		µg/l		20.0		124	70-130	5	20
Methylene chloride	**24.8**		µg/l		20.0		124	70-130	3	20
Naphthalene	**21.4**		µg/l		20.0		107	70-130	16	20
n-Propylbenzene	**19.5**		µg/l		20.0		98	70-130	5	20
Styrene	**18.9**		µg/l		20.0		95	70-130	3	20
1,1,1,2-Tetrachloroethane	**21.7**		µg/l		20.0		108	70-130	1	20
1,1,2,2-Tetrachloroethane	**22.4**		µg/l		20.0		112	70-130	3	20
Tetrachloroethene	**21.7**		µg/l		20.0		108	70-130	1	20
Toluene	**20.8**		µg/l		20.0		104	70-130	0.3	20
1,2,3-Trichlorobenzene	**19.4**		µg/l		20.0		97	70-130	7	20
1,2,4-Trichlorobenzene	**18.8**		µg/l		20.0		94	70-130	6	20
1,3,5-Trichlorobenzene	**19.3**		µg/l		20.0		96	70-130	4	20
1,1,1-Trichloroethane	**23.5**		µg/l		20.0		117	70-130	2	20
1,1,2-Trichloroethane	**22.9**		µg/l		20.0		114	70-130	2	20
Trichloroethene	**21.5**		µg/l		20.0		108	70-130	5	20
Trichlorofluoromethane (Freon 11)	**25.9**		µg/l		20.0		129	70-130	1	20
1,2,3-Trichloropropane	**22.9**		µg/l		20.0		115	70-130	3	20
1,2,4-Trimethylbenzene	**20.2**		µg/l		20.0		101	70-130	4	20
1,3,5-Trimethylbenzene	**20.2**		µg/l		20.0		101	70-130	3	20
Vinyl chloride	**23.2**		µg/l		20.0		116	70-130	9	20
m,p-Xylene	**19.9**		µg/l		20.0		100	70-130	4	20
o-Xylene	**21.1**		µg/l		20.0		105	70-130	3	20
Tetrahydrofuran	**21.0**		µg/l		20.0		105	70-130	3	20
Ethyl ether	**23.5**		µg/l		20.0		117	70-130	5	20
Tert-amyl methyl ether	**20.0**		µg/l		20.0		100	70-130	2	20
Ethyl tert-butyl ether	**21.9**		µg/l		20.0		110	70-130	1	20
Di-isopropyl ether	**24.3**		µg/l		20.0		122	70-130	3	20
Tert-Butanol / butyl alcohol	**250**		µg/l		200		125	70-130	7	20
1,4-Dioxane	**223**		µg/l		200		111	70-130	15	20
trans-1,4-Dichloro-2-butene	**20.4**		µg/l		20.0		102	70-130	5	20
Ethanol	**469**		µg/l		400		117	70-130	2	20
Surrogate: 4-Bromofluorobenzene	*53.5*		µg/l		*50.0*		*107*	*70-130*		
Surrogate: Toluene-d8	*51.9*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*57.4*		µg/l		*50.0*		*115*	*70-130*		
Surrogate: Dibromofluoromethane	*59.1*		µg/l		*50.0*		*118*	*70-130*		
Batch 1802714 - SW846 5030 Water MS										
Blank (1802714-BLK1)					Prepared & Analyzed: 26-Feb-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						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromochloromethane	< 1.00		µg/l	1.00						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1802714 - SW846 5030 Water MS										
Blank (1802714-BLK1)					Prepared & Analyzed: 26-Feb-18					
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						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1802714 - SW846 5030 Water MS										
Blank (1802714-BLK1)					Prepared & Analyzed: 26-Feb-18					
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						
Surrogate: 4-Bromofluorobenzene	*49.1*		µg/l		*50.0*		*98*	*70-130*		
Surrogate: Toluene-d8	*51.2*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*59.8*		µg/l		*50.0*		*120*	*70-130*		
Surrogate: Dibromofluoromethane	*62.8*		µg/l		*50.0*		*126*	*70-130*		
LCS (1802714-BS1)					Prepared & Analyzed: 26-Feb-18					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**23.6**		µg/l		20.0		118	70-130		
Acetone	**25.4**		µg/l		20.0		127	70-130		
Acrylonitrile	**23.7**		µg/l		20.0		119	70-130		
Benzene	**22.0**		µg/l		20.0		110	70-130		
Bromobenzene	**21.2**		µg/l		20.0		106	70-130		
Bromochloromethane	**24.4**		µg/l		20.0		122	70-130		
Bromodichloromethane	**22.4**		µg/l		20.0		112	70-130		
Bromoform	**20.5**		µg/l		20.0		103	70-130		
Bromomethane	**19.7**		µg/l		20.0		99	70-130		
2-Butanone (MEK)	**22.2**		µg/l		20.0		111	70-130		
n-Butylbenzene	**18.5**		µg/l		20.0		92	70-130		
sec-Butylbenzene	**20.5**		µg/l		20.0		102	70-130		
tert-Butylbenzene	**20.4**		µg/l		20.0		102	70-130		
Carbon disulfide	**24.8**		µg/l		20.0		124	70-130		
Carbon tetrachloride	**21.7**		µg/l		20.0		108	70-130		
Chlorobenzene	**20.1**		µg/l		20.0		100	70-130		
Chloroethane	**22.8**		µg/l		20.0		114	70-130		
Chloroform	**23.6**		µg/l		20.0		118	70-130		
Chloromethane	**23.0**		µg/l		20.0		115	70-130		
2-Chlorotoluene	**21.6**		µg/l		20.0		108	70-130		
4-Chlorotoluene	**22.5**		µg/l		20.0		112	70-130		
1,2-Dibromo-3-chloropropane	**24.2**		µg/l		20.0		121	70-130		
Dibromochloromethane	**22.0**		µg/l		20.0		110	70-130		
1,2-Dibromoethane (EDB)	**24.4**		µg/l		20.0		122	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1802714 - SW846 5030 Water MS										
LCS (1802714-BS1)						Prepared & Analyzed: 26-Feb-18				
Dibromomethane	**23.8**		µg/l		20.0		119	70-130		
1,2-Dichlorobenzene	**20.7**		µg/l		20.0		104	70-130		
1,3-Dichlorobenzene	**23.2**		µg/l		20.0		116	70-130		
1,4-Dichlorobenzene	**18.9**		µg/l		20.0		94	70-130		
Dichlorodifluoromethane (Freon12)	**22.2**		µg/l		20.0		111	70-130		
1,1-Dichloroethane	**24.5**		µg/l		20.0		123	70-130		
1,2-Dichloroethane	**23.5**		µg/l		20.0		117	70-130		
1,1-Dichloroethene	**22.7**		µg/l		20.0		113	70-130		
cis-1,2-Dichloroethene	**23.7**		µg/l		20.0		119	70-130		
trans-1,2-Dichloroethene	**23.4**		µg/l		20.0		117	70-130		
1,2-Dichloropropane	**21.7**		µg/l		20.0		109	70-130		
1,3-Dichloropropane	**22.9**		µg/l		20.0		114	70-130		
2,2-Dichloropropane	**23.5**		µg/l		20.0		118	70-130		
1,1-Dichloropropene	**21.2**		µg/l		20.0		106	70-130		
cis-1,3-Dichloropropene	**20.5**		µg/l		20.0		103	70-130		
trans-1,3-Dichloropropene	**21.6**		µg/l		20.0		108	70-130		
Ethylbenzene	**20.2**		µg/l		20.0		101	70-130		
Hexachlorobutadiene	**18.3**		µg/l		20.0		92	70-130		
2-Hexanone (MBK)	**23.2**		µg/l		20.0		116	70-130		
Isopropylbenzene	**21.2**		µg/l		20.0		106	70-130		
4-Isopropyltoluene	**18.9**		µg/l		20.0		94	70-130		
Methyl tert-butyl ether	**23.6**		µg/l		20.0		118	70-130		
4-Methyl-2-pentanone (MIBK)	**24.6**		µg/l		20.0		123	70-130		
Methylene chloride	**22.8**		µg/l		20.0		114	70-130		
Naphthalene	**19.9**		µg/l		20.0		99	70-130		
n-Propylbenzene	**20.0**		µg/l		20.0		100	70-130		
Styrene	**19.5**		µg/l		20.0		98	70-130		
1,1,1,2-Tetrachloroethane	**21.8**		µg/l		20.0		109	70-130		
1,1,2,2-Tetrachloroethane	**22.8**		µg/l		20.0		114	70-130		
Tetrachloroethene	**21.0**		µg/l		20.0		105	70-130		
Toluene	**20.8**		µg/l		20.0		104	70-130		
1,2,3-Trichlorobenzene	**18.7**		µg/l		20.0		93	70-130		
1,2,4-Trichlorobenzene	**18.5**		µg/l		20.0		92	70-130		
1,3,5-Trichlorobenzene	**19.1**		µg/l		20.0		96	70-130		
1,1,1-Trichloroethane	**23.0**		µg/l		20.0		115	70-130		
1,1,2-Trichloroethane	**23.1**		µg/l		20.0		116	70-130		
Trichloroethene	**22.2**		µg/l		20.0		111	70-130		
Trichlorofluoromethane (Freon 11)	**23.6**		µg/l		20.0		118	70-130		
1,2,3-Trichloropropane	**23.1**		µg/l		20.0		116	70-130		
1,2,4-Trimethylbenzene	**20.4**		µg/l		20.0		102	70-130		
1,3,5-Trimethylbenzene	**20.5**		µg/l		20.0		102	70-130		
Vinyl chloride	**22.5**		µg/l		20.0		113	70-130		
m,p-Xylene	**20.3**		µg/l		20.0		102	70-130		
o-Xylene	**21.8**		µg/l		20.0		109	70-130		
Tetrahydrofuran	**19.3**		µg/l		20.0		96	70-130		
Ethyl ether	**23.3**		µg/l		20.0		116	70-130		
Tert-amyl methyl ether	**19.6**		µg/l		20.0		98	70-130		
Ethyl tert-butyl ether	**22.1**		µg/l		20.0		111	70-130		
Di-isopropyl ether	**24.2**		µg/l		20.0		121	70-130		
Tert-Butanol / butyl alcohol	**248**		µg/l		200		124	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1802714 - SW846 5030 Water MS										
LCS (1802714-BS1)					Prepared & Analyzed: 26-Feb-18					
1,4-Dioxane	**225**		µg/l		200		113	70-130		
trans-1,4-Dichloro-2-butene	**20.7**		µg/l		20.0		103	70-130		
Ethanol	**438**		µg/l		400		110	70-130		
Surrogate: 4-Bromofluorobenzene	*54.4*		µg/l		*50.0*		*109*	*70-130*		
Surrogate: Toluene-d8	*52.4*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*56.8*		µg/l		*50.0*		*114*	*70-130*		
Surrogate: Dibromofluoromethane	*59.7*		µg/l		*50.0*		*119*	*70-130*		
LCS Dup (1802714-BSD1)					Prepared & Analyzed: 26-Feb-18					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**22.0**		µg/l		20.0		110	70-130	7	20
Acetone	**25.0**		µg/l		20.0		125	70-130	1	20
Acrylonitrile	**24.5**		µg/l		20.0		123	70-130	3	20
Benzene	**20.8**		µg/l		20.0		104	70-130	6	20
Bromobenzene	**20.7**		µg/l		20.0		103	70-130	2	20
Bromochloromethane	**23.9**		µg/l		20.0		120	70-130	2	20
Bromodichloromethane	**22.2**		µg/l		20.0		111	70-130	0.9	20
Bromoform	**20.9**		µg/l		20.0		104	70-130	2	20
Bromomethane	**19.2**		µg/l		20.0		96	70-130	3	20
2-Butanone (MEK)	**22.4**		µg/l		20.0		112	70-130	1	20
n-Butylbenzene	**18.1**		µg/l		20.0		91	70-130	2	20
sec-Butylbenzene	**19.3**		µg/l		20.0		96	70-130	6	20
tert-Butylbenzene	**19.4**		µg/l		20.0		97	70-130	5	20
Carbon disulfide	**23.2**		µg/l		20.0		116	70-130	7	20
Carbon tetrachloride	**20.5**		µg/l		20.0		102	70-130	6	20
Chlorobenzene	**19.6**		µg/l		20.0		98	70-130	2	20
Chloroethane	**21.3**		µg/l		20.0		107	70-130	7	20
Chloroform	**23.8**		µg/l		20.0		119	70-130	0.5	20
Chloromethane	**21.2**		µg/l		20.0		106	70-130	8	20
2-Chlorotoluene	**20.8**		µg/l		20.0		104	70-130	4	20
4-Chlorotoluene	**21.0**		µg/l		20.0		105	70-130	7	20
1,2-Dibromo-3-chloropropane	**24.5**		µg/l		20.0		123	70-130	1	20
Dibromochloromethane	**22.0**		µg/l		20.0		110	70-130	0.09	20
1,2-Dibromoethane (EDB)	**24.1**		µg/l		20.0		120	70-130	1	20
Dibromomethane	**23.8**		µg/l		20.0		119	70-130	0.2	20
1,2-Dichlorobenzene	**20.0**		µg/l		20.0		100	70-130	4	20
1,3-Dichlorobenzene	**22.5**		µg/l		20.0		112	70-130	3	20
1,4-Dichlorobenzene	**18.4**		µg/l		20.0		92	70-130	3	20
Dichlorodifluoromethane (Freon12)	**20.8**		µg/l		20.0		104	70-130	6	20
1,1-Dichloroethane	**23.9**		µg/l		20.0		120	70-130	2	20
1,2-Dichloroethane	**23.7**		µg/l		20.0		119	70-130	1	20
1,1-Dichloroethene	**21.3**		µg/l		20.0		107	70-130	6	20
cis-1,2-Dichloroethene	**23.1**		µg/l		20.0		116	70-130	3	20
trans-1,2-Dichloroethene	**23.0**		µg/l		20.0		115	70-130	2	20
1,2-Dichloropropane	**21.2**		µg/l		20.0		106	70-130	2	20
1,3-Dichloropropane	**21.6**		µg/l		20.0		108	70-130	6	20
2,2-Dichloropropane	**22.2**		µg/l		20.0		111	70-130	6	20
1,1-Dichloropropene	**19.9**		µg/l		20.0		100	70-130	6	20
cis-1,3-Dichloropropene	**19.8**		µg/l		20.0		99	70-130	3	20
trans-1,3-Dichloropropene	**20.8**		µg/l		20.0		104	70-130	4	20
Ethylbenzene	**19.5**		µg/l		20.0		97	70-130	4	20
Hexachlorobutadiene	**16.8**		µg/l		20.0		84	70-130	8	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1802714 - SW846 5030 Water MS										
LCS Dup (1802714-BSD1)					Prepared & Analyzed: 26-Feb-18					
2-Hexanone (MBK)	**23.3**		µg/l		20.0		117	70-130	0.5	20
Isopropylbenzene	**20.2**		µg/l		20.0		101	70-130	5	20
4-Isopropyltoluene	**18.1**		µg/l		20.0		91	70-130	4	20
Methyl tert-butyl ether	**24.0**		µg/l		20.0		120	70-130	2	20
4-Methyl-2-pentanone (MIBK)	**24.0**		µg/l		20.0		120	70-130	3	20
Methylene chloride	**23.9**		µg/l		20.0		119	70-130	4	20
Naphthalene	**20.1**		µg/l		20.0		101	70-130	1	20
n-Propylbenzene	**18.8**		µg/l		20.0		94	70-130	6	20
Styrene	**18.7**		µg/l		20.0		93	70-130	4	20
1,1,1,2-Tetrachloroethane	**20.8**		µg/l		20.0		104	70-130	5	20
1,1,2,2-Tetrachloroethane	**23.3**		µg/l		20.0		117	70-130	2	20
Tetrachloroethene	**19.6**		µg/l		20.0		98	70-130	7	20
Toluene	**19.9**		µg/l		20.0		99	70-130	5	20
1,2,3-Trichlorobenzene	**18.4**		µg/l		20.0		92	70-130	2	20
1,2,4-Trichlorobenzene	**18.2**		µg/l		20.0		91	70-130	1	20
1,3,5-Trichlorobenzene	**18.8**		µg/l		20.0		94	70-130	2	20
1,1,1-Trichloroethane	**21.6**		µg/l		20.0		108	70-130	6	20
1,1,2-Trichloroethane	**22.8**		µg/l		20.0		114	70-130	1	20
Trichloroethene	**20.6**		µg/l		20.0		103	70-130	8	20
Trichlorofluoromethane (Freon 11)	**23.1**		µg/l		20.0		116	70-130	2	20
1,2,3-Trichloropropane	**23.7**		µg/l		20.0		119	70-130	3	20
1,2,4-Trimethylbenzene	**19.4**		µg/l		20.0		97	70-130	5	20
1,3,5-Trimethylbenzene	**19.4**		µg/l		20.0		97	70-130	5	20
Vinyl chloride	**23.9**		µg/l		20.0		119	70-130	6	20
m,p-Xylene	**19.3**		µg/l		20.0		96	70-130	5	20
o-Xylene	**21.0**		µg/l		20.0		105	70-130	3	20
Tetrahydrofuran	**21.4**		µg/l		20.0		107	70-130	10	20
Ethyl ether	**23.5**		µg/l		20.0		118	70-130	1	20
Tert-amyl methyl ether	**18.7**		µg/l		20.0		93	70-130	5	20
Ethyl tert-butyl ether	**21.8**		µg/l		20.0		109	70-130	1	20
Di-isopropyl ether	**23.8**		µg/l		20.0		119	70-130	2	20
Tert-Butanol / butyl alcohol	**242**		µg/l		200		121	70-130	2	20
1,4-Dioxane	**195**		µg/l		200		97	70-130	15	20
trans-1,4-Dichloro-2-butene	**21.0**		µg/l		20.0		105	70-130	2	20
Ethanol	**498**		µg/l		400		124	70-130	13	20
Surrogate: 4-Bromofluorobenzene	*55.3*		µg/l		*50.0*		*111*	*70-130*		
Surrogate: Toluene-d8	*52.1*		µg/l		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*57.2*		µg/l		*50.0*		*114*	*70-130*		
Surrogate: Dibromofluoromethane	*60.4*		µg/l		*50.0*		*121*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8270D										
Batch 1802550 - SW846 3510C										
Blank (1802550-BLK1)					Prepared: 22-Feb-18 Analyzed: 23-Feb-18					
Acenaphthene	< 5.10		µg/l	5.10						
Acenaphthylene	< 5.10		µg/l	5.10						
Aniline	< 5.10		µg/l	5.10						
Anthracene	< 5.10		µg/l	5.10						
Azobenzene/Diphenyldiazene	< 5.10		µg/l	5.10						
Benzidine	< 10.2		µg/l	10.2						
Benzo (a) anthracene	< 5.10		µg/l	5.10						
Benzo (a) pyrene	< 5.10		µg/l	5.10						
Benzo (b) fluoranthene	< 5.10		µg/l	5.10						
Benzo (g,h,i) perylene	< 5.10		µg/l	5.10						
Benzo (k) fluoranthene	< 5.10		µg/l	5.10						
Benzoic acid	< 5.10		µg/l	5.10						
Benzyl alcohol	< 5.10		µg/l	5.10						
Bis(2-chloroethoxy)methane	< 5.10		µg/l	5.10						
Bis(2-chloroethyl)ether	< 5.10		µg/l	5.10						
Bis(2-chloroisopropyl)ether	< 5.10		µg/l	5.10						
Bis(2-ethylhexyl)phthalate	< 5.10		µg/l	5.10						
4-Bromophenyl phenyl ether	< 5.10		µg/l	5.10						
Butyl benzyl phthalate	< 5.10		µg/l	5.10						
Carbazole	< 5.10		µg/l	5.10						
4-Chloro-3-methylphenol	< 5.10		µg/l	5.10						
4-Chloroaniline	< 5.10		µg/l	5.10						
2-Chloronaphthalene	< 5.10		µg/l	5.10						
2-Chlorophenol	< 5.10		µg/l	5.10						
4-Chlorophenyl phenyl ether	< 5.10		µg/l	5.10						
Chrysene	< 5.10		µg/l	5.10						
Dibenzo (a,h) anthracene	< 5.10		µg/l	5.10						
Dibenzofuran	< 5.10		µg/l	5.10						
1,2-Dichlorobenzene	< 5.10		µg/l	5.10						
1,3-Dichlorobenzene	< 5.10		µg/l	5.10						
1,4-Dichlorobenzene	< 5.10		µg/l	5.10						
3,3´-Dichlorobenzidine	< 5.10		µg/l	5.10						
2,4-Dichlorophenol	< 5.10		µg/l	5.10						
Diethyl phthalate	< 5.10		µg/l	5.10						
Dimethyl phthalate	< 5.10		µg/l	5.10						
2,4-Dimethylphenol	< 5.10		µg/l	5.10						
Di-n-butyl phthalate	< 5.10		µg/l	5.10						
4,6-Dinitro-2-methylphenol	< 5.10		µg/l	5.10						
2,4-Dinitrophenol	< 5.10		µg/l	5.10						
2,4-Dinitrotoluene	< 5.10		µg/l	5.10						
2,6-Dinitrotoluene	< 5.10		µg/l	5.10						
Di-n-octyl phthalate	< 5.10		µg/l	5.10						
Fluoranthene	< 5.10		µg/l	5.10						
Fluorene	< 5.10		µg/l	5.10						
Hexachlorobenzene	< 5.10		µg/l	5.10						
Hexachlorobutadiene	< 5.10		µg/l	5.10						
Hexachlorocyclopentadiene	< 5.10		µg/l	5.10						
Hexachloroethane	< 5.10		µg/l	5.10						
Indeno (1,2,3-cd) pyrene	< 5.10		µg/l	5.10						
Isophorone	< 5.10		µg/l	5.10						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8270D										
Batch 1802550 - SW846 3510C										
Blank (1802550-BLK1)						Prepared: 22-Feb-18 Analyzed: 23-Feb-18				
2-Methylnaphthalene	< 5.10		µg/l	5.10						
2-Methylphenol	< 5.10		µg/l	5.10						
3 & 4-Methylphenol	< 10.2		µg/l	10.2						
Naphthalene	< 5.10		µg/l	5.10						
2-Nitroaniline	< 5.10		µg/l	5.10						
3-Nitroaniline	< 5.10		µg/l	5.10						
4-Nitroaniline	< 5.10		µg/l	5.10						
Nitrobenzene	< 5.10		µg/l	5.10						
2-Nitrophenol	< 5.10		µg/l	5.10						
4-Nitrophenol	< 20.4		µg/l	20.4						
N-Nitrosodimethylamine	< 5.10		µg/l	5.10						
N-Nitrosodi-n-propylamine	< 5.10		µg/l	5.10						
N-Nitrosodiphenylamine	< 5.10		µg/l	5.10						
Pentachlorophenol	< 20.4		µg/l	20.4						
Phenanthrene	< 5.10		µg/l	5.10						
Phenol	< 5.10		µg/l	5.10						
Pyrene	< 5.10		µg/l	5.10						
Pyridine	< 5.10		µg/l	5.10						
1,2,4-Trichlorobenzene	< 5.10		µg/l	5.10						
1-Methylnaphthalene	< 5.10		µg/l	5.10						
2,4,5-Trichlorophenol	< 5.10		µg/l	5.10						
2,4,6-Trichlorophenol	< 5.10		µg/l	5.10						
Pentachloronitrobenzene	< 5.10		µg/l	5.10						
1,2,4,5-Tetrachlorobenzene	< 5.10		µg/l	5.10						
Surrogate: 2-Fluorobiphenyl	*23.6*		µg/l		*51.0*		*46*	*30-130*		
Surrogate: 2-Fluorophenol	*22.6*		µg/l		*51.0*		*44*	*15-110*		
Surrogate: Nitrobenzene-d5	*26.5*		µg/l		*51.0*		*52*	*30-130*		
Surrogate: Phenol-d5	*25.3*		µg/l		*51.0*		*50*	*15-110*		
Surrogate: Terphenyl-dl4	*30.0*		µg/l		*51.0*		*59*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*11.7*		µg/l		*51.0*		*23*	*15-110*		
LCS (1802550-BS1)						Prepared: 22-Feb-18 Analyzed: 23-Feb-18				
Acenaphthene	**32.2**		µg/l	5.05	50.5		64	40-140		
Acenaphthylene	**31.5**		µg/l	5.05	50.5		62	40-140		
Aniline	**19.1**	QC6	µg/l	5.05	50.5		38	40-140		
Anthracene	**33.2**		µg/l	5.05	50.5		66	40-140		
Azobenzene/Diphenyldiazene	**34.2**		µg/l	5.05	50.5		68	40-140		
Benzidine	**30.1**		µg/l	10.1	50.5		60	40-140		
Benzo (a) anthracene	**33.6**		µg/l	5.05	50.5		67	40-140		
Benzo (a) pyrene	**36.6**		µg/l	5.05	50.5		72	40-140		
Benzo (b) fluoranthene	**36.8**		µg/l	5.05	50.5		73	40-140		
Benzo (g,h,i) perylene	**36.8**		µg/l	5.05	50.5		73	40-140		
Benzo (k) fluoranthene	**37.7**		µg/l	5.05	50.5		75	40-140		
Benzoic acid	**12.5**	QC6	µg/l	5.05	50.5		25	30-130		
Benzyl alcohol	**27.4**		µg/l	5.05	50.5		54	40-140		
Bis(2-chloroethoxy)methane	**24.6**		µg/l	5.05	50.5		49	40-140		
Bis(2-chloroethyl)ether	**26.6**		µg/l	5.05	50.5		53	40-140		
Bis(2-chloroisopropyl)ether	**29.0**		µg/l	5.05	50.5		57	40-140		
Bis(2-ethylhexyl)phthalate	**35.4**		µg/l	5.05	50.5		70	40-140		
4-Bromophenyl phenyl ether	**31.2**		µg/l	5.05	50.5		62	40-140		
Butyl benzyl phthalate	**33.8**		µg/l	5.05	50.5		67	40-140		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8270D										
Batch 1802550 - SW846 3510C										
LCS (1802550-BS1)						Prepared: 22-Feb-18 Analyzed: 23-Feb-18				
Carbazole	**50.6**		µg/l	5.05	50.5		100	40-140		
4-Chloro-3-methylphenol	**30.9**		µg/l	5.05	50.5		61	30-130		
4-Chloroaniline	**29.5**		µg/l	5.05	50.5		58	40-140		
2-Chloronaphthalene	**37.5**		µg/l	5.05	50.5		74	40-140		
2-Chlorophenol	**29.1**		µg/l	5.05	50.5		58	30-130		
4-Chlorophenyl phenyl ether	**31.4**		µg/l	5.05	50.5		62	40-140		
Chrysene	**33.5**		µg/l	5.05	50.5		66	40-140		
Dibenzo (a,h) anthracene	**38.8**		µg/l	5.05	50.5		77	40-140		
Dibenzofuran	**36.1**		µg/l	5.05	50.5		71	40-140		
1,2-Dichlorobenzene	**32.0**		µg/l	5.05	50.5		63	40-140		
1,3-Dichlorobenzene	**32.5**		µg/l	5.05	50.5		64	40-140		
1,4-Dichlorobenzene	**32.2**		µg/l	5.05	50.5		64	40-140		
3,3´-Dichlorobenzidine	**50.6**		µg/l	5.05	50.5		100	40-140		
2,4-Dichlorophenol	**30.2**		µg/l	5.05	50.5		60	30-130		
Diethyl phthalate	**32.8**		µg/l	5.05	50.5		65	40-140		
Dimethyl phthalate	**29.8**		µg/l	5.05	50.5		59	40-140		
2,4-Dimethylphenol	**29.1**		µg/l	5.05	50.5		58	30-130		
Di-n-butyl phthalate	**32.5**		µg/l	5.05	50.5		64	40-140		
4,6-Dinitro-2-methylphenol	**40.4**		µg/l	5.05	50.5		80	30-130		
2,4-Dinitrophenol	**29.9**		µg/l	5.05	50.5		59	30-130		
2,4-Dinitrotoluene	**45.0**		µg/l	5.05	50.5		89	40-140		
2,6-Dinitrotoluene	**44.5**		µg/l	5.05	50.5		88	40-140		
Di-n-octyl phthalate	**37.3**		µg/l	5.05	50.5		74	40-140		
Fluoranthene	**32.2**		µg/l	5.05	50.5		64	40-140		
Fluorene	**30.5**		µg/l	5.05	50.5		60	40-140		
Hexachlorobenzene	**37.6**		µg/l	5.05	50.5		74	40-140		
Hexachlorobutadiene	**28.7**		µg/l	5.05	50.5		57	40-140		
Hexachlorocyclopentadiene	**34.9**		µg/l	5.05	50.5		69	40-140		
Hexachloroethane	**33.7**		µg/l	5.05	50.5		67	40-140		
Indeno (1,2,3-cd) pyrene	**39.3**		µg/l	5.05	50.5		78	40-140		
Isophorone	**29.2**		µg/l	5.05	50.5		58	40-140		
2-Methylnaphthalene	**34.4**		µg/l	5.05	50.5		68	40-140		
2-Methylphenol	**28.2**		µg/l	5.05	50.5		56	30-130		
3 & 4-Methylphenol	**27.5**		µg/l	10.1	50.5		55	30-130		
Naphthalene	**28.6**		µg/l	5.05	50.5		57	40-140		
2-Nitroaniline	**35.1**		µg/l	5.05	50.5		69	40-140		
3-Nitroaniline	**44.0**		µg/l	5.05	50.5		87	40-140		
4-Nitroaniline	**52.6**		µg/l	5.05	50.5		104	40-140		
Nitrobenzene	**43.3**		µg/l	5.05	50.5		86	40-140		
2-Nitrophenol	**33.0**		µg/l	5.05	50.5		65	30-130		
4-Nitrophenol	**21.2**		µg/l	20.2	50.5		42	30-130		
N-Nitrosodimethylamine	**21.8**		µg/l	5.05	50.5		43	40-140		
N-Nitrosodi-n-propylamine	**32.0**		µg/l	5.05	50.5		63	40-140		
N-Nitrosodiphenylamine	**37.4**		µg/l	5.05	50.5		74	40-140		
Pentachlorophenol	**22.1**		µg/l	20.2	50.5		44	30-130		
Phenanthrene	**32.2**		µg/l	5.05	50.5		64	40-140		
Phenol	**15.2**		µg/l	5.05	50.5		30	30-130		
Pyrene	**34.2**		µg/l	5.05	50.5		68	40-140		
Pyridine	**13.4**	QC6	µg/l	5.05	50.5		26	40-140		
1,2,4-Trichlorobenzene	**33.2**		µg/l	5.05	50.5		66	40-140		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8270D										
Batch 1802550 - SW846 3510C										
LCS (1802550-BS1)					Prepared: 22-Feb-18 Analyzed: 23-Feb-18					
1-Methylnaphthalene	**30.4**		µg/l	5.05	50.5		60	40-140		
2,4,5-Trichlorophenol	**34.4**		µg/l	5.05	50.5		68	30-130		
2,4,6-Trichlorophenol	**30.2**		µg/l	5.05	50.5		60	30-130		
Pentachloronitrobenzene	**35.7**		µg/l	5.05	50.5		71	40-140		
1,2,4,5-Tetrachlorobenzene	**29.3**		µg/l	5.05	50.5		58	40-140		
Surrogate: 2-Fluorobiphenyl	*31.5*		µg/l		*50.5*		*62*	*30-130*		
Surrogate: 2-Fluorophenol	*21.7*		µg/l		*50.5*		*43*	*15-110*		
Surrogate: Nitrobenzene-d5	*35.3*		µg/l		*50.5*		*70*	*30-130*		
Surrogate: Phenol-d5	*17.5*		µg/l		*50.5*		*35*	*15-110*		
Surrogate: Terphenyl-dl4	*37.3*		µg/l		*50.5*		*74*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*35.6*		µg/l		*50.5*		*71*	*15-110*		
LCS Dup (1802550-BSD1)					Prepared: 22-Feb-18 Analyzed: 23-Feb-18					
Acenaphthene	**32.2**		µg/l	5.05	50.5		64	40-140	0.09	20
Acenaphthylene	**31.8**		µg/l	5.05	50.5		63	40-140	1	20
Aniline	**18.6**	QC6	µg/l	5.05	50.5		37	40-140	3	20
Anthracene	**33.5**		µg/l	5.05	50.5		66	40-140	1	20
Azobenzene/Diphenyldiazene	**33.7**		µg/l	5.05	50.5		67	40-140	1	20
Benzidine	**33.3**		µg/l	10.1	50.5		66	40-140	10	20
Benzo (a) anthracene	**33.8**		µg/l	5.05	50.5		67	40-140	0.4	20
Benzo (a) pyrene	**37.5**		µg/l	5.05	50.5		74	40-140	2	20
Benzo (b) fluoranthene	**37.6**		µg/l	5.05	50.5		74	40-140	2	20
Benzo (g,h,i) perylene	**37.2**		µg/l	5.05	50.5		74	40-140	1	20
Benzo (k) fluoranthene	**38.7**		µg/l	5.05	50.5		77	40-140	3	20
Benzoic acid	**12.6**	QC6	µg/l	5.05	50.5		25	30-130	0.2	20
Benzyl alcohol	**26.0**		µg/l	5.05	50.5		51	40-140	5	20
Bis(2-chloroethoxy)methane	**24.4**		µg/l	5.05	50.5		48	40-140	0.6	20
Bis(2-chloroethyl)ether	**26.3**		µg/l	5.05	50.5		52	40-140	1	20
Bis(2-chloroisopropyl)ether	**28.5**		µg/l	5.05	50.5		56	40-140	2	20
Bis(2-ethylhexyl)phthalate	**35.5**		µg/l	5.05	50.5		70	40-140	0.5	20
4-Bromophenyl phenyl ether	**30.9**		µg/l	5.05	50.5		61	40-140	0.9	20
Butyl benzyl phthalate	**33.6**		µg/l	5.05	50.5		66	40-140	0.6	20
Carbazole	**50.5**		µg/l	5.05	50.5		100	40-140	0.2	20
4-Chloro-3-methylphenol	**31.2**		µg/l	5.05	50.5		62	30-130	0.8	20
4-Chloroaniline	**29.3**		µg/l	5.05	50.5		58	40-140	0.9	20
2-Chloronaphthalene	**37.6**		µg/l	5.05	50.5		75	40-140	0.3	20
2-Chlorophenol	**28.7**		µg/l	5.05	50.5		57	30-130	1	20
4-Chlorophenyl phenyl ether	**31.9**		µg/l	5.05	50.5		63	40-140	1	20
Chrysene	**33.4**		µg/l	5.05	50.5		66	40-140	0.3	20
Dibenzo (a,h) anthracene	**39.5**		µg/l	5.05	50.5		78	40-140	2	20
Dibenzofuran	**36.8**		µg/l	5.05	50.5		73	40-140	2	20
1,2-Dichlorobenzene	**32.1**		µg/l	5.05	50.5		64	40-140	0.4	20
1,3-Dichlorobenzene	**32.5**		µg/l	5.05	50.5		64	40-140	0.2	20
1,4-Dichlorobenzene	**32.2**		µg/l	5.05	50.5		64	40-140	0.2	20
3,3´-Dichlorobenzidine	**51.4**		µg/l	5.05	50.5		102	40-140	2	20
2,4-Dichlorophenol	**29.7**		µg/l	5.05	50.5		59	30-130	2	20
Diethyl phthalate	**32.7**		µg/l	5.05	50.5		65	40-140	0.03	20
Dimethyl phthalate	**30.4**		µg/l	5.05	50.5		60	40-140	2	20
2,4-Dimethylphenol	**28.7**		µg/l	5.05	50.5		57	30-130	1	20
Di-n-butyl phthalate	**32.0**		µg/l	5.05	50.5		63	40-140	1	20
4,6-Dinitro-2-methylphenol	**40.6**		µg/l	5.05	50.5		80	30-130	0.4	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8270D										
Batch 1802550 - SW846 3510C										
LCS Dup (1802550-BSD1)					Prepared: 22-Feb-18 Analyzed: 23-Feb-18					
2,4-Dinitrophenol	**30.7**		µg/l	5.05	50.5		61	30-130	3	20
2,4-Dinitrotoluene	**45.6**		µg/l	5.05	50.5		90	40-140	1	20
2,6-Dinitrotoluene	**44.3**		µg/l	5.05	50.5		88	40-140	0.7	20
Di-n-octyl phthalate	**37.9**		µg/l	5.05	50.5		75	40-140	2	20
Fluoranthene	**31.8**		µg/l	5.05	50.5		63	40-140	1	20
Fluorene	**30.7**		µg/l	5.05	50.5		61	40-140	0.6	20
Hexachlorobenzene	**38.7**		µg/l	5.05	50.5		77	40-140	3	20
Hexachlorobutadiene	**28.1**		µg/l	5.05	50.5		56	40-140	2	20
Hexachlorocyclopentadiene	**33.8**		µg/l	5.05	50.5		67	40-140	3	20
Hexachloroethane	**33.2**		µg/l	5.05	50.5		66	40-140	1	20
Indeno (1,2,3-cd) pyrene	**40.6**		µg/l	5.05	50.5		80	40-140	3	20
Isophorone	**29.0**		µg/l	5.05	50.5		57	40-140	0.4	20
2-Methylnaphthalene	**33.8**		µg/l	5.05	50.5		67	40-140	2	20
2-Methylphenol	**27.9**		µg/l	5.05	50.5		55	30-130	0.9	20
3 & 4-Methylphenol	**27.1**		µg/l	10.1	50.5		54	30-130	2	20
Naphthalene	**28.6**		µg/l	5.05	50.5		57	40-140	0.3	20
2-Nitroaniline	**35.2**		µg/l	5.05	50.5		70	40-140	0.2	20
3-Nitroaniline	**44.2**		µg/l	5.05	50.5		88	40-140	0.5	20
4-Nitroaniline	**51.8**		µg/l	5.05	50.5		102	40-140	2	20
Nitrobenzene	**42.9**		µg/l	5.05	50.5		85	40-140	0.8	20
2-Nitrophenol	**32.7**		µg/l	5.05	50.5		65	30-130	0.9	20
4-Nitrophenol	**21.4**		µg/l	20.2	50.5		42	30-130	0.7	20
N-Nitrosodimethylamine	**21.7**		µg/l	5.05	50.5		43	40-140	0.4	20
N-Nitrosodi-n-propylamine	**31.7**		µg/l	5.05	50.5		63	40-140	0.9	20
N-Nitrosodiphenylamine	**36.6**		µg/l	5.05	50.5		72	40-140	2	20
Pentachlorophenol	**21.9**		µg/l	20.2	50.5		43	30-130	0.5	20
Phenanthrene	**32.4**		µg/l	5.05	50.5		64	40-140	0.6	20
Phenol	**15.2**		µg/l	5.05	50.5		30	30-130	0	20
Pyrene	**34.0**		µg/l	5.05	50.5		67	40-140	0.5	20
Pyridine	**13.6**	QC6	µg/l	5.05	50.5		27	40-140	1	20
1,2,4-Trichlorobenzene	**33.1**		µg/l	5.05	50.5		65	40-140	0.4	20
1-Methylnaphthalene	**30.6**		µg/l	5.05	50.5		61	40-140	0.5	20
2,4,5-Trichlorophenol	**34.8**		µg/l	5.05	50.5		69	30-130	1	20
2,4,6-Trichlorophenol	**30.8**		µg/l	5.05	50.5		61	30-130	2	20
Pentachloronitrobenzene	**35.7**		µg/l	5.05	50.5		71	40-140	0.08	20
1,2,4,5-Tetrachlorobenzene	**29.6**		µg/l	5.05	50.5		59	40-140	0.9	20
Surrogate: 2-Fluorobiphenyl	*31.6*		µg/l		*50.5*		*63*	*30-130*		
Surrogate: 2-Fluorophenol	*21.5*		µg/l		*50.5*		*43*	*15-110*		
Surrogate: Nitrobenzene-d5	*35.2*		µg/l		*50.5*		*70*	*30-130*		
Surrogate: Phenol-d5	*17.4*		µg/l		*50.5*		*34*	*15-110*		
Surrogate: Terphenyl-dl4	*37.5*		µg/l		*50.5*		*74*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*36.3*		µg/l		*50.5*		*72*	*15-110*		
Duplicate (1802550-DUP1)			**Source: SC44122-02**		Prepared: 22-Feb-18 Analyzed: 26-Feb-18					
Acenaphthene	< 5.00		µg/l	5.00		BRL				20
Acenaphthylene	< 5.00		µg/l	5.00		BRL				20
Aniline	< 5.00		µg/l	5.00		BRL				20
Anthracene	< 5.00		µg/l	5.00		BRL				20
Azobenzene/Diphenyldiazene	< 5.00		µg/l	5.00		BRL				20
Benzidine	< 10.0		µg/l	10.0		BRL				20
Benzo (a) anthracene	< 5.00		µg/l	5.00		BRL				20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8270D										
Batch 1802550 - SW846 3510C										
Duplicate (1802550-DUP1)			**Source: SC44122-02**		Prepared: 22-Feb-18 Analyzed: 26-Feb-18					
Benzo (a) pyrene	< 5.00		µg/l	5.00		BRL				20
Benzo (b) fluoranthene	< 5.00		µg/l	5.00		BRL				20
Benzo (g,h,i) perylene	< 5.00		µg/l	5.00		BRL				20
Benzo (k) fluoranthene	< 5.00		µg/l	5.00		BRL				20
Benzoic acid	< 5.00		µg/l	5.00		BRL				20
Benzyl alcohol	< 5.00		µg/l	5.00		BRL				20
Bis(2-chloroethoxy)methane	< 5.00		µg/l	5.00		BRL				20
Bis(2-chloroethyl)ether	< 5.00		µg/l	5.00		BRL				20
Bis(2-chloroisopropyl)ether	< 5.00		µg/l	5.00		BRL				20
Bis(2-ethylhexyl)phthalate	**0.950**	J	µg/l	5.00		BRL				20
4-Bromophenyl phenyl ether	< 5.00		µg/l	5.00		BRL				20
Butyl benzyl phthalate	< 5.00		µg/l	5.00		BRL				20
Carbazole	< 5.00		µg/l	5.00		BRL				20
4-Chloro-3-methylphenol	< 5.00		µg/l	5.00		BRL				20
4-Chloroaniline	< 5.00		µg/l	5.00		BRL				20
2-Chloronaphthalene	< 5.00		µg/l	5.00		BRL				20
2-Chlorophenol	< 5.00		µg/l	5.00		BRL				20
4-Chlorophenyl phenyl ether	< 5.00		µg/l	5.00		BRL				20
Chrysene	< 5.00		µg/l	5.00		BRL				20
Dibenzo (a,h) anthracene	< 5.00		µg/l	5.00		BRL				20
Dibenzofuran	< 5.00		µg/l	5.00		BRL				20
1,2-Dichlorobenzene	< 5.00		µg/l	5.00		BRL				20
1,3-Dichlorobenzene	< 5.00		µg/l	5.00		BRL				20
1,4-Dichlorobenzene	< 5.00		µg/l	5.00		BRL				20
3,3´-Dichlorobenzidine	< 5.00		µg/l	5.00		BRL				20
2,4-Dichlorophenol	< 5.00		µg/l	5.00		BRL				20
Diethyl phthalate	< 5.00		µg/l	5.00		BRL				20
Dimethyl phthalate	< 5.00		µg/l	5.00		BRL				20
2,4-Dimethylphenol	< 5.00		µg/l	5.00		BRL				20
Di-n-butyl phthalate	< 5.00		µg/l	5.00		BRL				20
4,6-Dinitro-2-methylphenol	< 5.00		µg/l	5.00		BRL				20
2,4-Dinitrophenol	< 5.00		µg/l	5.00		BRL				20
2,4-Dinitrotoluene	< 5.00		µg/l	5.00		BRL				20
2,6-Dinitrotoluene	< 5.00		µg/l	5.00		BRL				20
Di-n-octyl phthalate	< 5.00		µg/l	5.00		BRL				20
Fluoranthene	< 5.00		µg/l	5.00		BRL				20
Fluorene	< 5.00		µg/l	5.00		BRL				20
Hexachlorobenzene	< 5.00		µg/l	5.00		BRL				20
Hexachlorobutadiene	< 5.00		µg/l	5.00		BRL				20
Hexachlorocyclopentadiene	< 5.00		µg/l	5.00		BRL				20
Hexachloroethane	< 5.00		µg/l	5.00		BRL				20
Indeno (1,2,3-cd) pyrene	< 5.00		µg/l	5.00		BRL				20
Isophorone	< 5.00		µg/l	5.00		BRL				20
2-Methylnaphthalene	< 5.00		µg/l	5.00		BRL				20
2-Methylphenol	< 5.00		µg/l	5.00		BRL				20
3 & 4-Methylphenol	< 10.0		µg/l	10.0		BRL				20
Naphthalene	**0.980**	J	µg/l	5.00		1.29			27	20
2-Nitroaniline	< 5.00		µg/l	5.00		BRL				20
3-Nitroaniline	< 5.00		µg/l	5.00		BRL				20
4-Nitroaniline	< 5.00		µg/l	5.00		BRL				20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8270D										
Batch 1802550 - SW846 3510C										
Duplicate (1802550-DUP1)			**Source: SC44122-02**		Prepared: 22-Feb-18 Analyzed: 26-Feb-18					
Nitrobenzene	< 5.00		µg/l	5.00		BRL				20
2-Nitrophenol	< 5.00		µg/l	5.00		BRL				20
4-Nitrophenol	< 20.0		µg/l	20.0		BRL				20
N-Nitrosodimethylamine	< 5.00		µg/l	5.00		BRL				20
N-Nitrosodi-n-propylamine	< 5.00		µg/l	5.00		BRL				20
N-Nitrosodiphenylamine	< 5.00		µg/l	5.00		BRL				20
Pentachlorophenol	< 20.0		µg/l	20.0		BRL				20
Phenanthrene	< 5.00		µg/l	5.00		BRL				20
Phenol	< 5.00		µg/l	5.00		BRL				20
Pyrene	< 5.00		µg/l	5.00		BRL				20
Pyridine	< 5.00		µg/l	5.00		BRL				20
1,2,4-Trichlorobenzene	< 5.00		µg/l	5.00		BRL				20
1-Methylnaphthalene	< 5.00		µg/l	5.00		BRL				20
2,4,5-Trichlorophenol	< 5.00		µg/l	5.00		BRL				20
2,4,6-Trichlorophenol	< 5.00		µg/l	5.00		BRL				20
Pentachloronitrobenzene	< 5.00		µg/l	5.00		BRL				20
1,2,4,5-Tetrachlorobenzene	< 5.00		µg/l	5.00		BRL				20
Surrogate: 2-Fluorobiphenyl	*18.5*		µg/l		*50.0*		*37*	*30-130*		
Surrogate: 2-Fluorophenol	*11.6*		µg/l		*50.0*		*23*	*15-110*		
Surrogate: Nitrobenzene-d5	*15.7*		µg/l		*50.0*		*31*	*30-130*		
Surrogate: Phenol-d5	*8.60*		µg/l		*50.0*		*17*	*15-110*		
Surrogate: Terphenyl-dl4	*23.3*		µg/l		*50.0*		*47*	*30-130*		
Surrogate: 2,4,6-Tribromophenol	*21.3*		µg/l		*50.0*		*43*	*15-110*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8100Mod.										
Batch 1802625 - SW846 3510C										
Blank (1802625-BLK1)						Prepared: 23-Feb-18 Analyzed: 25-Feb-18				
Gasoline	< 0.2		mg/l	0.2						
Fuel Oil #2	< 0.2		mg/l	0.2						
Fuel Oil #4	< 0.2		mg/l	0.2						
Fuel Oil #6	< 0.2		mg/l	0.2						
Motor Oil	< 0.2		mg/l	0.2						
Ligroin	< 0.2		mg/l	0.2						
Aviation Fuel	< 0.2		mg/l	0.2						
Hydraulic Oil	< 0.2		mg/l	0.2						
Dielectric Fluid	< 0.2		mg/l	0.2						
Unidentified	< 0.2		mg/l	0.2						
Other Oil	< 0.2		mg/l	0.2						
Total Petroleum Hydrocarbons	< 0.2		mg/l	0.2						
Surrogate: 1-Chlorooctadecane	*0.0504*		mg/l		*0.0510*		*99*	*40-140*		
LCS (1802625-BS2)						Prepared: 23-Feb-18 Analyzed: 25-Feb-18				
Fuel Oil #2	**2.3**		mg/l	0.2	2.02		113	40-140		
Surrogate: 1-Chlorooctadecane	*0.0430*		mg/l		*0.0505*		*85*	*40-140*		
LCS Dup (1802625-BSD2)						Prepared: 23-Feb-18 Analyzed: 25-Feb-18				
Fuel Oil #2	**2.4**		mg/l	0.2	2.02		116	40-140	3	30
Surrogate: 1-Chlorooctadecane	*0.0410*		mg/l		*0.0505*		*81*	*40-140*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 6010C										
Batch 1802569 - SW846 3005A										
Blank (1802569-BLK1)					Prepared: 22-Feb-18 Analyzed: 23-Feb-18					
Cadmium	< 0.0025		mg/l	0.0025						
Selenium	< 0.0150		mg/l	0.0150						
Chromium	< 0.0050		mg/l	0.0050						
Barium	< 0.0050		mg/l	0.0050						
Arsenic	< 0.00400		mg/l	0.00400						
Silver	< 0.0050		mg/l	0.0050						
Lead	< 0.0075		mg/l	0.0075						
LCS (1802569-BS1)					Prepared: 22-Feb-18 Analyzed: 23-Feb-18					
Cadmium	**1.30**		mg/l	0.0025	1.25		104	85-115		
Selenium	**1.33**		mg/l	0.0150	1.25		106	85-115		
Chromium	**1.28**		mg/l	0.0050	1.25		103	85-115		
Barium	**1.31**		mg/l	0.0050	1.25		105	85-115		
Arsenic	**1.286**		mg/l	0.00400	1.25		103	85-115		
Silver	**1.26**		mg/l	0.0050	1.25		101	85-115		
Lead	**1.31**		mg/l	0.0075	1.25		104	85-115		
LCS Dup (1802569-BSD1)					Prepared: 22-Feb-18 Analyzed: 23-Feb-18					
Silver	**1.28**		mg/l	0.0050	1.25		102	85-115	1	20
Selenium	**1.36**		mg/l	0.0150	1.25		109	85-115	2	20
Lead	**1.34**		mg/l	0.0075	1.25		108	85-115	3	20
Chromium	**1.29**		mg/l	0.0050	1.25		104	85-115	0.7	20
Cadmium	**1.31**		mg/l	0.0025	1.25		105	85-115	1	20
Arsenic	**1.317**		mg/l	0.00400	1.25		105	85-115	2	20
Barium	**1.36**		mg/l	0.0050	1.25		109	85-115	4	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 245.1/7470A										
Batch 1802570 - EPA200/SW7000 Series										
Blank (1802570-BLK1)							Prepared: 22-Feb-18 Analyzed: 23-Feb-18			
Mercury	< 0.00020		mg/l	0.00020						
LCS (1802570-BS1)							Prepared: 22-Feb-18 Analyzed: 23-Feb-18			
Mercury	**0.00434**		mg/l	0.00020	0.00500		87	85-115		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 6010C										
Batch 1802315 - SW846 3005A										
Blank (1802315-BLK1)					Prepared & Analyzed: 22-Feb-18					
Cadmium	< 0.0025		mg/l	0.0025						
Silver	< 0.0050		mg/l	0.0050						
Arsenic	< 0.0040		mg/l	0.0040						
Barium	< 0.0050		mg/l	0.0050						
Selenium	< 0.0150		mg/l	0.0150						
Chromium	< 0.0050		mg/l	0.0050						
Lead	< 0.0075		mg/l	0.0075						
LCS (1802315-BS1)					Prepared & Analyzed: 22-Feb-18					
Barium	**1.32**		mg/l	0.0050	1.25		106	85-115		
Lead	**1.20**		mg/l	0.0075	1.25		96	85-115		
Cadmium	**1.30**		mg/l	0.0025	1.25		104	85-115		
Selenium	**1.35**		mg/l	0.0150	1.25		108	85-115		
Arsenic	**1.21**		mg/l	0.0040	1.25		97	85-115		
Silver	**1.29**		mg/l	0.0050	1.25		103	85-115		
Chromium	**1.25**		mg/l	0.0050	1.25		100	85-115		
LCS Dup (1802315-BSD1)					Prepared & Analyzed: 22-Feb-18					
Selenium	**1.35**		mg/l	0.0150	1.25		108	85-115	0.07	20
Lead	**1.20**		mg/l	0.0075	1.25		96	85-115	0	20
Chromium	**1.28**		mg/l	0.0050	1.25		102	85-115	2	20
Cadmium	**1.32**		mg/l	0.0025	1.25		105	85-115	1	20
Barium	**1.32**		mg/l	0.0050	1.25		106	85-115	0.2	20
Silver	**1.34**		mg/l	0.0050	1.25		107	85-115	3	20
Arsenic	**1.22**		mg/l	0.0040	1.25		97	85-115	0.3	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 245.1/7470A										
Batch 1802316 - EPA200/SW7000 Series										
Blank (1802316-BLK1)						Prepared & Analyzed: 22-Feb-18				
Mercury	< 0.00020		mg/l	0.00020						
LCS (1802316-BS1)						Prepared & Analyzed: 22-Feb-18				
Mercury	**0.00425**		mg/l	0.00020	0.00500		85	85-115		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
ASTM D 1293-99B										
Batch 1802491 - General Preparation										
Duplicate (1802491-DUP1)			**Source: SC44122-01**			Prepared & Analyzed: 20-Feb-18				
pH	**6.31**		pH Units			6.32			0.2	5
Reference (1802491-SRM1)						Prepared & Analyzed: 20-Feb-18				
pH	**6.04**		pH Units		6.00		101	97.5-102.5		
Reference (1802491-SRM2)						Prepared & Analyzed: 20-Feb-18				
pH	**6.01**		pH Units		6.00		100	97.5-102.5		
SM18-22 2540C										
Batch 1802605 - General Preparation										
Blank (1802605-BLK1)						Prepared: 22-Feb-18 Analyzed: 24-Feb-18				
Total Dissolved Solids	< 5		mg/l	5						
LCS (1802605-BS1)						Prepared: 22-Feb-18 Analyzed: 24-Feb-18				
Total Dissolved Solids	**1050**		mg/l	10	1000		105	90-110		
Duplicate (1802605-DUP1)			**Source: SC44122-01**			Prepared: 22-Feb-18 Analyzed: 24-Feb-18				
Total Dissolved Solids	**263**		mg/l	5		259			2	5
SM2540D (11)										
Batch 1802529 - General Preparation										
Blank (1802529-BLK1)						Prepared: 21-Feb-18 Analyzed: 23-Feb-18				
Total Suspended Solids	< 0.5		mg/l	0.5						
LCS (1802529-BS1)						Prepared: 21-Feb-18 Analyzed: 23-Feb-18				
Total Suspended Solids	**98.0**		mg/l	10.0	100		98	90-110		
SW846 1010A										
Batch 1802527 - General Preparation										
Duplicate (1802527-DUP1)			**Source: SC44122-01**			Prepared & Analyzed: 21-Feb-18				
Flashpoint	**>150**		°F			>150				20
Reference (1802527-SRM1)						Prepared & Analyzed: 21-Feb-18				
Flashpoint	**84**		°F		81.0		104	95-105		
SW846 Ch. 7.3										
Batch 1802531 - General Preparation										
Blank (1802531-BLK1)						Prepared & Analyzed: 21-Feb-18				
Reactivity	**See Narrative**		mg/l							
Reactive Cyanide	< 25.0		mg/l	25.0						
Reactive Sulfide	< 50.0		mg/l	50.0						
Duplicate (1802531-DUP1)			**Source: SC44122-01**			Prepared & Analyzed: 21-Feb-18				
Reactivity	**See Narrative**		mg/l			ee Narrativ				200
Reactive Cyanide	< 25.0		mg/l	25.0		BRL				20
Reactive Sulfide	< 50.0		mg/l	50.0		BRL				20
Reference (1802531-SRM1)						Prepared & Analyzed: 21-Feb-18				
Reactive Cyanide	< 25.0		mg/l	25.0	100		0	0-200		
Reference (1802531-SRM2)						Prepared & Analyzed: 21-Feb-18				
Reactive Sulfide	< 50.0		mg/l	50.0	6700		0	0-200		

Notes and Definitions

D	Data reported from a dilution
E	This flag indicates the concentration for this analyte is an estimated value due to exceeding the calibration range or interferences resulting in a biased final concentration.
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
O01	This compound is a common laboratory contaminant.
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.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
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.
LIV	The initial volume for this sample has been reduced due to sample matrix and/or historical data therefore elevating the reporting limit.

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.

SC44122 BM

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☐ Standard TAT - 7 to 10 business days
- ☑ Rush TAT - Date Needed: Feb 26, 2018

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 60 days unless otherwise instructed

Report To: Kleinfelder
4 Technology Drive, Suite 110
Westborough, MA 01581
Telephone #: 508-370-8256 Fax: 508-68-1401
Project Mgr: Emily Straley

Invoice To: Cumberland Farms
Mr. Matt Young
165 Flanders Road
Westbough, MA 01581
P.O No.: 314073 RQN

Project No: CFI Brockton MA8619
Site Name: 700 Oak Street
Location: Brockton State MA
Sampler(s): Nicole Biller

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= none 12=

DW=Dinking Water GW= Groundwater WW= Waste Water
O= Oil SW= surface Water SO=Soil SL= Sludge A= Air
X1= X2= X3=

G= Grab C=Compsite

Lab ID	Sample ID	Date	Time	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic		List Preservative Code below: 2	2	4	4	4	4	11	11	QA/QC Reporting Notes: "additional charges may appply
											Analysis: VOCs via 8260	SVOCs via 8270	TPH via 8100	RCRA 8 Metals Total	RCRA 8 Metals Dissolved (4D)	Total Dissolved Solids	Flashpoint, pH Reactivity	Total Suspended Solids	
SC44122-01	MW-1	2-20-18	1000	G	GW	2	4		2		X	X	X	X	X	X	X	X	Dissolved Metals have been filtered on site
02	MW-5	2-20-18	1030	G	GW	2	2		2		X	X		X	X				

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
		2-20-18	1245	0.0
DSR		2/20/18	1625	0
				0.0
				0.2

☐ EDD format:
☑ E-mail to: estraley@kleinfelder.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☑ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Batch Summary

1802315

Soluble Metals by EPA 6000/7000 Series Methods

1802315-BLK1
1802315-BS1
1802315-BSD1
SC44122-01 (MW-1)
SC44122-02 (MW-5)

1802316

Soluble Metals by EPA 200 Series Methods

1802316-BLK1
1802316-BS1
SC44122-01 (MW-1)
SC44122-02 (MW-5)

1802491

General Chemistry Parameters

1802491-DUP1
1802491-SRM1
1802491-SRM2
SC44122-01 (MW-1)

1802514

Volatile Organic Compounds

1802514-BLK1
1802514-BS1
1802514-BSD1
SC44122-01 (MW-1)
SC44122-02 (MW-5)

1802527

General Chemistry Parameters

1802527-DUP1
1802527-SRM1
SC44122-01 (MW-1)

1802529

General Chemistry Parameters

1802529-BLK1
1802529-BS1
SC44122-01 (MW-1)

1802531

General Chemistry Parameters

1802531-BLK1
1802531-DUP1
1802531-SRM1
1802531-SRM2
SC44122-01 (MW-1)

1802534

Soluble Metals by EPA 200/6000 Series Methods

SC44122-01 (MW-1)
SC44122-02 (MW-5)

1802536

Total Metals by EPA 200/6000 Series Methods

SC44122-01 (MW-1)
SC44122-02 (MW-5)

1802550

Semivolatile Organic Compounds by GCMS

1802550-BLK1
1802550-BS1
1802550-BSD1
1802550-DUP1
SC44122-01 (MW-1)
SC44122-02 (MW-5)

1802569

Total Metals by EPA 6000/7000 Series Methods

1802569-BLK1
1802569-BS1
1802569-BSD1
SC44122-01 (MW-1)
SC44122-02 (MW-5)

1802570

Total Metals by EPA 200 Series Methods

1802570-BLK1
1802570-BS1
SC44122-01 (MW-1)
SC44122-02 (MW-5)

1802605

General Chemistry Parameters

1802605-BLK1
1802605-BS1
1802605-DUP1
SC44122-01 (MW-1)

1802625

Extractable Petroleum Hydrocarbons

1802625-BLK1
1802625-BS2
1802625-BSD2
SC44122-01 (MW-1)

1802636

Volatile Organic Compounds

1802636-BLK1
1802636-BS1
1802636-BSD1
SC44122-01RE1 (MW-1)
SC44122-02RE1 (MW-5)

1802714

Volatile Organic Compounds

1802714-BLK1
1802714-BS1
1802714-BSD1
SC44122-02RE2 (MW-5)

S602716

Extractable Petroleum Hydrocarbons

S602716-CAL9
S602716-CALA
S602716-CALB
S602716-CALC
S602716-CALD
S602716-CALE
S602716-CALF
S602716-CALG
S602716-CALH
S602716-CALI
S602716-CALJ
S602716-CALK
S602716-CALL
S602716-CALM
S602716-ICV2
S602716-LCV2

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

S816807

Volatile Organic Compounds

S816807-CAL1
S816807-CAL2
S816807-CAL3
S816807-CAL4
S816807-CAL5
S816807-CAL6
S816807-CAL7
S816807-CAL8
S816807-CAL9
S816807-ICV1
S816807-LCV1
S816807-LCV2
S816807-TUN1

S816932

Semivolatile Organic Compounds by GCMS

S816932-CAL1
S816932-CAL2
S816932-CAL3
S816932-CAL4
S816932-CAL5
S816932-CAL6
S816932-CAL7
S816932-CAL8
S816932-CAL9
S816932-ICV1
S816932-LCV1
S816932-LCV2
S816932-TUN1

S816984

Volatile Organic Compounds

S816984-CCV1
S816984-TUN1

S817076

Volatile Organic Compounds

S817076-CCV1
S817076-TUN1

S817101

Semivolatile Organic Compounds by GCMS

S817101-CCV1
S817101-TUN1

S817118

Extractable Petroleum Hydrocarbons

S817118-CCV1
S817118-CCV3

S817130

Volatile Organic Compounds

S817130-CCV1
S817130-TUN1

S817145

Semivolatile Organic Compounds by GCMS

S817145-CCV1
S817145-TUN1

ATTACHMENT D

Fish and Wildlife Consistency Letter

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To:
Consultation Code: 05E1NE00-2019-SLI-2002
Event Code: 05E1NE00-2019-E-04955
Project Name: Brockton, MA

June 17, 2019

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2019-SLI-2002

Event Code: 05E1NE00-2019-E-04955

Project Name: Brockton, MA

Project Type: DEVELOPMENT

Project Description: Treatment of groundwater and discharge through stormwater system into unnamed wetland under EPA NPDES Remediation General Permit.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/42.100827514675984N71.05656546436246W

Counties: Plymouth, MA

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

ATTACHMENT E

Massachusetts Cultural Resources in Vicinity of Site

Massachusetts Cultural Resource Information System
MACRIS

MACRIS Search Results

Search Criteria: Town(s): Brockton; Resource Type(s): Area, Burial Ground, Building, Object, Structure;

Inv. No.	Property Name	Street	Town	Year
BRO.A	Field, D. W. Park		Brockton	
BRO.586	Field, D. W. Park - Restroom Facility	Field, D. W. Park	Brockton	c 1960
BRO.587	Field, D. W. Park - Pump House	Field, D. W. Park	Brockton	c 1970
BRO.950	Field, D. W. Park - Waldo Lake	Field, D. W. Park	Brockton	r 1935
BRO.951	Field, D. W. Park - Upper Porter Pond	Field, D. W. Park	Brockton	r 1920
BRO.952	Field, D. W. Park - Lower Porter Pond	Field, D. W. Park	Brockton	r 1820
BRO.953	Field, D. W. Park - Thirty Acre Pond	Field, D. W. Park	Brockton	r 1920
BRO.954	Field, D. W. Park - Ellis Brett Pond	Field, D. W. Park	Brockton	r 1850
BRO.955	Field, D. W. Park - Cross Pond	Field, D. W. Park	Brockton	r 1795
BRO.957	Field, D. W. Golf Course	Field, D. W. Park	Brockton	1926
BRO.958	Field, D. W. Park - Concrete Landing and Steps	Field, D. W. Park	Brockton	c 1925
BRO.961	Field, D. W. Park - Bath House Foundation	Field, D. W. Park	Brockton	1933
BRO.962	Field, D. W. Park - Walls	Field, D. W. Park	Brockton	c 1930
BRO.963	Field, D. W. Park - Concrete Culverts	Field, D. W. Park	Brockton	c 1930
BRO.964	Field, D. W. Park - Concrete Spillways	Field, D. W. Park	Brockton	c 1930
BRO.965	Field, D. W. Park - Waldo Lake Bridge	Field, D. W. Park	Brockton	1934
BRO.966	Field, D. W. Park - Thirty Acre Pond Footbridge	Field, D. W. Park	Brockton	c 1934
BRO.956	Field, D. W. Park - Field, D. W. Parkway	Field, D. W. Pkwy	Brockton	1927
BRO.46	Field, D. W. Golf Course Clubhouse	Oak St	Brockton	1927
BRO.960	Field, D. W. Park - Main Entrance Gates	Oak St	Brockton	1991
BRO.900	Field, D. W. Park - Central Memorial Tower	Park Rd	Brockton	1928
BRO.904	Field, D. W. Park	Pleasant St	Brockton	r 1930
BRO.959	Field, D. W. Park - Pleasant Street Entrance Piers	Pleasant St	Brockton	c 1925
BRO.948	Route 24 Bridge over Oak Street	Rt 24	Brockton	1954