73 William Franks Drive
West Springfield, MA 01089
Telephone 413-781-0070
Fax 737-207-8280
www.atcgroupservices.com

November 25, 2019
Project Number 12859.55

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

RE: Notice of Intent for Remediation General Permit
Commercial Property
Cumberland Farms Property #MA2080
3 Main Street – Route 20
Brimfield, MA 01010

Dear Ms. Puleo:

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

Background

The Site is located at 3 Main Street in Brimfield, Hampden County, Massachusetts and is comprised of 21,095 square feet of land occupied by a gasoline dispensing station and a CFI convenience store. The convenience store is a 1,710 square foot single story building with no basement and is located on the south central portion of the Site. Two pump islands are located north of the convenience store and three underground storage tanks (USTs) for gasoline are located east of the pump islands. The central portion of the Site is paved and the perimeter of the property is landscaped. The Site is currently owned by CFI and is operated as a gasoline dispensing station and CFI convenience store. The Site was purchased byCFI on June 4, 1976 and was reconstructed in 1977. The reconstruction included the demolition of a former building, the construction of the existing convenience store, the removal of former USTs, and the installation of three 8,000-gallon steel gasoline USTs. Before 1977, the Site was operated as a Texaco gasoline dispensing and automotive repair station. The site is located within the boundaries of an Interim Wellhead Protection Area and there are non-community public drinking water supplies within 500 feet of the site. The site and the area surrounding the site have private drinking water wells. The site is served by a private drinking water well located south of the convenience store. An on-site septic tank and leaching field are located along the northern property boundary. Overhead electric lines enter the northwest corner of the property, run parallel to the western property boundary, and enter the convenience store on the western and southern sides. One catch basin and the respective outfall is located on the property. Two additional catch basins are located along the front of the Site and are connected to the MassDOT stormwater drainage system that runs around the corner of Main Street (Route 20) and along Wales Road (Route 19) and eventually discharges at the Lower Brook.

Pretreatment

The excavation will be dewatered by installing temporary sump pumps. Pumps will be used so that collected groundwater from the excavation area can then be pumped through a carbon filtration system during excavation activities. The water will then be pumped through bag filters to remove solids and then discharged to a catch basin located along the front of the site. The catch basins are connected to the MassDOT storm water drainage system, which is connected to an outfall located along a retaining wall located beside a culvert which is also known as the Lower Brook located 0.1 miles southeast of the Site. A discharge permit application through MassDOT was be submitted on November 27, 2019 and is expected to be approved by December 12, 2019. Please refer to Figure 1 for the Site Plan depicting the catch basins and Figure 2 for a depiction of the outfall location.

Average flow rate of discharge of treated groundwater from the Site to the storm drainage line is expected to be approximately no more than 50 gallons per minute (gpm) as is consistent with pumping equipment capacity.

Influent Sample Analysis

Groundwater samples were collected from the raw water/influent location (ECS-8) on November 7, 2019 and were submitted to Spectrum/Eurofins Analytical, Inc. of Agawam, Massachusetts for laboratory analysis for the following parameters:

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

Also, a sample of the receiving water (Lower Brook) was collected on this date for laboratory analysis of pH, Hardness, Ammonia, and Metals. Sampling data is provided in a copy of the laboratory report and is included as Attachment II. Based on the location of the outfall and receiving waters and the proposed design discharge flow, the seven day-ten year low flow (7Q10) of the receiving waters was limited due to lack of information and was determined to be 0.0 MGD and the calculated dilution factor was determined to be 1. MassDEP reviewed and approved the 7Q10 low flow determination and the calculated dilution factor (Attachment III).

Groundwater analytical results were compared to the Appendix III effluent limitations (www.epa.gov/region1/npdes/rgp.html). These results indicate that no parameters were detected in the effluent samples at concentrations that exceed the applicable EPA Appendix III effluent limitations, however, the following parameter for the outflow sample was outside of the limitation range:

- pH

As the influent pH level is within the appropriate limitation range, the outflow pH level may be a product of other influent sources and discharge during excavation activities is unlikely to be of direct impact in the receiving waters.

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

There are no surface water bodies present on the site. The nearest surface water bodies are an unnamed tributary located approximately 210 feet south of the site and Sherman Brook located approximately 350 feet east of the site. No Areas of Critical Environmental Concern, Species of Special Concern, or Threatened or Endangered Species are located within 500 feet of the site.

Based on this information, the potential discharge will not have an adverse affect on the NHESP Estimated Habitats of Rare Wildlife. A copy of the MassGIS Resource Priority and NHESP Maps of the Site area is included in Attachment IV.

Review of National Register of Historic Places

Listings of Historic Places within the Town of Brimfield were obtained from the Massachusetts Cultural Resources Information System (MACRIS) online database at http://mhc- macris.net/towns.aspx (accessed November 20, 2019). A copy of the MACRIS report is provided as Attachment V. The database indicated that there are two historic places located in and in close proximity to the Site: The Site building at 3 Main Street, and the Post Office next door (also identified as 3 Main Street) are listed as historical buildings. This project does not involve the demolition or rehabilitation of historic properties.

The proposed redevelopment project has commenced and is expected last for approximately 4-6 months. The duration of the dewatering aspect of the project is only expected to be for a 1 week duration in January 2020. Should you have any questions or concerns regarding the contents of this letter or the NOI for the RGP, please do not hesitate to contact the undersigned at (413) 781-0070.

If there are any questions regarding this information, please do not hesitate to contact the undersigned at (413) 781-0070.

Sincerely,
ATC GROUP SERVICES LLC

Alexandra N. Riddle

Alexandra N. Riddle

cc: Matthew Young, Cumberland Farms, Inc., 165 Flanders Road, Westborough, MA Cathy Vakalopoulus, MassDEP, Surface Water Discharge Permit Program, One Winter Street, 5th Floor, Boston, MA 02108 MassDOT, 811 North King Street, Northampton, MA 01060

Attachments

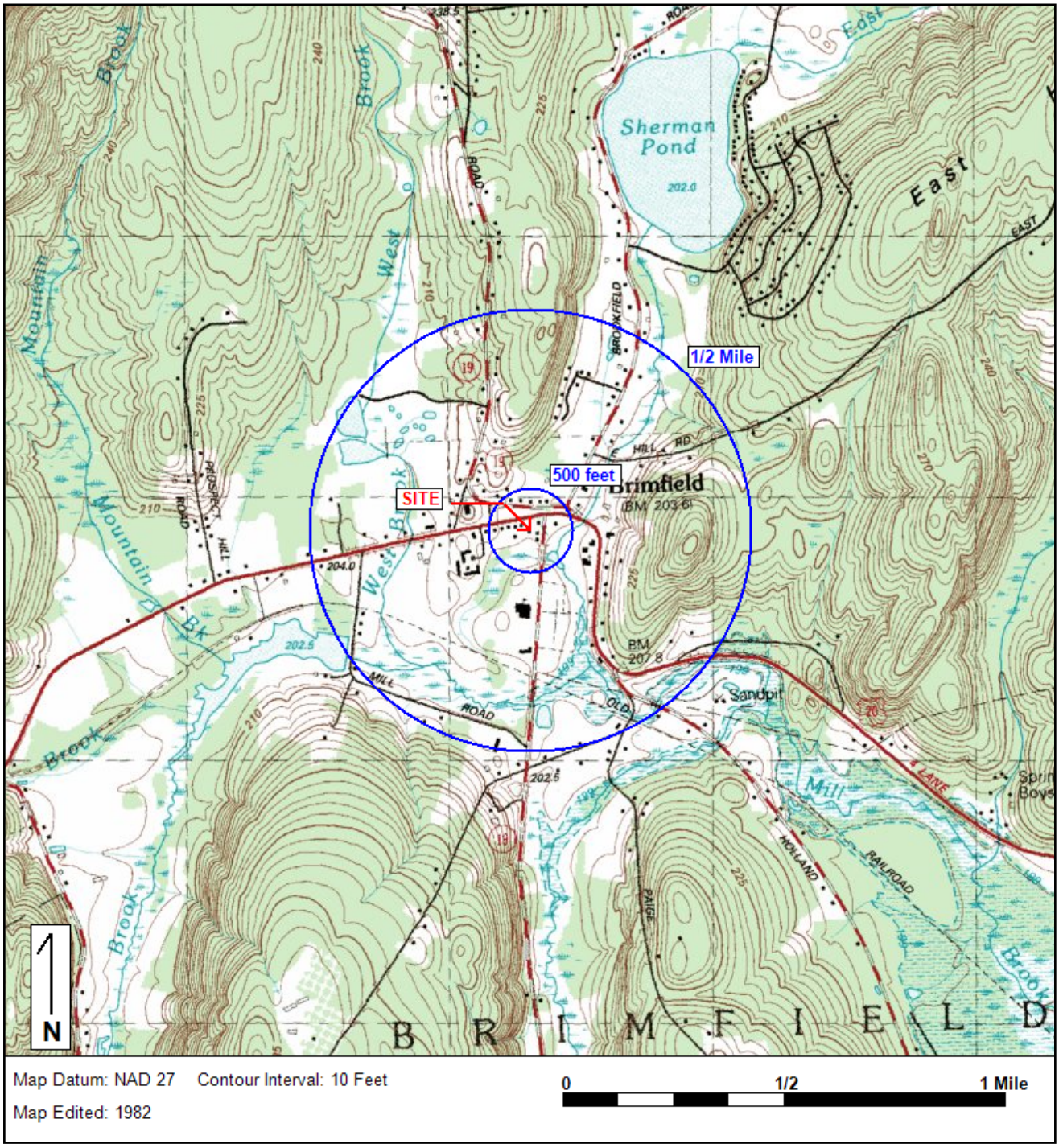
Figure 1: Site Locus
Figure 2: Site Plan
Figure 3: Outflow Assessment
Attachment I: NOI for the RGP
Attachment II: Laboratory Analytical Report
Attachment III: MassDEP Approval of 7Q10 Low Flow Determination & Dilution Factor Calculation
Attachment IV: MassGIS NHESP Map
Attachment V: MACRIS Database Search Results, PNF

FIGURES

ATC Group Services LLC
73 William Franks Drive
West Springfield, MA 01089
Phone 413-781-0070 Fax 413-781-3734
www.atcgroupservices.com

CFI Brimfield,MA
3 Main St
Brimfield, MA

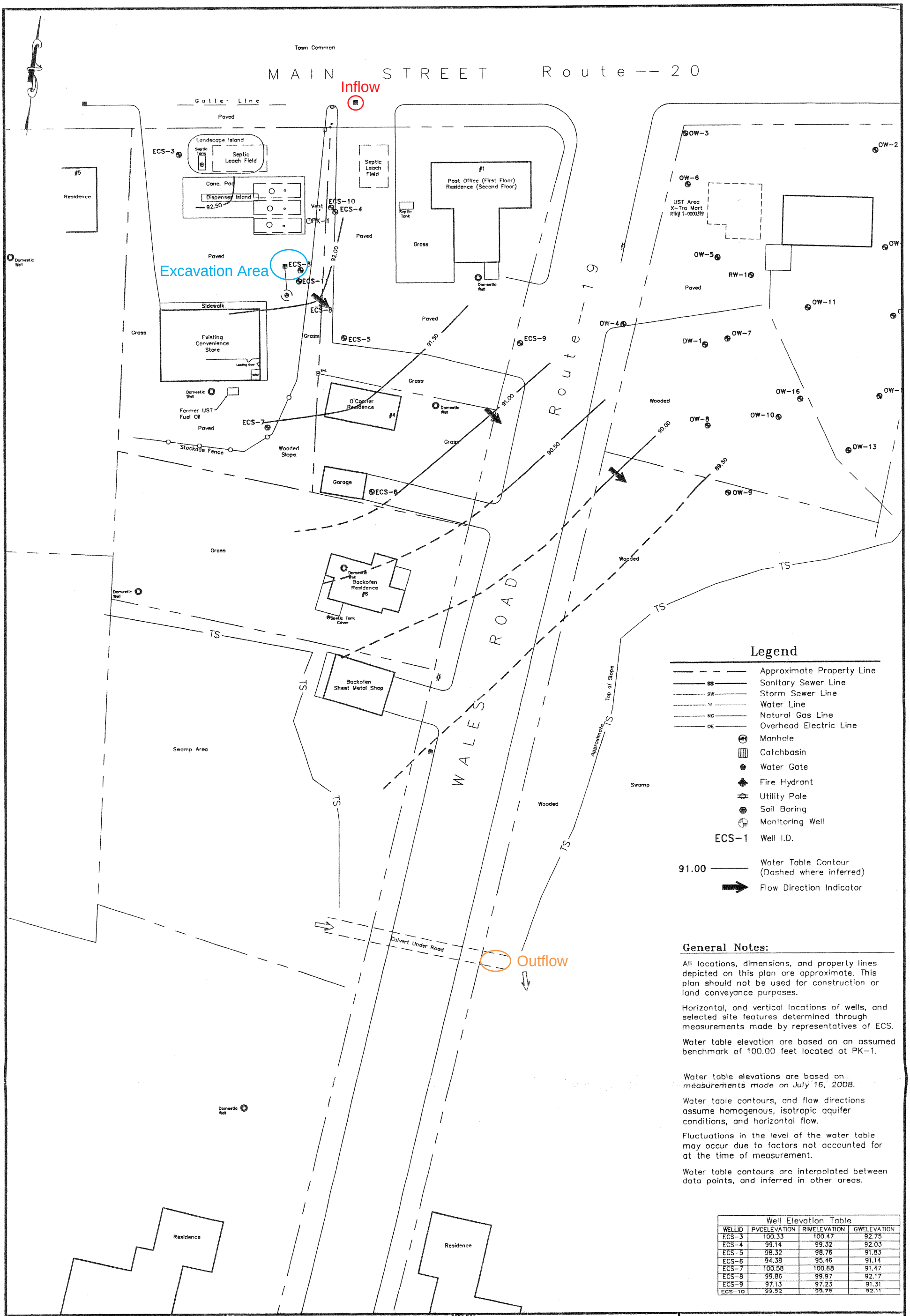
Figure 1: SITE LOCUS



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

Lat/Lon: 42.12 NORTH, -72.2008 WEST - UTM Coordinates: 18 4666892 EAST / 731396 NORTH

Generated By: Katerina Korolov



Legend

- Approximate Property Line
- SS — Sanitary Sewer Line
- SW — Storm Sewer Line
- W — Water Line
- NG — Natural Gas Line
- OE — Overhead Electric Line
- Manhole
- Catchbasin
- Water Gate
- Fire Hydrant
- Utility Pole
- Soil Boring
- Monitoring Well
- ECS-1 — Well I.D.
- 91.00 — Water Table Contour (Dashed where inferred)
- Flow Direction Indicator

General Notes:

All locations, dimensions, and property lines depicted on this plan are approximate. This plan should not be used for construction or land conveyance purposes.

Horizontal, and vertical locations of wells, and selected site features determined through measurements made by representatives of ECS.

Water table elevation are based on an assumed benchmark of 100.00 feet located at PK-1.

Water table elevations are based on measurements made on July 16, 2008.

Water table contours, and flow directions assume homogenous, isotropic aquifer conditions, and horizontal flow.

Fluctuations in the level of the water table may occur due to factors not accounted for at the time of measurement.

Water table contours are interpolated between data points, and inferred in other areas.

Well Elevation Table

WELLID	PVCELEVATION	RIMELEVATION	GWELEVATION
ECS-3	100.33	100.47	92.75
ECS-4	99.14	99.32	92.03
ECS-5	98.32	98.76	91.83
ECS-6	94.38	95.46	91.14
ECS-7	100.58	100.68	91.47
ECS-8	99.86	99.97	92.17
ECS-9	97.13	97.23	91.31
ECS-10	99.52	99.75	92.11

ecs
588 Silver Street * Agawam, MA 01001
Phone: 1-800-789-3530 Fax: 413-789-2778

CLIENT: Cumberland Farms, Inc.

GRAPHIC SCALE: 50 25 0 25 50

SAVED ON: 7/30/2008 9:58 AM SAVED BY: RMALAS

PROJECT: Cumberland Farms, Inc.
3 Main Street – Route 20
Brimfield, Massachusetts

TITLE: Site Plan with Groundwater Contours (7/16/08)

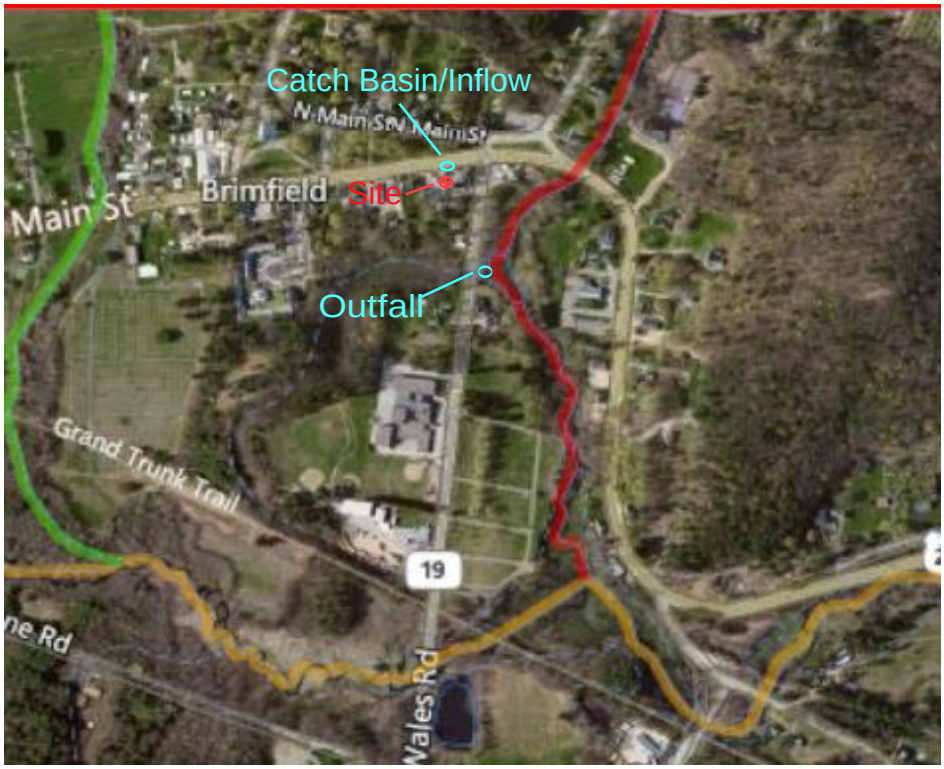
CADFILE: F:\Data\Projects\12859\DWG\12859SP.dwg

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
RAS	MB	JO	KCS
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
1"=50'	July 2008	12859.55	2

2014 Assessment Unit ID: MA41-16
Water Name: Unnamed Tributary
Watershed: Quinebaug **Water Type:** RIVER **Water Code:** 4129335
Size: 1.2 MILES **Class:** B **Qualifier:** **Category:** 5 **TMDL Count:** 0
Description: Unnamed tributary to Mill Brook, headwaters, outlet Sherman Pond, Brimfield to confluence with Mill Brook, Brimfield.

Use	Attainment	Cause	Poltnt_Flg	Source	TMDL DWM Id
Aesthetic	Fully Supporting				
Fish Consumption	Not Assessed				
Fish, other Aquatic Life and Wildlife	Not Supporting	Oxygen, Dissolved	Y	Source Unknown	
Fish, other Aquatic Life and Wildlife	Not Supporting	Aquatic Macroinvertebrate Bioassessments	Y	Source Unknown	
Fish, other Aquatic Life and Wildlife	Not Supporting	Sedimentation/Siltation	Y	Source Unknown	
Primary Contact Recreation	Not Supporting	Escherichia coli	Y	Non-Point Source	
Secondary Contact Recreation	Not Supporting	Escherichia coli	Y	Non-Point Source	

*Base map generated by MassDEP online Map Viewer - 2014 Integrated List of Waters Map



ATTACHMENT I

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

A. General site information:

<table>
<tr><td rowspan="2">1. Name of site: CFI Brimfield</td><td colspan="3">Site address: Cumberland Farms
Street: 3 Main Street</td></tr>
<tr><td>City: Brimfield</td><td>State: MA</td><td>Zip: 01010</td></tr>
<tr><td rowspan="4">2. Site owner
CFI

Owner is (check one): ☐ Federal ☐ State/Tribal ■ Private
☐ Other; if so, specify:</td><td colspan="3">Contact Person: Mr. Matthew Young</td></tr>
<tr><td colspan="2">Telephone: (508) 270-4477</td><td>Email: MYoung@cumberlandfarms.com</td></tr>
<tr><td colspan="3">Mailing address: Cumberland Farms
Street: 165 Flanders Road</td></tr>
<tr><td>City: Westborough</td><td>State: MA</td><td>Zip: 01581</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner</td><td colspan="3">Contact Person: Mr. Matthew Young (See info above)</td></tr>
<tr><td colspan="2">Telephone:</td><td>Email:</td></tr>
<tr><td colspan="3">Mailing address:
Street:</td></tr>
<tr><td>City:</td><td>State:</td><td>Zip:</td></tr>
<tr><td>4. NPDES permit number assigned by EPA:

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

B. Receiving water information:

1. Name of receiving water(s): Locally known as Lower Brook (source: historical town engineering plans)- identified by MA as "Unnamed Tributary"	Waterbody identification of receiving water(s): Unnamed Tributary MA41-16	Classification of receiving water(s): -the Lower Brook culvert outfalls eventually into the East Brook (a class B, category 5 impaired stream)

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

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

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

3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. Yes, listed in 2014, Fish/wildlife use is impaired due to non-supporting Aquatic Macroinvertebrates and sedimentation/siltation. Primary and Secondary Recreation contact is impaired due to non-point source E.Coli. The sources are unknown and no TMDL's are available.

4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.	0
5. Indicate the requested dilution factor for the calculation of water quality-based effluent limitations (WQBELs) determined in accordance with the instructions in Appendix V for sites in Massachusetts and Appendix VI for sites in New Hampshire.	1

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: Chloride, Ammonia as N, TSS, TDS	
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): Lower Brook Culvert, located on the east side of Route 19 (Wales Rd), approximately 500 feet south of the corner of Rt 20 and RT 19	Outfall location(s): (Latitude, Longitude) Latitude: 42° 7'15.26"N Longitude: 72°12'2.63"W
Discharges enter the receiving water(s) via (check any that apply): ☐ Direct discharge to the receiving water ■ Indirect discharge, if so, specify: GW discharges via catch basins to enter the receiving storm drainage system that drains from Route 20 (MassDOT) underground to Route 19 and exits via the Lower Brook culvert pipe into swamp which connects to East Brook ☐ A private storm sewer system ■ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ■ Yes ☐ No Has the operator has received permission from the owner to use such system for discharges? (check one): ☐ Yes ■No, if so, explain, with an estimated timeframe for obtaining permission: MassDOT permit application to be submitted by 11-27-19. Approval expected by 12-12-2019 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): March 9, 2019 to March 27, 2019 (this is a time window wherein discharge anticipated to last approx. one week during tank installation event) 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="5">☐ I – Petroleum-Related Site Remediation
☐ II – Non-Petroleum-Related Site Remediation
◪ III – Contaminated Site Dewatering
☐ IV – Dewatering of Pipelines and Tanks
☐ V – Aquifer Pump Testing
☐ VI – Well Development/Rehabilitation
☐ VII – Collection Structure Dewatering/Remediation
☐ VIII – Dredge-Related Dewatering</td><td colspan="2">a. If Activity Category I or II: (check all that apply)

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

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

4. Influent and Effluent Characteristics

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

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

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

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

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:

Temporary pumps will extract water and the water will be processed through a carbon bag filtration system before discharge into the catch basin.

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

Identify each major treatment component (check any that apply):
☐ Fractionation tanks☐ Equalization tank ☐ Oil/water separator ☐ Mechanical filter ☐ Media filter
☐ Chemical feed tank ☐ Air stripping unit ■ Bag filter ☐ Other; if so, specify:

Indicate if either of the following will occur (check any that apply):
☐ Chlorination ☐ De-chlorination

3. Provide the **design flow capacity** in gallons per minute (gpm) of the most limiting component. Indicate the most limiting component: up to 50 gpm expected flow limitation as within functional range of sump-pumps to be used. Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	
Provide the proposed maximum effluent flow in gpm.	50 gpm
Provide the average effluent flow in gpm.	Unknown
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 See Figure 3 for flow source and in/effluent points.

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:
NA-No additives to be used.
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 NA-No additives to be used.

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.

Please see attached letter for a description of supplemental information.

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:	
Notification provided to the appropriate State, including a copy of this NOI, if required. (This is an MCP Site, therefore the NOI was not submitted to the State, however, the Mass DOT has been notified.)	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. 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 ☐ Check one: Yes ☐ No ■ NA ☐
Notification provided to the owner/operator of the area associated with activities covered by an additional discharge permit(s). Additional discharge permit is (check one): ☐ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:	Check one: Yes ☐ No ☐ NA ■
Signature: Matthew D Young	Date: 11/27/2019
Print Name and Title: Matthew Young, Sr. Project Manager	

ATTACHMENT II

eurofins | Spectrum Analytical

☑ Final Report
☐ Revised Report

Report Date:
02-Dec-19 12:24

Laboratory Report
SC56705

ATC Group Services, LLC
73 William Franks Drive
West Springfield, MA 01089
Attn: Alexandra Riddle

Project: CFI - Brimfield, MA
Project #: MA-0807

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.

New York # 11393
USDA # P330-15-00375

Authorized by:

Dawn Wojcik
Laboratory Director

Dawn E Wojcik

Eurofins Spectrum Analytical holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 27 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: SC56705

Project: CFI - Brimfield, MA

Project Number: MA-0807

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC56705-01	ECS-8	Ground Water	07-Nov-19 12:20	07-Nov-19 15:05
SC56705-02	Outflow (Lower Brook Culvert)	Ground Water	07-Nov-19 12:20	07-Nov-19 15:05

MassDEP Analytical Protocol Certification Form

Laboratory Name: Eurofins Spectrum Analytical, Inc.	**Project #:** MA-0807
Project Location: CFI - Brimfield, MA	**RTN:**
This form provides certifications for the following data set:	SC56705-01 through SC56705-02
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

<u>Data User Note:</u> 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

Dawn E. Wojcik
Laboratory Director
Date: 12/2/2019

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 4.2 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.

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.

Method 624.1: The laboratory control sample (LCS) for analytical batch 480-505133 recovered outside control limits for the following analytes: 2-Methyl-2-Propanol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore,
the data have been reported.SC56705-01 (480-162546-1)
Method 624.1: The continuing calibration verification (CCV) associated with batch 480-505133 recovered above the upper control limit for
2-Methyl-2-Propanol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: SC56705-01 (480-162546-1).
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method 608.3: The laboratory control sample duplicate (LCSD) for preparation batch 480-504409 and analytical batch 480-504603 recovered outside control limits for the following analytes: PCB-1016. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 200.8: The laboratory control sample (LCS) for preparation batch 480-504539 and analytical batch 480-505178 recovered outside
control limits for the following analytes: Total Antimony. This analyte was biased high in the LCS and was not detected in the associated samples, SC56705-01 (480-162546-1) and SC56705-02 (480-162546-2) ; therefore, the data have been reported.
Method 200.8: The Initial Calibration Verification (ICV 480-505178/5) recovered above the upper control limit for Total Antimony. The sample SC56705-02 (480-162546-2) associated with this ICV was non-detect for the affected analytes; therefore, the data have been reported.
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-504409.

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

200.7 Rev 4.4

Samples:

SC56705-01 *ECS-8*

Compound was found in the blank and sample.

Iron

200.8

Laboratory Control Samples:

504539 BS

Antimony percent recovery 121 (85-115) is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

ECS-8
Outflow (Lower Brook Culvert)

505761-14

LCS or LCSD is outside acceptance limits.

Antimony

Samples:

SC56705-01RE1 *ECS-8*

LCS or LCSD is outside acceptance limits.

Antimony

SC56705-02 *Outflow (Lower Brook Culvert)*

200.8

Samples:

SC56705-02 *Outflow (Lower Brook Culvert)*

ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Antimony

LCS or LCSD is outside acceptance limits.

Antimony

608.3

Laboratory Control Samples:

504603-59

LCS or LCSD is outside acceptance limits.

PCB-1016

Samples:

SC56705-01 *ECS-8*

LCS or LCSD is outside acceptance limits.

PCB-1016

E625.1/E625.1SIM

Laboratory Control Samples:

505293A BS

2-Nitroaniline percent recovery 137 (30-130) is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

ECS-8

Benzidine percent recovery <10 (30-130) is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

ECS-8

Bis(2-chloroisopropyl)ether percent recovery 61 (63-139) is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

ECS-8

505293A BSD

4-Chloroaniline RPD 52.8% (20%) is outside individual acceptance criteria.

Pyridine RPD 38.1% (20%) is outside individual acceptance criteria.

CE55177-LCS

This parameter is outside laboratory rpd specified recovery limits.

Pyridine

CE55177-LCSD

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

Hexachlorocyclopentadiene

E625.1/E625.1SIM

Laboratory Control Samples:

CE55177-LCSD

This parameter is outside laboratory rpd specified recovery limits.

Pyridine

CF55177-LCS

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

2-Nitroaniline
Benzidine
Bis(2-chloroisopropyl)ether

This parameter is outside laboratory rpd specified recovery limits.

4-Chloroaniline

CF55177-LCSD

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

2-Nitroaniline
Bis(2-chloroisopropyl)ether

This parameter is outside laboratory rpd specified recovery limits.

4-Chloroaniline

Sample Acceptance Check Form

Client:	ATC Group Services, LLC - West Springfield, MA
Project:	CFI - Brimfield, MA / MA-0807
Work Order:	SC56705
Sample(s) received on:	11/7/2019

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

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

Summary of Hits

Lab ID: SC56705-01 **Client ID:** ECS-8

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
TPH (1664A)	3.0		5.2	mg/l	1664B
Iron	0.41	B	0.050	mg/l	200.7 Rev 4.4
Chromium	0.83		1.5	ug/l	200.8
Copper	5.9		1.0	ug/l	200.8
Lead	0.63		1.0	ug/l	200.8
Nickel	0.39		1.0	ug/l	200.8
Zinc	88		10	ug/l	200.8
Chloride	23.2		3.0	mg/l	E300.0
Ammonia as Nitrogen	0.05		0.05	mg/l	E350.1
Calcium hardness as calcium carbonate	1.6		0.50	mg/l	SM 2340B
Hardness as calcium carbonate	2.1		0.50	mg/l	SM 2340B
Magnesium hardness as calcium carbonate	0.49		0.50	mg/l	SM 2340B
Total Suspended Solids	12		5.0	mg/l	SM 2540D-11
Tot. Diss. Solids	120		20	mg/l	SM2540C-11
pH	6.84		1.00	pH Units	SM4500-H B-11
Reactivity	Negative		0	mg/l	SW846-React

Lab ID: SC56705-02 **Client ID:** Outflow (Lower Brook Culvert)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Copper	1.2		1.0	ug/l	200.8
Lead	1.1		1.0	ug/l	200.8
Nickel	1.4		1.0	ug/l	200.8
Zinc	17		10	ug/l	200.8
Ammonia as Nitrogen	0.15		0.05	mg/l	E350.1
Hardness as calcium carbonate	68		4.0	mg/l	SM 2340C
pH	6.16		1.00	pH Units	SM4500-H B-11

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

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-8	MA-0807	Ground Water	07-Nov-19 12:20	07-Nov-19
SC56705-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Prepared by method E300.0													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
16887-00-6	Chloride	**23.2**		mg/l	3.0	3.0	1	E300.0	08-Nov-19 03:06	08-Nov-19 03:06	M-PA009	505536A	
Prepared by method E350.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7664-41-7	Ammonia as Nitrogen	**0.05**		mg/l	0.05	0.05	1	E350.1	08-Nov-19 10:11	08-Nov-19 10:11	M-PA009	505357A	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
83-32-9	Acenaphthene	< 0.05		ug/l	0.05	0.05	1	E625.1/E625.1SIM	07-Nov-19	11-Nov-19 05:32	M-PA009	505293A	
208-96-8	Acenaphthylene	< 0.05		ug/l	0.05	0.05	1	"	"	"	"	"	
56-55-3	Benzo(a)anthracene	< 0.04		ug/l	0.04	0.04	1	"	"	"	"	"	
50-32-8	Benzo(a)pyrene	< 0.05		ug/l	0.05	0.05	1	"	"	"	"	"	
205-99-2	Benzo(b)fluoranthene	< 0.05		ug/l	0.05	0.05	1	"	"	"	"	"	
191-24-2	Benzo(g,h,i)perylene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	< 0.05		ug/l	0.05	0.05	1	"	"	"	"	"	
218-01-9	Chrysene	< 0.05		ug/l	0.05	0.05	1	"	"	"	"	"	
53-70-3	Dibenz(a,h)anthracene	< 0.02		ug/l	0.02	0.02	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 0.06		ug/l	0.06	0.06	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-c,d)pyrene	< 0.05		ug/l	0.05	0.05	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 0.10		ug/l	0.10	0.10	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 0.05		ug/l	0.05	0.05	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 0.05		ug/l	0.05	0.05	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 0.05		ug/l	0.05	0.05	1	"	"	"	"	"	
110-86-1	Pyridine	< 0.48		ug/l	0.48	0.48	1	"	"	"	"	"	
Surrogate recoveries:													
118-79-6	*% 2,4,6-Tribromophenol*	*85*			*15-110 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*64*			*40-140 %*			"	"	"	"	"	
367-12-4	*% 2-Fluorophenol*	*37*			*15-110 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*52*			*40-140 %*			"	"	"	"	"	
4165-62-2	*% Phenol-d5*	*17*			*15-110 %*			"	"	"	"	"	
98904-43-9	*% Terphenyl-d14*	*68*			*40-140 %*			"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
120-82-1	1,2,4-Trichlorobenzene	< 4.8		ug/l	4.8	4.8	1	E625.1/E625.1SIM	07-Nov-19	12-Nov-19 00:33	M-PA009	505293A	
95-50-1	1,2-Dichlorobenzene	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
122-66-7	1,2-Diphenylhydrazine	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-8	MA-0807	Ground Water	07-Nov-19 12:20	07-Nov-19
SC56705-01				

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*													
Re-analysis of Subcontracted Analyses													
51-28-5	2,4-Dinitrophenol	< 4.8		ug/l	4.8	4.8	1	E625.1/E625.1SIM	07-Nov-19	12-Nov-19 00:33	M-PA009	505293A	
121-14-2	2,4-Dinitrotoluene	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
87-65-0	2,6-Dichlorophenol	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
95-48-7	2-Methylphenol (o-cresol)	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 9.6		ug/l	9.6	9.6	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
	3&4-Methylphenol (m&p-cresol)	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
91-94-1	3,3'-Dichlorobenzidine	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
120-12-7	Anthracene	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
92-87-5	Benzidine	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
65-85-0	Benzoic acid	< 9.6		ug/l	9.6	9.6	1	"	"	"	"	"	
100-51-6	Benzyl alcohol	< 9.6		ug/l	9.6	9.6	1	"	"	"	"	"	
85-68-7	Benzyl butyl phthalate	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
39638-32-9	Bis(2-chloroisopropyl)ether	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 0.96		ug/l	0.96	0.96	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 0.96		ug/l	0.96	0.96	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
131-11-3	Dimethylphthalate	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
84-74-2	Di-n-butylphthalate	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
117-84-0	Di-n-octylphthalate	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
86-73-7	Fluorene	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 0.96		ug/l	0.96	0.96	1	"	"	"	"	"	
78-59-1	Isophorone	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
91-20-3	Naphthalene	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-8 SC56705-01	MA-0807	Ground Water	07-Nov-19 12:20	07-Nov-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*													
Re-analysis of Subcontracted Analyses													
108-95-2	Phenol	< 4.8		ug/l	4.8	4.8	1	E625.1/E625.1SIM	07-Nov-19	12-Nov-19 00:33	M-PA009	505293A	
129-00-0	Pyrene	< 4.8		ug/l	4.8	4.8	1	"	"	"	"	"	
Surrogate recoveries:													
118-79-6	*% 2,4,6-Tribromophenol*	*111*			*15-130 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*59*			*30-130 %*			"	"	"	"	"	
367-12-4	*% 2-Fluorophenol*	*35*			*10-130 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*54*			*15-130 %*			"	"	"	"	"	
4165-62-2	*% Phenol-d5*	*16*			*10-130 %*			"	"	"	"	"	
98904-43-9	*% Terphenyl-d14*	*66*			*30-130 %*			"	"	"	"	"	
Prepared by method SM 2540D-11													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
	Total Suspended Solids	**12**		mg/l	5.0	5.0	1	SM 2540D-11	08-Nov-19 07:26	08-Nov-19 07:26	M-PA009	505410A	
Prepared by method SM2540C-11													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
	Tot. Diss. Solids	**120**		mg/l	20	20	2	SM2540C-11	08-Nov-19 10:47	08-Nov-19 10:47	M-PA009	505457A	
Prepared by method SM3500CRB													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
18540-29-9	Chromium, Hexavalent	< 0.01		mg/l	0.01	0.01	1	SM3500CRB-11	07-Nov-19	07-Nov-19 18:32	M-PA009	505349A	
Prepared by method SM4500Cl-G													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7782-50-5	Chlorine Residual	< 0.02		mg/l	0.02	0.02	1	SM4500Cl-G-00	"	07-Nov-19 18:11	M-PA009	505348A	
Prepared by method SM4500-H B-11													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
	pH	**6.84**	pH	pH Units	1.00	1.00	1	SM4500-H B-11	08-Nov-19 00:01	08-Nov-19 00:01	M-PA009	505429A	
Prepared by method SW-7.3													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
	Reactivity Sulfide	< 5		mg/l	5	5	1	SW-7.3	08-Nov-19 14:58	08-Nov-19 14:58	M-PA009	'[none]'	
Subcontracted Analyses Prepared by method SW846-React													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
	Reactivity	**Negative**		mg/l	0	0	1	SW846-React	08-Nov-19 15:03	08-Nov-19 15:03	M-PA009	505406A	
Re-analysis of Subcontracted Analyses Prepared by method SW846-React													
	Reactivity Cyanide	< 2.0		mg/l	2.0	2.0	1.99	SW846-React	08-Nov-19 12:58	08-Nov-19 12:58	M-PA009	505406A	
Prepared by method SM 4500 CN													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
57-12-5	Total Cyanide	< 0.010		mg/l	0.010	0.010	1	SW9010C/SW9012B	08-Nov-19	12-Nov-19 12:23	M-PA009	505548A	
Subcontracted Analyses Prepared by method 8011													
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - DSC													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-8	MA-0807	Ground Water	07-Nov-19 12:20	07-Nov-19
SC56705-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Prepared by method 8011													
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - DSC													
106-93-4	Ethylene Dibromide	< 0.011		ug/l	0.011	0.0077	1	8011	18-Nov-19 10:52	19-Nov-19 01:34	DSC	505127	
Prepared by method 1664B													
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - CRK													
	TPH (1664A)	**3.0**		mg/l	5.2	2.0	1	1664B	20-Nov-19 12:33	20-Nov-19 14:59	CRK	505679	
Prepared by method 245.1													
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - BMB													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00012	1	245.1	18-Nov-19 14:09	18-Nov-19 16:38	BMB	505172	
Prepared by method 200.7													
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - AMH													
7439-89-6	Iron	**0.41**	B	mg/l	0.050	0.019	1	200.7 Rev 4.4	14-Nov-19 09:46	14-Nov-19 22:40	AMH	504316	
Subcontracted Analyses													
Prepared by method 200.8													
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - KMP													
7440-38-2	Arsenic	< 1.0		ug/l	1.0	0.27	1	200.8	15-Nov-19 08:05	18-Nov-19 12:30	KMP	504539	
7440-41-7	Beryllium	< 0.70		ug/l	0.70	0.030	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.50		ug/l	0.50	0.071	1	"	"	"	"	"	
7440-47-3	Chromium	**0.83**		ug/l	1.5	0.36	1	"	"	"	"	"	
7440-50-8	Copper	**5.9**		ug/l	1.0	0.22	1	"	"	"	"	"	
7439-92-1	Lead	**0.63**		ug/l	1.0	0.17	1	"	"	"	"	"	
7440-02-0	Nickel	**0.39**		ug/l	1.0	0.11	1	"	"	"	"	"	
7782-49-2	Selenium	< 1.0		ug/l	1.0	0.44	1	"	"	"	"	"	
7440-22-4	Silver	< 0.50		ug/l	0.50	0.036	1	"	"	"	"	"	
7440-28-0	Thallium	< 0.20		ug/l	0.20	0.019	1	"	"	"	"	"	
7440-66-6	Zinc	**88**		ug/l	10	2.6	1	"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
Prepared by method 200.8													
7440-36-0	Antimony	< 1.0	*	ug/l	1.0	0.35	1	200.8	15-Nov-19 08:05	20-Nov-19 14:55	KMP	504539	
Subcontracted Analyses													
Prepared by method 3510C													
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - W1T													
12674-11-2	PCB-1016	< 0.057	*	ug/l	0.057	0.036	1	608.3	14-Nov-19 08:49	15-Nov-19 09:55	W1T	504409	
11104-28-2	PCB-1221	< 0.057		ug/l	0.057	0.036	1	"	"	"	"	"	
11141-16-5	PCB-1232	< 0.057		ug/l	0.057	0.036	1	"	"	"	"	"	
53469-21-9	PCB-1242	< 0.057		ug/l	0.057	0.036	1	"	"	"	"	"	
12672-29-6	PCB-1248	< 0.057		ug/l	0.057	0.036	1	"	"	"	"	"	
11097-69-1	PCB-1254	< 0.057		ug/l	0.057	0.030	1	"	"	"	"	"	
11096-82-5	PCB-1260	< 0.057		ug/l	0.057	0.030	1	"	"	"	"	"	
37324-23-5	PCB-1262	< 0.057		ug/l	0.057	0.030	1	"	"	"	"	"	
11100-14-4	PCB-1268	< 0.057		ug/l	0.057	0.030	1	"	"	"	"	"	
Surrogate recoveries:													
2051-24-3	*DCB Decachlorobiphenyl*	*57*			*36-121 %*			"	"	"	"	"	

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

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
ECS-8	MA-0807	Ground Water	07-Nov-19 12:20	07-Nov-19
SC56705-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - W1T													
877-09-8	*Tetrachloro-m-xylene (Surr)*	*104*			*42-135 %*			608.3	14-Nov-19 08:49	-Nov-19 09:	W1T	504409	
Subcontracted Analyses Prepared by method NA													
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - LMH													
	Calcium hardness as calcium carbonate	**1.6**		mg/l	0.50	0.10	1	SM 2340B	26-Nov-19 08:28	26-Nov-19 08:28	LMH	506759	
	Hardness as calcium carbonate	**2.1**		mg/l	0.50	0.10	1	"	"	"	"	"	
	Magnesium hardness as calcium carbonate	**0.49**		mg/l	0.50	0.10	1	"	"	"	"	"	
Subcontracted Analyses Prepared by method 624													
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - S1V													
71-55-6	1,1,1-Trichloroethane	< 5.0		ug/l	5.0	0.39	1	624.1	18-Nov-19 13:38	18-Nov-19 13:38	S1V	505133	
79-00-5	1,1,2-Trichloroethane	< 5.0		ug/l	5.0	0.48	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 5.0		ug/l	5.0	0.59	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 5.0		ug/l	5.0	0.85	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5.0		ug/l	5.0	0.44	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 5.0		ug/l	5.0	0.60	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5.0		ug/l	5.0	0.54	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5.0		ug/l	5.0	0.51	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 200		ug/l	200	15	1	"	"	"	"	"	
71-43-2	Benzene	< 5.0		ug/l	5.0	0.60	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 5.0		ug/l	5.0	0.51	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 5.0		ug/l	5.0	0.57	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 5.0		ug/l	5.0	0.46	1	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether	< 5.0		ug/l	5.0	0.35	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 5.0		ug/l	5.0	0.81	1	"	"	"	"	"	
179601-23-1	m-Xylene & p-Xylene	< 10		ug/l	10	1.1	1	"	"	"	"	"	
95-47-6	o-Xylene	< 5.0		ug/l	5.0	0.43	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 5.0		ug/l	5.0	0.34	1	"	"	"	"	"	
108-88-3	Toluene	< 5.0		ug/l	5.0	0.45	1	"	"	"	"	"	
	Total BTEX	< 10		ug/l	10	1.1	1	"	"	"	"	"	
79-01-6	Trichloroethylene	< 5.0		ug/l	5.0	0.60	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 5.0		ug/l	5.0	0.75	1	"	"	"	"	"	
Surrogate recoveries:													
17060-07-0	*1,2-Dichloroethane-d4 (Surr)*	*109*			*68-130 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene (Surr)*	*106*			*76-123 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8 (Surr)*	*99*			*77-120 %*			"	"	"	"	"	
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - S1V													
67-64-1	Acetone	< 2.5		ug/l	2.5	2.0	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Outflow (Lower Brook Culvert) SC56705-02	MA-0807	Ground Water	07-Nov-19 12:20	07-Nov-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
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	08-Nov-19 10:12	08-Nov-19 10:12	M-PA009	505357A	
Prepared by method SM4500-H B-11													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
	pH	**6.16**	pH	pH Units	1.00	1.00	1	SM4500-H B-11	08-Nov-19 00:03	08-Nov-19 00:03	M-PA009	505429A	
Subcontracted Analyses													
Prepared by method NA													
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - MB													
	Hardness as calcium carbonate	**68**		mg/l	4.0	1.1	1	SM 2340C	27-Nov-19 12:55	27-Nov-19 12:55	MB	507212	
Prepared by method 245.1													
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - BMB													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00012	1	245.1	18-Nov-19 14:09	18-Nov-19 16:39	BMB	505172	
Subcontracted Analyses													
Prepared by method 200.8													
Analysis performed by TestAmerica Analytical Testing Corp.- Buffalo - KMP													
7440-36-0	Antimony	< 1.0	^, *	ug/l	1.0	0.35	1	200.8	15-Nov-19 08:05	18-Nov-19 12:41	KMP	504539	
7440-38-2	Arsenic	< 1.0		ug/l	1.0	0.27	1	"	"	"	"	"	
7440-41-7	Beryllium	< 0.70		ug/l	0.70	0.030	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.50		ug/l	0.50	0.071	1	"	"	"	"	"	
7440-47-3	Chromium	< 1.5		ug/l	1.5	0.36	1	"	"	"	"	"	
7440-50-8	Copper	**1.2**		ug/l	1.0	0.22	1	"	"	"	"	"	
7439-92-1	Lead	**1.1**		ug/l	1.0	0.17	1	"	"	"	"	"	
7440-02-0	Nickel	**1.4**		ug/l	1.0	0.11	1	"	"	"	"	"	
7782-49-2	Selenium	< 1.0		ug/l	1.0	0.44	1	"	"	"	"	"	
7440-22-4	Silver	< 0.50		ug/l	0.50	0.036	1	"	"	"	"	"	
7440-28-0	Thallium	< 0.20		ug/l	0.20	0.019	1	"	"	"	"	"	
7440-66-6	Zinc	**17**		ug/l	10	2.6	1	"	"	"	"	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E300.0										
Batch 505536A - E300.0										
Blank (CE56714-BLK)						Prepared & Analyzed: 08-Nov-19				
Chloride	< 3.0		mg/l	3.0			BRL	-		
LCS (CE56714-LCS)						Prepared & Analyzed: 08-Nov-19				
Chloride	**31.01**		mg/l	3.0	903288201		103.4	90-110		20
E350.1										
Batch 505357A - E350.1										
Blank (CE55464-BLK)						Prepared: 07-Nov-19 Analyzed: 08-Nov-19				
Ammonia as Nitrogen	< 0.05		mg/l	0.05			BRL	-		
LCS (CE55464-LCS)						Prepared: 07-Nov-19 Analyzed: 08-Nov-19				
Ammonia as Nitrogen	**6.690**		mg/l	0.05	6.77		98.8	90-110		20
E625.1/E625.1SIM										
Batch 505293A - E625.1										
Blank (CE55177-BLK)						Prepared: 07-Nov-19 Analyzed: 10-Nov-19				
Hexachlorobenzene	**ND**		ug/l	0.50			ND	-		
Pyridine	**ND**		ug/l	0.50			ND	-		
Phenanthrene	**ND**		ug/l	0.50			ND	-		
Pentachlorophenol	**ND**		ug/l	0.50			ND	-		
N-Nitrosodimethylamine	**ND**		ug/l	0.05			ND	-		
Nitrobenzene	**ND**		ug/l	0.50			ND	-		
Indeno(1,2,3-c,d)pyrene	**ND**		ug/l	0.50			ND	-		
Hexachlorobutadiene	**ND**		ug/l	0.50			ND	-		
Dibenz(a,h)anthracene	**ND**		ug/l	0.50			ND	-		
Chrysene	**ND**		ug/l	0.50			ND	-		
Benzo(k)fluoranthene	**ND**		ug/l	0.50			ND	-		
Benzo(b)fluoranthene	**ND**		ug/l	0.50			ND	-		
Benzo(a)pyrene	**ND**		ug/l	0.50			ND	-		
Benzo(a)anthracene	**ND**		ug/l	0.50			ND	-		
Hexachlorocyclopentadiene	**ND**		ug/l	0.50			ND	-		
Acenaphthylene	**ND**		ug/l	0.50			ND	-		
Acenaphthene	**ND**		ug/l	0.50			ND	-		
Benzo(g,h,i)perylene	**ND**		ug/l	0.50			ND	-		
Surrogate: % 2-Fluorophenol	*52*		ug/l		*7.5*		*52*	*10-130*		
Surrogate: % 2-Fluorobiphenyl	*67*		ug/l		*5*		*67*	*30-130*		
Surrogate: % Nitrobenzene-d5	*61*		ug/l		*5*		*61*	*15-130*		
Surrogate: % Phenol-d5	*56*		ug/l		*7.5*		*56*	*10-130*		
Surrogate: % Terphenyl-d14	*77*		ug/l		*5*		*77*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*79*		ug/l		*7.5*		*79*	*15-130*		
LCS (CE55177-LCS)						Prepared: 07-Nov-19 Analyzed: 10-Nov-19				
Chrysene	**4.465**		ug/l	0.50	5		89	44-140		87
Benzo(a)anthracene	**4.256**		ug/l	0.50	5		85	42-133		53
Pyridine	**1.706**	r	ug/l	0.50	5		34	30-130		20
Phenanthrene	**4.072**		ug/l	0.50	5		81	65-120		39
Pentachlorophenol	**3.589**		ug/l	0.50	5		72	38-152		86
N-Nitrosodimethylamine	**3.007**		ug/l	0.05	5		60	30-130		20
Nitrobenzene	**3.408**		ug/l	0.50	5		68	54-158		62
Indeno(1,2,3-c,d)pyrene	**4.990**		ug/l	0.50	5		100	10-151		99
Hexachlorocyclopentadiene	**1.518**		ug/l	0.50	5		30	30-130		20
Hexachlorobutadiene	**2.929**		ug/l	0.50	5		59	38-120		62
Hexachlorobenzene	**3.631**		ug/l	0.50	5		73	8-142		55
Dibenz(a,h)anthracene	**4.401**		ug/l	0.50	5		88	10-200		126

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E625.1/E625.1SIM										
Batch 505293A - E625.1										
LCS (CE55177-LCS)					Prepared: 07-Nov-19 Analyzed: 10-Nov-19					
Benzo(g,h,i)perylene	**4.628**		ug/l	0.50	5		93	10-195		97
Benzo(b)fluoranthene	**4.719**		ug/l	0.50	5		94	42-140		71
Benzo(a)pyrene	**3.843**		ug/l	0.50	5		77	32-148		72
Benzo(k)fluoranthene	**5.042**		ug/l	0.50	5		101	25-146		63
Acenaphthylene	**3.620**		ug/l	0.50	5		72	54-126		74
Acenaphthene	**3.755**		ug/l	0.50	5		75	60-132		48
Surrogate: % 2-Fluorophenol	*3.473*		ug/l		*7.5*		*46*	*10-130*		
Surrogate: % 2,4,6-Tribromophenol	*6.511*		ug/l		*7.5*		*87*	*15-130*		
Surrogate: % 2-Fluorobiphenyl	*3.324*		ug/l		*5*		*66*	*30-130*		
Surrogate: % Nitrobenzene-d5	*3.128*		ug/l		*5*		*63*	*15-130*		
Surrogate: % Phenol-d5	*3.385*		ug/l		*7.5*		*45*	*10-130*		
Surrogate: % Terphenyl-d14	*3.689*		ug/l		*5*		*74*	*30-130*		
LCS Dup (CE55177-LCSD)			**Source: CE55177-LCS**		Prepared: 07-Nov-19 Analyzed: 10-Nov-19					
Acenaphthene	**3.573**		ug/l	0.50	5		71	60-132	5.5	48
Chrysene	**4.280**		ug/l	0.50	5		86	44-140	3.4	87
Nitrobenzene	**3.116**		ug/l	0.50	5		62	54-158	9.2	62
Indeno(1,2,3-c,d)pyrene	**4.800**		ug/l	0.50	5		96	10-151	4.1	99
Pentachlorophenol	**3.326**		ug/l	0.50	5		67	38-152	7.2	86
Hexachlorocyclopentadiene	**1.308**	I	ug/l	0.50	5		26	30-130	14.3	20
Phenanthrene	**3.825**		ug/l	0.50	5		77	65-120	5.1	39
Hexachlorobutadiene	**2.727**		ug/l	0.50	5		55	38-120	7.0	62
Hexachlorobenzene	**3.478**		ug/l	0.50	5		70	8-142	4.2	55
Dibenz(a,h)anthracene	**4.208**		ug/l	0.50	5		84	10-200	4.7	126
N-Nitrosodimethylamine	**2.974**		ug/l	0.05	5		59	30-130	1.7	20
Benzo(k)fluoranthene	**4.853**		ug/l	0.50	5		97	25-146	4.0	63
Benzo(g,h,i)perylene	**4.503**		ug/l	0.50	5		90	10-195	3.3	97
Benzo(b)fluoranthene	**4.582**		ug/l	0.50	5		92	42-140	2.2	71
Benzo(a)pyrene	**3.791**		ug/l	0.50	5		76	32-148	1.3	72
Benzo(a)anthracene	**4.046**		ug/l	0.50	5		81	42-133	4.8	53
Acenaphthylene	**3.487**		ug/l	0.50	5		70	54-126	2.8	74
Pyridine	**2.483**	r	ug/l	0.50	5		50	30-130	38.1	20
Surrogate: % 2-Fluorophenol	*3.242*		ug/l		*7.5*		*43*	*10-130*		
Surrogate: % 2-Fluorobiphenyl	*3.208*		ug/l		*5*		*64*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*6.212*		ug/l		*7.5*		*83*	*15-130*		
Surrogate: % Terphenyl-d14	*3.554*		ug/l		*5*		*71*	*30-130*		
Surrogate: % Phenol-d5	*3.366*		ug/l		*7.5*		*45*	*10-130*		
Surrogate: % Nitrobenzene-d5	*2.845*		ug/l		*5*		*57*	*15-130*		
Blank (CF55177-BLK)					Prepared: 07-Nov-19 Analyzed: 11-Nov-19					
Dibenzofuran	**ND**		ug/l	3.5			ND	-		
4-Chloro-3-methylphenol	**ND**		ug/l	1.0			ND	-		
4-Chloroaniline	**ND**		ug/l	3.5			ND	-		
4-Chlorophenyl phenyl ether	**ND**		ug/l	1.0			ND	-		
4-Nitroaniline	**ND**		ug/l	5.0			ND	-		
4-Nitrophenol	**ND**		ug/l	1.0			ND	-		
Anthracene	**ND**		ug/l	1.5			ND	-		
Benzidine	**ND**		ug/l	4.5			ND	-		
Benzoic acid	**ND**		ug/l	10			ND	-		
Benzyl alcohol	**ND**		ug/l	5.0			ND	-		
Benzyl butyl phthalate	**ND**		ug/l	1.5			ND	-		
Bis(2-chloroethoxy)methane	**ND**		ug/l	3.5			ND	-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E625.1/E625.1SIM										
Batch 505293A - E625.1										
Blank (CF55177-BLK)						Prepared: 07-Nov-19 Analyzed: 11-Nov-19				
Bis(2-chloroethyl)ether	**ND**		ug/l	1.0			ND	-		
4-Bromophenyl phenyl ether	**ND**		ug/l	3.5			ND	-		
Bis(2-ethylhexyl)phthalate	**ND**		ug/l	1.5			ND	-		
Hexachloroethane	**ND**		ug/l	3.5			ND	-		
Diethyl phthalate	**ND**		ug/l	1.5			ND	-		
Dimethylphthalate	**ND**		ug/l	1.5			ND	-		
Di-n-butylphthalate	**ND**		ug/l	1.5			ND	-		
Di-n-octylphthalate	**ND**		ug/l	1.5			ND	-		
Fluoranthene	**ND**		ug/l	1.5			ND	-		
Fluorene	**ND**		ug/l	1.5			ND	-		
Isophorone	**ND**		ug/l	3.5			ND	-		
N-Nitrosodi-n-propylamine	**ND**		ug/l	3.5			ND	-		
N-Nitrosodiphenylamine	**ND**		ug/l	3.5			ND	-		
Phenol	**ND**		ug/l	1.0			ND	-		
Pyrene	**ND**		ug/l	1.5			ND	-		
Bis(2-chloroisopropyl)ether	**ND**		ug/l	1.0			ND	-		
2,4-Dinitrophenol	**ND**		ug/l	1.0			ND	-		
4,6-Dinitro-2-methylphenol	**ND**		ug/l	1.0			ND	-		
Naphthalene	**ND**		ug/l	1.5			ND	-		
1,2,4-Trichlorobenzene	**ND**		ug/l	3.5			ND	-		
1,2-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
1,2-Diphenylhydrazine	**ND**		ug/l	1.6			ND	-		
1,3-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
1,4-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
2,4,5-Trichlorophenol	**ND**		ug/l	1.0			ND	-		
2,4,6-Trichlorophenol	**ND**		ug/l	1.0			ND	-		
2,4-Dimethylphenol	**ND**		ug/l	1.0			ND	-		
2,4-Dinitrotoluene	**ND**		ug/l	3.5			ND	-		
2-Methylphenol (o-cresol)	**ND**		ug/l	1.0			ND	-		
3-Nitroaniline	**ND**		ug/l	5.0			ND	-		
3,3'-Dichlorobenzidine	**ND**		ug/l	5.0			ND	-		
3&4-Methylphenol (m&p-cresol)	**ND**		ug/l	1.0			ND	-		
2,4-Dichlorophenol	**ND**		ug/l	1.0			ND	-		
2-Nitroaniline	**ND**		ug/l	3.5			ND	-		
2,6-Dichlorophenol	**ND**		ug/l	10			ND	-		
2-Methylnaphthalene	**ND**		ug/l	3.5			ND	-		
2-Chlorophenol	**ND**		ug/l	1.0			ND	-		
2-Chloronaphthalene	**ND**		ug/l	3.5			ND	-		
2,6-Dinitrotoluene	**ND**		ug/l	3.5			ND	-		
2-Nitrophenol	**ND**		ug/l	1.0			ND	-		
Surrogate: % 2-Fluorophenol	*48*		ug/l		*7.5*		*48*	*10-130*		
Surrogate: % 2,4,6-Tribromophenol	*119*		ug/l		*7.5*		*119*	*15-130*		
Surrogate: % Phenol-d5	*56*		ug/l		*7.5*		*56*	*10-130*		
Surrogate: % 2-Fluorobiphenyl	*63*		ug/l		*5*		*63*	*30-130*		
Surrogate: % Terphenyl-d14	*77*		ug/l		*5*		*77*	*30-130*		
Surrogate: % Nitrobenzene-d5	*65*		ug/l		*5*		*65*	*15-130*		
LCS (CF55177-LCS)						Prepared: 07-Nov-19 Analyzed: 11-Nov-19				
4-Chlorophenyl phenyl ether	**43.53**		ug/l	1.0	50		87	38-145		61
4-Nitroaniline	**49.52**		ug/l	5.0	50		99	30-130		20
4-Nitrophenol	**47.21**		ug/l	1.0	50		94	13-129		131

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E625.1/E625.1SIM										
Batch 505293A - E625.1										
LCS (CF55177-LCS)					Prepared: 07-Nov-19 Analyzed: 11-Nov-19					
Anthracene	**43.58**		ug/l	1.5	50		87	43-120		66
Isophorone	**33.49**		ug/l	3.5	50		67	47-180		93
Benzidine	**0**	I	ug/l	4.5	50		<10	30-130		20
Benzoic acid	**23.37**		ug/l	10	50		47	30-130		20
Benzyl alcohol	**37.16**		ug/l	5.0	50		74	30-130		20
Benzyl butyl phthalate	**46.63**		ug/l	1.5	50		93	10-140		60
Bis(2-chloroethoxy)methane	**32.12**		ug/l	3.5	50		64	49-165		54
Hexachloroethane	**32.79**		ug/l	3.5	50		66	55-120		52
Bis(2-chloroisopropyl)ether	**30.52**	I	ug/l	1.0	50		61	63-139		76
4-Chloroaniline	**26.56**	r	ug/l	3.5	50		53	30-130		20
Bis(2-ethylhexyl)phthalate	**49.97**		ug/l	1.5	50		100	29-137		82
2,4-Dichlorophenol	**37.17**		ug/l	1.0	50		74	53-122		50
Dibenzofuran	**38.42**		ug/l	3.5	50		77	30-130		20
Diethyl phthalate	**44.18**		ug/l	1.5	50		88	10-120		100
Dimethylphthalate	**41.60**		ug/l	1.5	50		83	10-120		183
Di-n-butylphthalate	**47.25**		ug/l	1.5	50		95	8-120		47
Di-n-octylphthalate	**52.48**		ug/l	1.5	50		105	19-132		69
Fluoranthene	**45.34**		ug/l	1.5	50		91	43-121		66
Fluorene	**41.57**		ug/l	1.5	50		83	70-120		38
Bis(2-chloroethyl)ether	**29.26**		ug/l	1.0	50		59	43-126		108
2,6-Dichlorophenol	**37.17**		ug/l	10	50		74	30-130		20
3&4-Methylphenol (m&p-cresol)	**35.21**		ug/l	1.0	50		70	30-130		20
Naphthalene	**32.80**		ug/l	1.5	50		66	36-120		65
1,2,4-Trichlorobenzene	**34.37**		ug/l	3.5	50		69	57-130		50
1,2-Dichlorobenzene	**30.21**		ug/l	1.0	50		60	30-130		20
1,2-Diphenylhydrazine	**40.24**		ug/l	1.6	50		80	30-130		20
1,3-Dichlorobenzene	**30.08**		ug/l	1.0	50		60	46-154		20
1,4-Dichlorobenzene	**30.41**		ug/l	1.0	50		61	30-130		20
2,4,5-Trichlorophenol	**41.69**		ug/l	1.0	50		83	30-130		20
2,4,6-Trichlorophenol	**41.02**		ug/l	1.0	50		82	52-129		58
2,4-Dinitrophenol	**38.45**		ug/l	1.0	50		77	10-173		132
2,4-Dinitrotoluene	**46.11**		ug/l	3.5	50		92	48-127		42
4-Chloro-3-methylphenol	**40.88**		ug/l	1.0	50		82	41-128		73
2,6-Dinitrotoluene	**45.28**		ug/l	3.5	50		91	68-137		48
2-Chloronaphthalene	**36.54**		ug/l	3.5	50		73	65-120		24
2-Chlorophenol	**31.15**		ug/l	1.0	50		62	36-120		61
2-Methylnaphthalene	**33.39**		ug/l	3.5	50		67	30-130		20
2-Methylphenol (o-cresol)	**33.50**		ug/l	1.0	50		67	30-130		20
2-Nitrophenol	**48.18**		ug/l	1.0	50		96	45-167		55
3,3'-Dichlorobenzidine	**32.11**		ug/l	5.0	50		64	8-213		108
3-Nitroaniline	**46.70**		ug/l	5.0	50		93	30-130		20
4,6-Dinitro-2-methylphenol	**52.56**		ug/l	1.0	50		105	30-130		20
4-Bromophenyl phenyl ether	**43.36**		ug/l	3.5	50		87	65-120		43
2,4-Dimethylphenol	**40.87**		ug/l	1.0	50		82	42-120		58
N-Nitrosodi-n-propylamine	**37.87**		ug/l	3.5	50		76	14-198		87
2-Nitroaniline	**68.54**	I	ug/l	3.5	50		137	30-130		20
Pyrene	**46.71**		ug/l	1.5	50		93	70-120		49
N-Nitrosodiphenylamine	**37.46**		ug/l	3.5	50		75	30-130		20
Phenol	**25.92**		ug/l	1.0	50		52	17-120		64
Surrogate: % Terphenyl-d14	*41.41*		ug/l		*50*		*83*	*30-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E625.1/E625.1SIM										
Batch 505293A - E625.1										
LCS (CF55177-LCS)						Prepared: 07-Nov-19 Analyzed: 11-Nov-19				
Surrogate: % 2,4,6-Tribromophenol	*83.49*		ug/l		*75*		*111*	*15-130*		
Surrogate: % 2-Fluorophenol	*34.37*		ug/l		*75*		*46*	*10-130*		
Surrogate: % Nitrobenzene-d5	*34.32*		ug/l		*50*		*69*	*15-130*		
Surrogate: % Phenol-d5	*35.76*		ug/l		*75*		*48*	*10-130*		
Surrogate: % 2-Fluorobiphenyl	*34.37*		ug/l		*50*		*69*	*30-130*		
LCS Dup (CF55177-LCSD)			**Source: CE55177-LCS**			Prepared: 07-Nov-19 Analyzed: 11-Nov-19				
2-Nitroaniline	**68.86**	l	ug/l	3.5	50		138	30-130	0.7	20
4-Nitrophenol	**49.32**		ug/l	1.0	50		99	13-129	5.2	131
4-Nitroaniline	**47.68**		ug/l	5.0	50		95	30-130	4.1	20
4-Chlorophenyl phenyl ether	**42.08**		ug/l	1.0	50		84	38-145	3.5	61
4-Chloroaniline	**45.65**	r	ug/l	3.5	50		91	30-130	52.8	20
4-Chloro-3-methylphenol	**41.96**		ug/l	1.0	50		84	41-128	2.4	73
4-Bromophenyl phenyl ether	**42.49**		ug/l	3.5	50		85	65-120	2.3	43
4,6-Dinitro-2-methylphenol	**52.30**		ug/l	1.0	50		105	30-130	0.0	20
3&4-Methylphenol (m&p-cresol)	**34.09**		ug/l	1.0	50		68	30-130	2.9	20
3,3'-Dichlorobenzidine	**47.26**		ug/l	5.0	50		95	8-213	39.0	108
Benzyl alcohol	**35.36**		ug/l	5.0	50		71	30-130	4.1	20
2-Methylnaphthalene	**32.12**		ug/l	3.5	50		64	30-130	4.6	20
2-Chlorophenol	**29.33**		ug/l	1.0	50		59	36-120	5.0	61
2-Chloronaphthalene	**35.57**		ug/l	3.5	50		71	65-120	2.8	24
3-Nitroaniline	**48.15**		ug/l	5.0	50		96	30-130	3.2	20
Dimethylphthalate	**40.19**		ug/l	1.5	50		80	10-120	3.7	183
Pyrene	**44.17**		ug/l	1.5	50		88	70-120	5.5	49
Phenol	**27.66**		ug/l	1.0	50		55	17-120	5.6	64
N-Nitrosodiphenylamine	**35.79**		ug/l	3.5	50		72	30-130	4.1	20
N-Nitrosodi-n-propylamine	**35.73**		ug/l	3.5	50		71	14-198	6.8	87
Naphthalene	**31.48**		ug/l	1.5	50		63	36-120	4.7	65
Isophorone	**33.33**		ug/l	3.5	50		67	47-180	0.0	93
Hexachloroethane	**31.03**		ug/l	3.5	50		62	55-120	6.3	52
Fluorene	**40.14**		ug/l	1.5	50		80	70-120	3.7	38
Fluoranthene	**43.23**		ug/l	1.5	50		86	43-121	5.6	66
Benzidine	**50.17**		ug/l	4.5	50		100	30-130	NC	20
Di-n-butylphthalate	**46.07**		ug/l	1.5	50		92	8-120	3.2	47
Anthracene	**41.70**		ug/l	1.5	50		83	43-120	4.7	66
Diethyl phthalate	**42.17**		ug/l	1.5	50		84	10-120	4.7	100
Dibenzofuran	**37.74**		ug/l	3.5	50		75	30-130	2.6	20
Bis(2-ethylhexyl)phthalate	**49.19**		ug/l	1.5	50		98	29-137	2.0	82
Bis(2-chloroisopropyl)ether	**28.17**	l	ug/l	1.0	50		56	63-139	8.5	76
Bis(2-chloroethyl)ether	**27.03**		ug/l	1.0	50		54	43-126	8.8	108
Bis(2-chloroethoxy)methane	**30.65**		ug/l	3.5	50		61	49-165	4.8	54
Benzyl butyl phthalate	**47.14**		ug/l	1.5	50		94	10-140	1.1	60
2-Methylphenol (o-cresol)	**31.56**		ug/l	1.0	50		63	30-130	6.2	20
Benzoic acid	**24.69**		ug/l	10	50		49	30-130	4.2	20
Di-n-octylphthalate	**51.48**		ug/l	1.5	50		103	19-132	1.9	69
2,6-Dichlorophenol	**36.55**		ug/l	10	50		73	30-130	1.4	20
2,4-Dinitrotoluene	**43.46**		ug/l	3.5	50		87	48-127	5.6	42
2,4-Dinitrophenol	**38.74**		ug/l	1.0	50		77	10-173	0.0	132
2,4-Dimethylphenol	**39.91**		ug/l	1.0	50		80	42-120	2.5	58
2-Nitrophenol	**44.66**		ug/l	1.0	50		89	45-167	7.6	55
2,6-Dinitrotoluene	**43.43**		ug/l	3.5	50		87	68-137	4.5	48

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E625.1/E625.1SIM										
Batch 505293A - E625.1										
LCS Dup (CF55177-LCSD)			**Source: CE55177-LCS**		Prepared: 07-Nov-19 Analyzed: 11-Nov-19					
2,4,6-Trichlorophenol	**40.74**		ug/l	1.0	50		81	52-129	1.2	58
2,4,5-Trichlorophenol	**41.29**		ug/l	1.0	50		83	30-130	0.0	20
1,4-Dichlorobenzene	**28.64**		ug/l	1.0	50		57	30-130	6.8	20
2,4-Dichlorophenol	**36.55**		ug/l	1.0	50		73	53-122	1.4	50
1,2,4-Trichlorobenzene	**32.78**		ug/l	3.5	50		66	57-130	4.4	50
1,2-Dichlorobenzene	**28.21**		ug/l	1.0	50		56	30-130	6.9	20
1,2-Diphenylhydrazine	**38.94**		ug/l	1.6	50		78	30-130	2.5	20
1,3-Dichlorobenzene	**28.02**		ug/l	1.0	50		56	46-154	6.9	20
Surrogate: % 2-Fluorobiphenyl	*32.66*		ug/l		*50*		*65*	*30-130*		
Surrogate: % 2-Fluorophenol	*31.50*		ug/l		*75*		*42*	*10-130*		
Surrogate: % Terphenyl-d14	*39.81*		ug/l		*50*		*80*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*81.94*		ug/l		*75*		*109*	*15-130*		
Surrogate: % Phenol-d5	*35.69*		ug/l		*75*		*48*	*10-130*		
Surrogate: % Nitrobenzene-d5	*31.92*		ug/l		*50*		*64*	*15-130*		
SM 2540D-11										
Batch 505410A - SM 2540D-11										
Blank (CE55621-BLK)					Prepared & Analyzed: 08-Nov-19					
Total Suspended Solids	< 2.5		mg/l	2.5	48		BRL	-		
LCS (CE55621-LCS)					Prepared & Analyzed: 08-Nov-19					
Total Suspended Solids	**41.00**		mg/l	2.5	48		85	85-115		
SM2540C-11										
Batch 505457A - SM2540C-11										
Blank (CE55635-BLK)					Prepared & Analyzed: 08-Nov-19					
Tot. Diss. Solids	< 10		mg/l	10	602		BRL	-		
LCS (CE55635-LCS)					Prepared & Analyzed: 08-Nov-19					
Tot. Diss. Solids	**576.0**		mg/l	10	602		96	85-115		20
SM3500CRB-11										
Batch 505349A - SM3500CRB										
Blank (CE56587-BLK)					Prepared & Analyzed: 07-Nov-19					
Chromium, Hexavalent	< 0.01		mg/l	0.01			BRL	-		
Duplicate (CE56587-DUP)			**Source: SC56705-01**		Prepared & Analyzed: 07-Nov-19					
Chromium, Hexavalent	< 0.01		mg/l	0.01		brl		-	NC	30
LCS (CE56587-LCS)					Prepared & Analyzed: 07-Nov-19					
Chromium, Hexavalent	**0.2552**		mg/l	0.01	0.25		102	90-110		30
Matrix Spike (CE56587-MS)			**Source: SC56705-01**		Prepared & Analyzed: 07-Nov-19					
Chromium, Hexavalent	**0.5604**		mg/l	0.01	0.5	brl	112	85-115		30
SM4500Cl-G-00										
Batch 505348A - SM4500Cl-G										
Blank (CE56587-BLK)					Prepared & Analyzed: 07-Nov-19					
Chlorine Residual	< 0.02		mg/l	0.02			BRL	-		
Duplicate (CE56587-DUP)			**Source: SC56705-01**		Prepared & Analyzed: 07-Nov-19					
Chlorine Residual	< 0.02		mg/l	0.02		brl		-	NC	
LCS (CE56587-LCS)					Prepared & Analyzed: 07-Nov-19					
Chlorine Residual	**0.3199**		mg/l	0.02	0.2909		110	-		
SM4500-H B-11										
Batch 505429A - SM4500-H B-11										
LCS (CE56490-LCS)					Prepared & Analyzed: 07-Nov-19					

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SM4500-H B-11										
Batch 505429A - SM4500-H B-11										
LCS (CE56490-LCS)						Prepared & Analyzed: 07-Nov-19				
pH	**8.900**		%	%			96.8	85-115		20
SW846-React										
Batch 505406A - SW846-React										
Blank (CE55434-BLK)						Prepared & Analyzed: 08-Nov-19				
Reactivity Cyanide	< 0.05		mg/l	0.05			BRL	-		
LCS (CE55434-LCS)						Prepared & Analyzed: 08-Nov-19				
Reactivity Cyanide	**0.4460**		mg/l	0.05	0.45		99.1	80-120		20
Blank (CF55434-BLK)						Prepared & Analyzed: 08-Nov-19				
Reactivity Sulfide	< 20		mg/l	20			BRL	-		
LCS (CF55434-LCS)						Prepared & Analyzed: 08-Nov-19				
Reactivity Sulfide	**36.8**		mg/l	20	40		92.0	80-120		20
SW9010C/SW9012B										
Batch 505548A - SM 4500 CN										
Blank (CE55028-BLK)						Prepared: 08-Nov-19 Analyzed: 12-Nov-19				
Total Cyanide	< 0.010		mg/l	0.010			BRL	-		
LCS (CE55028-LCS)						Prepared: 08-Nov-19 Analyzed: 12-Nov-19				
Total Cyanide	**0.4340**		mg/l	0.010	0.429		101	90-110		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
200.7 Rev 4.4										
Batch 504316 - 200.7										
Matrix Spike Dup (1625461D)			**Source: SC56705-01**			Prepared & Analyzed: 14-Nov-19				
Iron	**10.2**		mg/l	0.050	10.0	0.41	98	70-130	2	20
Matrix Spike (1625461S)			**Source: SC56705-01**			Prepared & Analyzed: 14-Nov-19				
Iron	**10.5**		mg/l	0.050	10.0	0.41	101	70-130		
Blank (504705-20)						Prepared & Analyzed: 14-Nov-19				
Iron	< 0.050		mg/l	0.050				-		
LCS (504705-21)						Prepared & Analyzed: 14-Nov-19				
Iron	**9.74**		mg/l	0.050	10.0		97	85-115		
200.8										
Batch 504539 - 200.8										
Matrix Spike Dup (1625461D)			**Source: SC56705-01**			Prepared: 15-Nov-19 Analyzed: 18-Nov-19				
Silver	**22.4**		ug/l	0.50	20.0	BRL	112	70-130	1	20
Arsenic	**23.0**		ug/l	1.0	20.0	BRL	115	70-130	2	20
Beryllium	**22.9**		ug/l	0.70	20.0	BRL	114	70-130	1	20
Cadmium	**21.5**		ug/l	0.50	20.0	BRL	107	70-130	1	20
Chromium	**22.6**		ug/l	1.5	20.0	0.83	109	70-130	2	20
Copper	**28.4**		ug/l	1.0	20.0	5.9	112	70-130	1	20
Lead	**22.2**		ug/l	1.0	20.0	0.63	108	70-130	2	20
Nickel	**21.2**		ug/l	1.0	20.0	0.39	104	70-130	2	20
Selenium	**23.0**		ug/l	1.0	20.0	BRL	115	70-130	0	20
Zinc	**142**		ug/l	10	50.0	88	108	70-130	2	20
Thallium	**21.3**		ug/l	0.20	20.0	BRL	106	70-130	1	20
Matrix Spike Dup (1625461DRE1)			**Source: SC56705-01RE1**			Prepared: 15-Nov-19 Analyzed: 20-Nov-19				
Antimony	**25.2**		ug/l	1.0	20.0	BRL	126	70-130	1	20
Matrix Spike (1625461S)			**Source: SC56705-01**			Prepared: 15-Nov-19 Analyzed: 18-Nov-19				
Thallium	**21.1**		ug/l	0.20	20.0	BRL	105	70-130		
Silver	**22.3**		ug/l	0.50	20.0	BRL	111	70-130		
Selenium	**23.0**		ug/l	1.0	20.0	BRL	115	70-130		
Nickel	**20.7**		ug/l	1.0	20.0	0.39	102	70-130		
Lead	**21.7**		ug/l	1.0	20.0	0.63	105	70-130		
Copper	**28.0**		ug/l	1.0	20.0	5.9	111	70-130		
Chromium	**22.2**		ug/l	1.5	20.0	0.83	107	70-130		
Cadmium	**21.2**		ug/l	0.50	20.0	BRL	106	70-130		
Beryllium	**22.7**		ug/l	0.70	20.0	BRL	113	70-130		
Arsenic	**22.4**		ug/l	1.0	20.0	BRL	112	70-130		
Zinc	**139**		ug/l	10	50.0	88	103	70-130		
Matrix Spike (1625461SRE1)			**Source: SC56705-01RE1**			Prepared: 15-Nov-19 Analyzed: 20-Nov-19				
Antimony	**24.9**		ug/l	1.0	20.0	BRL	125	70-130		
Blank (505178-13)						Prepared: 15-Nov-19 Analyzed: 18-Nov-19				
Beryllium	**ND**		ug/l	0.70				-		
Thallium	**ND**		ug/l	0.20				-		
Silver	**ND**		ug/l	0.50				-		
Selenium	**ND**		ug/l	1.0				-		
Nickel	**ND**		ug/l	1.0				-		
Lead	**ND**		ug/l	1.0				-		
Copper	**ND**		ug/l	1.0				-		
Cadmium	**ND**		ug/l	0.50				-		
Arsenic	**ND**		ug/l	1.0				-		
Zinc	**ND**		ug/l	10				-		
Chromium	**ND**		ug/l	1.5				-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
200.8										
Batch 504539 - 200.8										
LCS (505178-14)						Prepared: 15-Nov-19 Analyzed: 18-Nov-19				
Arsenic	**22.2**		ug/l	1.0	20.0		111	85-115		
Silver	**21.8**		ug/l	0.50	20.0		109	85-115		
Thallium	**21.0**		ug/l	0.20	20.0		105	85-115		
Zinc	**52.4**		ug/l	10	50.0		105	85-115		
Beryllium	**22.3**		ug/l	0.70	20.0		111	85-115		
Cadmium	**20.9**		ug/l	0.50	20.0		104	85-115		
Chromium	**21.5**		ug/l	1.5	20.0		108	85-115		
Copper	**22.3**		ug/l	1.0	20.0		111	85-115		
Lead	**20.3**		ug/l	1.0	20.0		102	85-115		
Nickel	**20.5**		ug/l	1.0	20.0		102	85-115		
Selenium	**22.7**		ug/l	1.0	20.0		113	85-115		
Blank (505761-13)						Prepared: 15-Nov-19 Analyzed: 20-Nov-19				
Antimony	**ND**		ug/l	1.0				-		
LCS (505761-14)						Prepared: 15-Nov-19 Analyzed: 20-Nov-19				
Antimony	**24.2**	*	ug/l	1.0	20.0		121	85-115		
245.1										
Batch 505172 - 245.1										
Blank (505235-13)						Prepared & Analyzed: 18-Nov-19				
Mercury	**ND**		mg/l	0.00020				-		
LCS (505235-14)						Prepared & Analyzed: 18-Nov-19				
Mercury	**0.00750**		mg/l	0.00020	0.00667		112	85-115		
608.3										
Batch 504409 - 3510C										
Blank (504603-57)						Prepared: 14-Nov-19 Analyzed: 15-Nov-19				
PCB-1268	**ND**		ug/l	0.060				-		
PCB-1232	**ND**		ug/l	0.060				-		
PCB-1262	**ND**		ug/l	0.060				-		
PCB-1260	**ND**		ug/l	0.060				-		
PCB-1254	**ND**		ug/l	0.060				-		
PCB-1221	**ND**		ug/l	0.060				-		
PCB-1016	**ND**		ug/l	0.060				-		
PCB-1248	**ND**		ug/l	0.060				-		
PCB-1242	**ND**		ug/l	0.060				-		
Surrogate: DCB Decachlorobiphenyl	*0.122*		ug/l		*0.200*		*61*	*36-121*		
Surrogate: Tetrachloro-m-xylene (Surr)	*0.190*		ug/l		*0.200*		*95*	*42-135*		
LCS (504603-58)						Prepared: 14-Nov-19 Analyzed: 15-Nov-19				
PCB-1260	**1.08**		ug/l	0.060	1.00		108	69-120		
PCB-1016	**1.19**		ug/l	0.060	1.00		119	69-123		
Surrogate: Tetrachloro-m-xylene (Surr)	*0.194*		ug/l		*0.200*		*97*	*42-135*		
Surrogate: DCB Decachlorobiphenyl	*0.128*		ug/l		*0.200*		*64*	*36-121*		
LCS Dup (504603-59)						Prepared: 14-Nov-19 Analyzed: 15-Nov-19				
PCB-1016	**1.37**	*	ug/l	0.060	1.00		137	69-123	14	30
PCB-1260	**1.15**		ug/l	0.060	1.00		115	69-120	7	30
Surrogate: Tetrachloro-m-xylene (Surr)	*0.221*		ug/l		*0.200*		*111*	*42-135*		
Surrogate: DCB Decachlorobiphenyl	*0.135*		ug/l		*0.200*		*67*	*36-121*		
SM 2340C										
Batch 507212 - NA										
Blank (507212-27)						Prepared & Analyzed: 27-Nov-19				

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SM 2340C										
Batch 507212 - NA										
Blank (507212-27)						Prepared & Analyzed: 27-Nov-19				
Hardness as calcium carbonate	**ND**		mg/l	2.0				-		
LCS (507212-28)						Prepared & Analyzed: 27-Nov-19				
Hardness as calcium carbonate	**268**		mg/l	4.0	272		99	90-110		
Blank (507212-3)						Prepared & Analyzed: 27-Nov-19				
Hardness as calcium carbonate	**ND**		mg/l	2.0				-		
LCS (507212-4)						Prepared & Analyzed: 27-Nov-19				
Hardness as calcium carbonate	**264**		mg/l	4.0	272		97	90-110		

Notes and Definitions

*	LCS or LCSD is outside acceptance limits.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
l	This parameter is outside laboratory lcs/lcsd specified recovery limits.
r	This parameter is outside laboratory rpd specified recovery limits.
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.
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.

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.

SC56705

eurofins | Spectrum Analytical

CHAIN OF CUSTODY RECORD

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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: ATC W. Springfield
Telephone #: 413-781-0070
Project Mgr: A. Riddle

Invoice To: CFI
P.O No.: Pending Quote #:

Project No: MA-0807
Site Name: CFI-BRIMFIELD
Location: 3 Main St, Brimfield State: MA
Sampler(s): K.K.

F=Field Filtered 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=_____ 12=_____

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

G= Grab C=Composite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: pH, Ammonia, Hardness	PP13 Total ① Metals	Iron, Chloride, TRC ①	VOC-624, VOC-8260	SVOC SIM 625	SVOC 8270 ② VOC 524, 524.2	Iron, Hex Chrome 7196, PCBs 608	Cyanide 4500 Reactivity	Pentachlorophenol TSS, TDS	TPH 1664 Ethanol 1666	Check if chlorinated
SC56705a1	ECS-8	11.7.19	12:20	G	GW	10	6		6	X	X	X	X	X	X	X	X	X	X	☐
a2	Outflow (Lower Brook Culvert)	11.7.19	1:45	G	SW	~~10~~ KK	~~6~~ KK		3	X	X									☐
																				☐
																				☐
																				☐
																				☐
																				☐
																				☐
																				☐
																				☐

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may appply

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

① Lowest RLs possible
② TBA & TAME only by 524

Relinquished by:	Received by:	Date:	Time:
Katerina Korolov		11/7/19	1505

Temp °C: Observed 4.2; Correction Factor 0; Corrected 4.2; IR ID # 01

☐ EDD format:
☑ E-mail to: alexandra.Riddle@atcgs.com

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

- Influent Samples

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

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

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

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

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

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

Table 2 Footnotes:

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

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

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

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

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

eurofins | Spectrum Analytical

11 Almgren Drive
Agawam, MA 01001
(413) 789-9018

This preceding chain of custody has been amended to include the client requested additional analyses as noted below:

Laboratory ID	*Client ID*	*Analysis*	*Added*
SC56705-01	ECS-8	Total Antimony by ICPMS	11/8/2019
SC56705-01	ECS-8	Total Arsenic by ICPMS	11/8/2019
SC56705-01	ECS-8	Total Beryllium by ICPMS	11/8/2019
SC56705-01	ECS-8	Total Cadmium by ICPMS	11/8/2019
SC56705-01	ECS-8	Total Chromium by ICPMS	11/8/2019
SC56705-01	ECS-8	Total Copper by ICPMS	11/8/2019
SC56705-01	ECS-8	Total Lead by ICPMS	11/8/2019
SC56705-01	ECS-8	Total Mercury by CVAA	11/8/2019
SC56705-01	ECS-8	Total Nickel by ICPMS	11/8/2019
SC56705-01	ECS-8	Total PP13 Metals by ICPMS	11/8/2019
SC56705-01	ECS-8	Total Selenium by ICPMS	11/8/2019
SC56705-01	ECS-8	Total Silver by ICPMS	11/8/2019
SC56705-01	ECS-8	Total Thallium by ICPMS	11/8/2019
SC56705-01	ECS-8	Total Zinc by ICPMS	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total Antimony by ICPMS	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total Arsenic by ICPMS	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total Beryllium by ICPMS	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total Cadmium by ICPMS	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total Chromium by ICPMS	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total Copper by ICPMS	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total Lead by ICPMS	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total Mercury by CVAA	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total Nickel by ICPMS	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total PP13 Metals by ICPMS	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total Selenium by ICPMS	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total Silver by ICPMS	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total Thallium by ICPMS	11/8/2019
SC56705-02	Outflow (Lower Brook Culvert)	Total Zinc by ICPMS	11/8/2019
SC56705-01	ECS-8	Microextractables	11/11/2019

Batch Summary

'[none]'

Subcontracted Analyses

SC56705-01 (ECS-8)

504316

Subcontracted Analyses

1625461D
1625461S
504705-20
504705-21
SC56705-01 (ECS-8)

504409

Subcontracted Analyses

504603-57
504603-58
504603-59
SC56705-01 (ECS-8)

504539

Subcontracted Analyses

1625461D
1625461DRE1
1625461S
1625461SRE1
505178-13
505178-14
505761-13
505761-14
SC56705-01 (ECS-8)
SC56705-01RE1 (ECS-8)
SC56705-02 (Outflow (Lower Brook Culvert))

505127

Subcontracted Analyses

SC56705-01 (ECS-8)

505133

Subcontracted Analyses

SC56705-01 (ECS-8)

505172

Subcontracted Analyses

505235-13
505235-14
SC56705-01 (ECS-8)
SC56705-02 (Outflow (Lower Brook Culvert))

505293A

Subcontracted Analyses

CE55177-BLK
CE55177-LCS
CE55177-LCSD
CF55177-BLK
CF55177-LCS
CF55177-LCSD
SC56705-01 (ECS-8)
SC56705-01RE1 (ECS-8)

505348A

Subcontracted Analyses

CE56587-BLK
CE56587-DUP
CE56587-LCS
SC56705-01 (ECS-8)

505349A

Subcontracted Analyses

CE56587-BLK
CE56587-DUP
CE56587-LCS
CE56587-MS
SC56705-01 (ECS-8)

505357A

Subcontracted Analyses

CE55464-BLK
CE55464-LCS
SC56705-01 (ECS-8)
SC56705-02 (Outflow (Lower Brook Culvert))

505406A

Subcontracted Analyses

CE55434-BLK
CE55434-LCS
CF55434-BLK
CF55434-LCS
SC56705-01 (ECS-8)
SC56705-01RE1 (ECS-8)

505410A

Subcontracted Analyses

CE55621-BLK
CE55621-LCS
SC56705-01 (ECS-8)

505429A

Subcontracted Analyses

CE56490-LCS
SC56705-01 (ECS-8)
SC56705-02 (Outflow (Lower Brook Culvert))

505457A

Subcontracted Analyses

CE55635-BLK
CE55635-LCS
SC56705-01 (ECS-8)

505536A

Subcontracted Analyses

CE56714-BLK
CE56714-LCS
SC56705-01 (ECS-8)

505548A

Subcontracted Analyses

CE55028-BLK
CE55028-LCS
SC56705-01 (ECS-8)

505679

Subcontracted Analyses

SC56705-01 (ECS-8)

506759

Subcontracted Analyses

SC56705-01 (ECS-8)

507212

Subcontracted Analyses

507212-27
507212-28
507212-3
507212-4
SC56705-02 (Outflow (Lower Brook Culvert))

ATTACHMENT III

Katerina Korolov

From: Vakalopoulos, Catherine (DEP) <catherine.vakalopoulos@state.ma.us>
Sent: Wednesday, November 20, 2019 4:32 PM
To: Katerina Korolov
Subject: [EXTERNAL] RE: Seeking information for an RGP permit in Mass

Hi Katerina,
As we discussed, since USGS StreamStats could not calculate a 7Q10 for the location of the proposed discharge south of 3 Main St. in Brimfield at the Rt. 19 culvert, a dilution factor cannot be calculated. Therefore, the dilution factor at this location is 1.

One more thing that I forgot to mention over the phone is that if this site is not *currently* an MCP site, you will also have to submit a transmittal form and $500 fee to MassDEP. Instructions are located here: https://www.mass.gov/how-to/wm-15-npdes-general-permit-notice-of-intent. Feel free to contact me if you have any questions.

Cathy

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

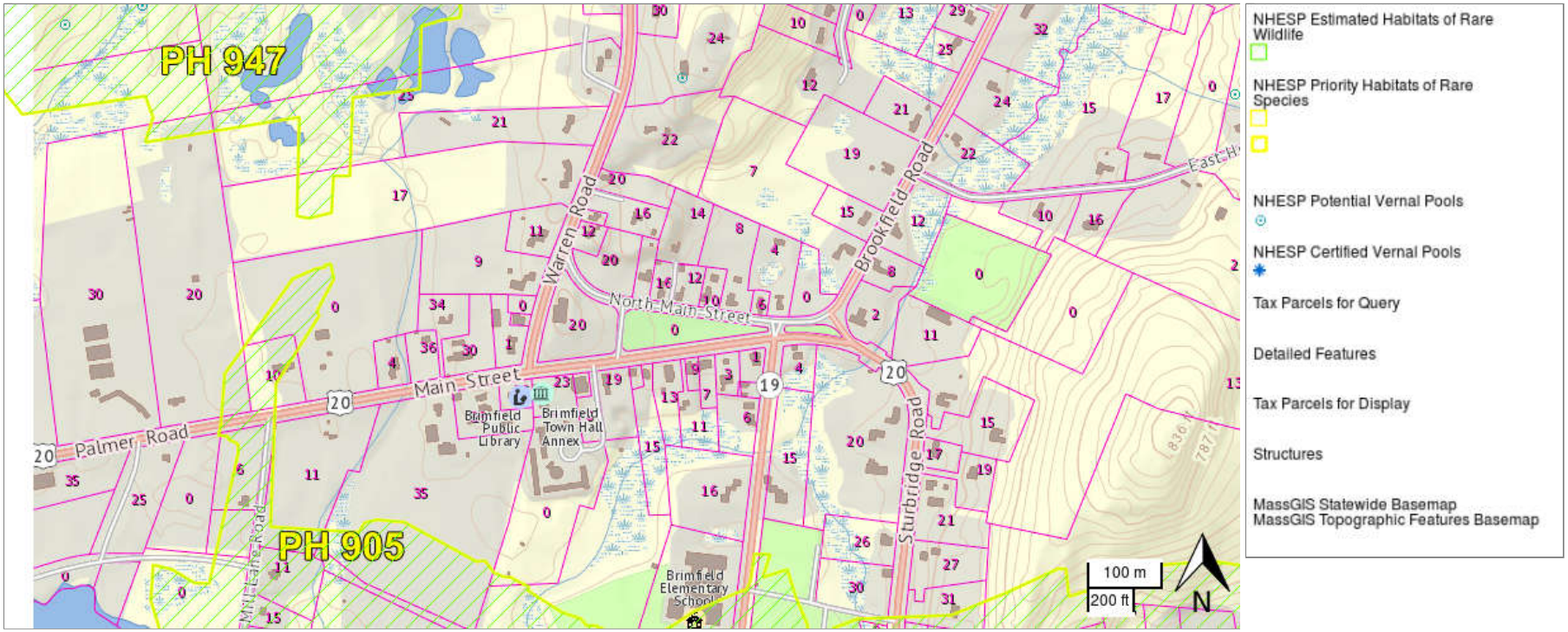
From: Katerina Korolov [mailto:Katerina.Korolov@atcgs.com]
Sent: Wednesday, November 20, 2019 4:18 PM
To: Vakalopoulos, Catherine (DEP)
Subject: RE: Seeking information for an RGP permit in Mass

Katerina Korolov | STAFF GEOLOGIST | **ATC Group Services LLC**
Office +1 413 781 0070 | Cell +1 607 342 0610

73 William Franks Drive | West Springfield, MA 01089
katerina.korolov@atcgs.com | www.atcgroupservices.com

ATTACHMENT IV

NHESP Map of Estimated and Priority Habitats of Rare Species and Wildlife



ATTACHMENT V

ATC
—AN ATLAS COMPANY—
73 William Franks Drive
West Springfield, MA 01089

Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125

73 William Franks Drive
West Springfield, MA 01089
Telephone 413-781-0070
Fax 737-207-8280
www.atcgroupservices.com

November 25, 2019
Project Number 12859.55

Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125

RE: Project Notification Form
Commercial Property
Cumberland Farms Property #MA2080
3 Main Street – Route 20
Brimfield, MA 01010

To whom it may concern:

On behalf of Cumberland Farms, Inc. (CFI), ATC Group Services LLC (ATC) is submitting this Project Notification Form for the above-referenced property (the "Site"). CFI is proposing to redevelop the property in March 2019. Approval for dewatering through EPA is necessary and this PNF is required as part of the Notice of Intent process. A Site Locus is provided as Figure 1 and a Site Plan is provided as Figure 2. A copy of the NOI form is provided as Attachment I.

Background

The Site is located at 3 Main Street in Brimfield, Hampden County, Massachusetts and is comprised of 21,095 square feet of land occupied by a gasoline dispensing station and a CFI convenience store. The convenience store is a 1,710 square foot single story building with no basement and is located on the south central portion of the Site. Two pump islands are located north of the convenience store and three underground storage tanks (USTs) for gasoline are located east of the pump islands. The central portion of the Site is paved and the perimeter of the property is landscaped. The Site is currently owned by V.H.S. Realty, Inc. and is operated as a gasoline dispensing station and CFI convenience store. The Site was purchased by V.H.S. on June 4, 1976 and was reconstructed in 1977. Before 1977, the Site was operated as a Texaco gasoline dispensing and automotive repair station. One catch basin and the respective outfall is located on the property. Two additional catch basins are located along the front of the Site and are connected to the MassDOT stormwater drainage system that runs around the corner of Main Street (Route 20) and along Wales Road (Route 19) and eventually discharges at the Lower Brook. The proposed redevelopment project is scheduled to start on February 24, 2020 and last for approximately 3 months

Listings of Historic Places within the Town of Brimfield were obtained from the Massachusetts Cultural Resources Information System (MACRIS) online database at http://mhc- macris.net/towns.aspx (accessed November 20, 2019). A copy of the MACRIS report is provided as Attachment V. The database indicated that there are two historic places located in and in close proximity to the Site: The Site building at 3 Main Street, and the Post Office next door (also identified as 3 main Street) are listed as historical buildings. This project does not involve the demolition or rehabilitation of historic properties.

If there are any questions regarding this information, please do not hesitate to contact the undersigned at (413) 781-0070.

Sincerely,
ATC GROUP SERVICES LLC

Alexandra N. Riddle

Alexandra N. Riddle

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

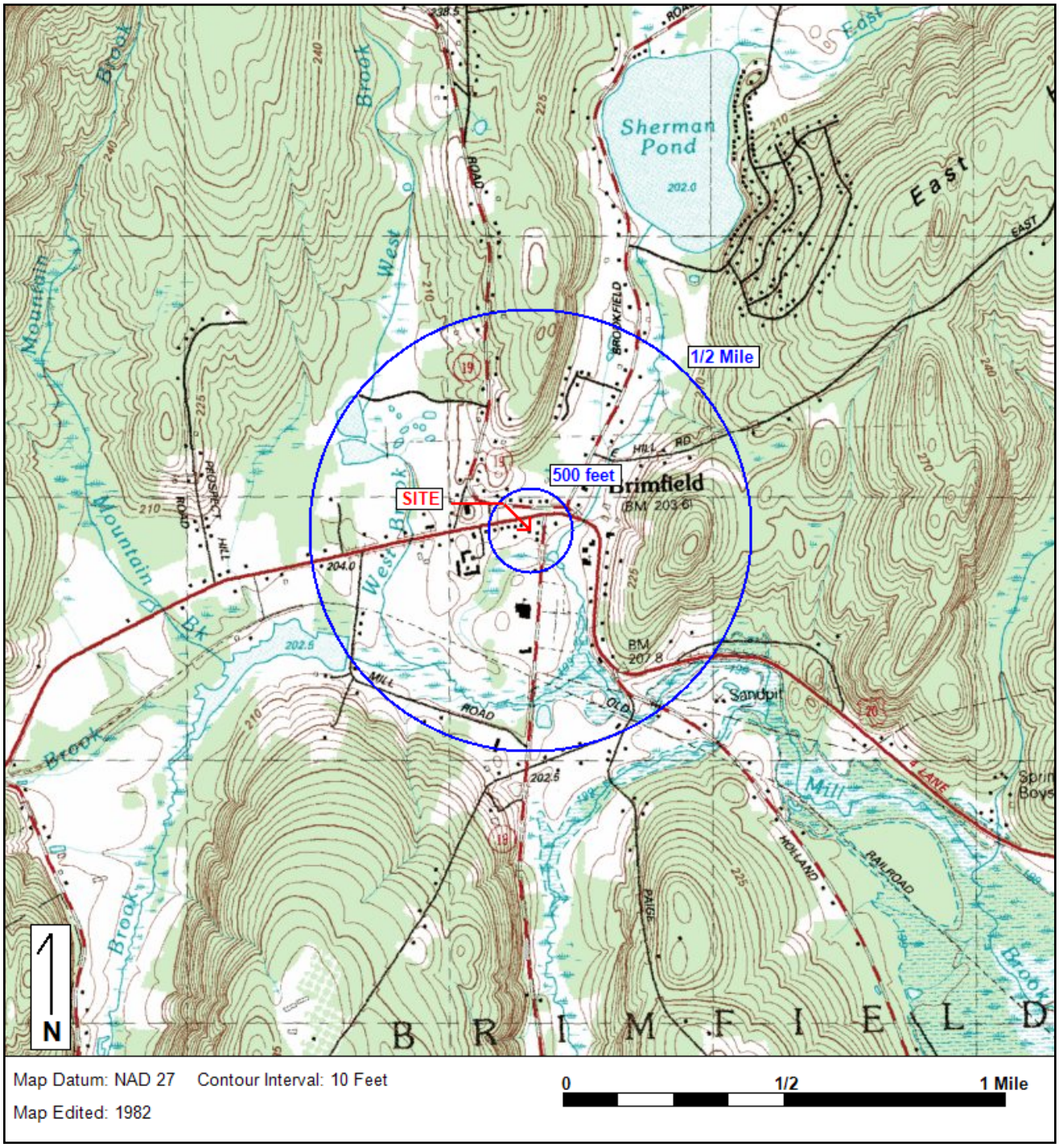
Search Criteria: Town(s): Brimfield; Place: Brimfield; Street No: 3; Street Name: Main St; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year
BRI.3	Robinson, Charles Grocery and Dry Goods Store	3 Main St	Brimfield	c 1916
BRI.156	Brimfield Center Convenience Market	3 Main St	Brimfield	1977

ATC Group Services LLC
73 William Franks Drive
West Springfield, MA 01089
Phone 413-781-0070 Fax 413-781-3734
www.atcgroupservices.com

CFI Brimfield,MA
3 Main St
Brimfield, MA

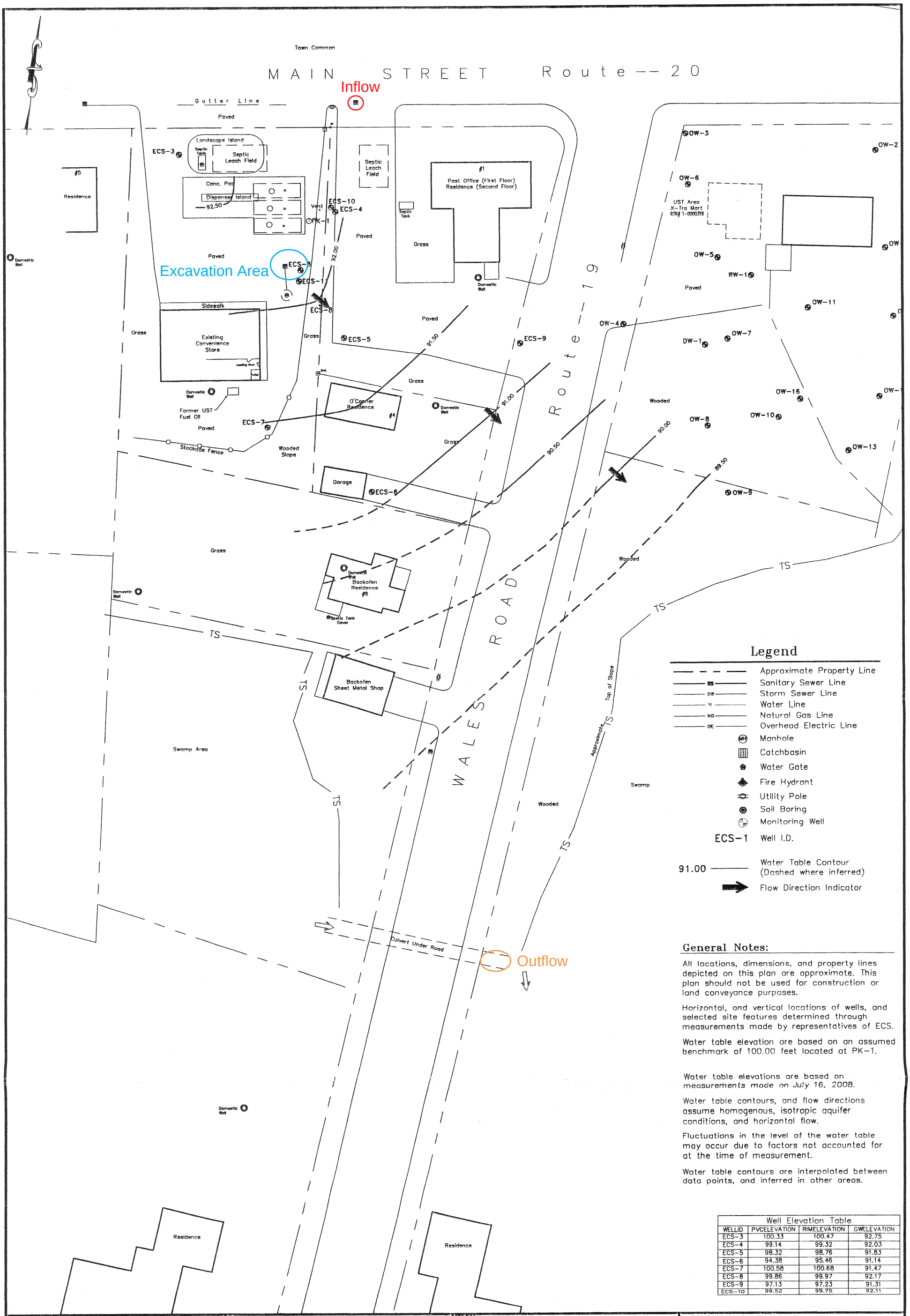
Figure 1: SITE LOCUS



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

Lat/Lon: 42.12 NORTH, -72.2008 WEST - UTM Coordinates: 18 4666892 EAST / 731396 NORTH

Generated By: Katerina Korolov



Legend

- Approximate Property Line
- SS — Sanitary Sewer Line
- SW — Storm Sewer Line
- W — Water Line
- NG — Natural Gas Line
- OE — Overhead Electric Line
- Manhole
- Catchbasin
- Water Gate
- Fire Hydrant
- Utility Pole
- Soil Boring
- Monitoring Well
- ECS-1 — Well I.D.
- 91.00 — Water Table Contour (Dashed where inferred)
- Flow Direction Indicator

General Notes:

All locations, dimensions, and property lines depicted on this plan are approximate. This plan should not be used for construction or land conveyance purposes.

Horizontal, and vertical locations of wells, and selected site features determined through measurements made by representatives of ECS.

Water table elevation are based on an assumed benchmark of 100.00 feet located at PK-1.

Water table elevations are based on measurements made on July 16, 2008.

Water table contours, and flow directions assume homogenous, isotropic aquifer conditions, and horizontal flow.

Fluctuations in the level of the water table may occur due to factors not accounted for at the time of measurement.

Water table contours are interpolated between data points, and inferred in other areas.

Well Elevation Table

WELLID	PVCELEVATION	RIMELEVATION	GWELEVATION
ECS-3	100.33	100.47	92.75
ECS-4	99.14	99.32	92.03
ECS-5	98.32	98.76	91.83
ECS-6	94.38	95.46	91.14
ECS-7	100.58	100.68	91.47
ECS-8	99.86	99.97	92.17
ECS-9	97.13	97.23	91.31
ECS-10	99.52	99.75	92.11

ecs
588 Silver Street * Agawam, MA 01001
Phone: 1-800-789-3530 Fax: 413-789-2778

CLIENT: Cumberland Farms, Inc.

GRAPHIC SCALE: 50 25 0 25 50

SAVED ON: 7/30/2008 9:58 AM SAVED BY: RMALAS

PROJECT: Cumberland Farms, Inc.
3 Main Street – Route 20
Brimfield, Massachusetts

TITLE: Site Plan with Groundwater Contours (7/16/08)

CADFILE: F:\Data\Projects\12859\DWG\12859SP.dwg

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
RAS	MB	JO	KCS
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
1"=50'	July 2008	12859.55	2