July 16, 2019

Ms. Shauna Little
Environmental Protection Agency
Office of Environmental Stewardship (OES)
Water Technical Unit
5 Post Office Square, Suite 110 (OES4-SMR)
Boston, MA 02109-3912

Re: NPDES RGP NOI
Former Mobil Service Station No. 01707
694 Main Street (Route 28)
Dennisport, MA
Release Tracking Number 4-00933

Dear Ms. Little,

On behalf of ExxonMobil Environmental and Property Solutions Company (E&PS), Kleinfelder has prepared the attached National Pollutant Discharge Elimination System (NPDES) Notice of Intent (NOI) to discharge treated groundwater under the auspices of the Remediation General Permit (RGP). This request is to allow for the treatment and discharge of potentially impacted groundwater to allow excavation activities associated with the remediation of impacted soil under Massachusetts Department of Environmental Protection (MassDEP) Release Tracking Number (RTN) 4-00933. The excavation activities will be performed at property located at 694 Main Street, Dennisport, Massachusetts.

Excavation dewatering and the discharge of treated groundwater are currently anticipated to beginno earlier than September 3, 2019 and end in approximately February 2020.

The NOI form is included as Attachment A.

Project Background

This project will excavate and remove soils impacts with petroleum hydrocarbons from the property located at 694 Main Street (Route 28). These impacts are associated with the release of petroleum at this property.

Massachusetts Contingency Plan Applicability
Assessment and remedial activities associated with a release of gasoline have been performed since approximately 1979, and has been tracked under MassDEP RTN 4-00933 since 1990. A Site Locus is included in Attachment B as Figure 1. A Temporary Solution Statement was submitted to MassDEP in January 2017, subsequent site monitoring conducted at the site and has been documented in Temporary Solution Status Reports in accordance with the Massachusetts Contingency Plan (310 CMR 40.0000). Excavation, handling, removal, and treatment of impacted soils are also planned to be conducted under the applicable provisions of 310 CMR 40.0000. A Site Plan and Proposed Excavation Area is included in Attachment B as Figure 2.

Groundwater Characterization

Groundwater sampling has been conducted under RTN 4-00933 for approximately 40 years. For the purpose of this application, a sample of groundwater was collected from an onsite monitoring well. A representative groundwater sample was collected from dewatering well MW-31 on June 5, 2019, and designated "NPDES Dewater Sample". The sample was submitted to Eurofins Spectrum Analytical of Agawam, MA for analysis of volatile organic compounds (VOCs) via EPA Methods 624 and 8260, polynuclear aromatic hydrocarbons (PAHs) and phenols via EPA Method 625 SIM, total PCBs via EPA Method 8082, total metals via EPA Method 200.7, Oil and Grease via EPA Method 1664A, chloride via EPA Method 300, ammonia via EPA Method 350.1, cyanide via EPA Method 335.4, ethanol via EPA method 8015 and total suspended solids via Standard Method 2540D. Groundwater pH and temperature were recorded in the field.

Groundwater analytical results are included as Attachment C. Kleinfelder notes some exceedances of the required detection limits due to laboratory dilutions, however, these exceedances are not expected to represent exceedances of effluent limitations in the water planned to be discharged under this permit. The detection limit for 1,4-dioxane was 1,000 ug/L, compared to a discharge limit of 200 ug/L, however, this compound is believed to be absent at the site. Sampling to be collected from effluent will be sufficiently sensitive to ensure detection limits are at required levels and/or below the discharge limit required. Kleinfelder also notes that for the analytes chloride and ethanol, the laboratory chose to run an alternative method than those specified for analysis. Chloride was analyzed by method 4500, and was detected with 68.9 ug/L. Ethanol was analyzed by method 8015, and was not detected, with a detection limit of 1 ug/L. The use of alternative laboratory methods is not considered to compromise the validity of the data.

Receiving Water Characterization

Discharge will occur through existing catch basin and/or manhole structures located on Main Street and/or Upper County Road to the stormwater system located on both of these streets and connecting at the intersection. Permission for this discharge is being simultaneously sought with the Massachusetts Department of Transportation (MassDOT), which controls the stormwater structures within this area of Main Street and Upper County Road.

Water is conveyed within stormwater structures to the east to the intersection with Division Street, and then south through stormwater structures running along Division Street, and is discharged into a wetland area, as shown on the NOI Map (Attachment B, Figure 3).

The wetland area extends west from Division Street, and continues to the south. At the southern end of the wetland area, a culvert beneath Lower County Road connects the wetland area to a large manmade retention pond (Pound Pond). At the southern edge of the pond, a headwall allows flow of the water to a culvert, which passes beneath an area of Sea View Park, and connects to stormwater infrastructure along Chase Avenue. Water is conveyed to the intersection of Chase Avenue and Inman Road, from which point if flows out of an outfall pipe at Inman Beach to the Nantucket Sound. The invert of the outfall pipe is located above Mean Low Water (MLW), at an approximate elevation of 0.35' NGVD29 (-0.53' NAVD88).

The wetland area was sampled June 5, 2019, at the point where it crosses Division Street, which is the first point at which the stormwater system daylights. The surface water sample was submitted to Eurofins Spectrum Analytical of Agawam, MA for analysis of total metals via EPA Method 200.7, ammonia via EPA Method 350.1 and hardness via EPA Method 130.1. Analtyical results are included as Attachment C.

The final receiving water body, Nantucket Sound, was sampled on July 10, 2019. The surface water sample was submitted to Alpha Analytical Laboratory for analysis of total metals via EPA Method 200.7, dissolved metals via EPA Method 200.7, ammonia via EPA Method 350.1 and salinity via EPA Method 2520B. Receiving water analytical results are included as Attachment C. Kleinfelder notes that due to the salinity of the sample, detection limits for some analytes exceed EPA-required levels.

Nantucket Sound is not listed in the Massachusetts Integrated List of Waters 303(d) list, nor are the wetland area or the unnamed manmade pond (Pound Pond). All of these water bodies are Class SA. No dilution due to flow in the receiving water body is assumed.

Proposed Treatment System

A Design Flow treatment system discharge rate of 350 gallons per minute (gpm) was used to evaluate the applicable RGP discharge standards. Extracted water from the excavation activities will be initially pumped into two 21,000-gallon fractionation tanks.

Following settling, extracted groundwater will be treated by passage through (at minimum) 50-micron particle filters, and through liquid-phase reactive carbon vessels. If needed the treatment system will include an organoclay and/or resin unit for the removal of dissolved metals. Flow will be measured using an in-line flowmeter and totalizer prior to the discharge into a catchbasin and/or manhole on Main Street and/or Upper County Road.

Kleinfelder anticipates that the dewatering system will operate from approximately September 3, 2019 through February 28, 2020. A Work Plan for the groundwater extraction and treatment systems satisfying the requirements of Section 2.5 of the RGP will be available at the Site prior to initiating dewatering activities. See Attachment B, Figure 4 for a Treatment System Schematic.

Proposed Remedial Additive

The remedial additive Petrofix is planned to be added to the bottom of the excavation after terminal depth is reached in each area. Due to the planned phasing of excavation work, there is a potential for the remedial additive to be present in groundwater during dewatering of subsequent areas of the excavation, prior to treatment.

Petrofix is a concentrated water-based suspension consisting of micron-scale activated carbon and biostimulating electron acceptors. PetroFix is designed to first remove hydrocarbons from the dissolved phase by adsorbing them onto activated carbon particles and then stimulating hydrocarbon biodegradation by adding electron acceptors. The additive comes in two parts, including one part that contains activated carbon, calcium sulfate dihydrate and an additive in suspension, and one that is a powder consisting of ammonium sulfate and sodium nitrate. The two parts are mixed and applied to the base and side walls of the excavation. None of the

components of the remedial additive are expected to cause an exceedance of the applicable water quality standards, and the application of this additive will not add any pollutants that would justify the application of permit conditions that are different from this permit.

The Safety Data Sheets (SDS) for the two components of Petrofix are included as Attachment D.

Notice of Intent

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

- Review of the Massachusetts Geographic Information Systems MassDEP Priority Resources Map (Figure 5 in Attachment B) shows the Site is not within an ACEC.
- An "informal consultation" with the Fish and Wildlife Service resulted in a consistency letter opining that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the applicable regulations, the permit eligibility therefore meets "Criterion B" (Attachment E).
- This work will not affect historical properties that are listed by the United States Park Service or Massachusetts Cultural Resources. Cultural resources in the vicinity of the Site are listed in Attachment F.

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

We appreciate your assistance in processing this Notice of Intent.

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

Sincerely,
KLEINFELDER

Madeline Soule
Staff Professional II

Jeremy Blumberg
Project Manager

cc: Mr. Kehat Falik, E&PS (file)
cc: Dennisport Conservation Commission
cc: MassDOT, Highway Division, District 5 Permits Engineer

List of Attachments

Attachment A – RGP NOI Form
Attachment B – Figures
- Figure 1 – Locus Plan
- Figure 2 – Site Plan and Proposed Excavation Area
- Figure 3 – NOI Map
- Figure 4 – Treatment System Schematic

Attachment C – Laboratory Analytical Data
Attachment D – Safety Data Sheets
Attachment E – Fish and Wildlife Consistency Letter
Attachment F – Massachusetts Cultural Resources in Vicinity of Site

ATTACHMENT A

RGP NOI Form

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

A. General site information:

<table>
<tr><td rowspan="2">1. Name of site:
FORMER MOBIL SERVICE STATION # 17377 (01-707)</td><td colspan="3">Site address: 694 Main Street
Street:</td></tr>
<tr><td>City: Dennisport</td><td>State: MA</td><td>Zip: 02639</td></tr>
<tr><td rowspan="4">2. Site owner
684-694 Main Street LLC

Owner is (check one): ☐ Federal ☐ State/Tribal ■ Private
☐ Other; if so, specify:</td><td colspan="3">Contact Person:</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 rowspan="4">3. Site operator, if different than owner
Kleinfelder</td><td colspan="3">Contact Person: Madeline Soule</td></tr>
<tr><td colspan="2">Telephone: 617-498-4679</td><td>Email: msoule@kleinfelder.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: One Beacon Street, Suite 8100</td></tr>
<tr><td>City: Boston</td><td>State: MA</td><td>Zip: 02108</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):
4-00933
☐ NH Groundwater Management Permit or Groundwater Release Detection Permit:
☐ CERCLA
☐ UIC Program
☐ POTW Pretreatment
☐ CWA Section 404</td></tr>
</table>

B. Receiving water information:

Unnamed wetlands west of Division Street, discharging to manmade retention pond (Pound Pond). Pound pond discharges above MLW to Nantucket Sound

Waterbody identification of receiving water(s):	Classification of receiving water(s):
No segment ID available for Pound Pond or Nantucket Sound	Class SA

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

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

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

3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. For more information, contact the appropriate State as noted in Part 4.6 of the RGP. Not listed

4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.	N/A
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: fuel parameters, non-halogenated VOCs, inorganics	
a. For source waters that are contaminated groundwater or contaminated surface water, indicate are any contaminants present that are not included in the RGP? (check one): ☐ Yes ■ No If yes, indicate the contaminant(s) and the maximum concentration present in accordance with the instructions in Appendix VIII.	b. For a source water that is a surface water other than the receiving water, potable water or other, indicate any contaminants present at the maximum concentration in accordance with the instructions in Appendix VIII? (check one): ☐ Yes ☐ No
3. Has the source water been previously chlorinated or otherwise contains residual chlorine? (check one): ☐ Yes ■ No	

D. Discharge information

1.The discharge(s) is a(n) (check any that apply): ■ Existing discharge ☐ New discharge ☐ New source	
Outfall(s): Outlet to unnamed wetland. Wetland is culverted to enter manmade retention pond (Pound Pond), which discharges to Nantucket Sound above Mean Low Water	Outfall location(s): (Latitude, Longitude) 41°39'43.4"N, 70°07'11.3"W (wetland outfall) 41°39'18.3"N 70°07'15.9"W (Nantucket Sound outfall)
Discharges enter the receiving water(s) via (check any that apply): ☐ Direct discharge to the receiving water ■ Indirect discharge, if so, specify: Discharge is to a catchbasin / stormwater system which discharges to an unnamed wetland, connected to man-made retention pond, which discharges to Nantucket Sound ☐ ■	
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: permission expected approximately concurrently with EPA approval 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): September 2019 - February 2020 Indicate if the discharge is expected to occur over a duration of: ■ less than 12 months ☐ 12 months or more ☐ is an emergency discharge	
Has the operator attached a site plan in accordance with the instructions in D, above? (check one): ■ Yes ☐ No	

<table>
<tr><td>2. Activity Category: (check all that apply)</td><td colspan="2">3. Contamination Type Category: (check all that apply)</td></tr>
<tr><td rowspan="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	E350.1	0.50		2.71	Report mg/L	---
Chloride		✔	1	SM4500	3.0		68.9	Report µg/l	---
Total Residual Chlorine	✔		1	SM4500	0.500		<0.500	0.2 mg/L	0.0075 mg/L
Total Suspended Solids		✔	1	SM2540D	25		1300	30 mg/L	---
Antimony	✔	✔	1	200.7	3		<3	206 µg/L	
Arsenic		✔	1	200.7	2		40	104 µg/L	36 µg/L
Cadmium		✔	1	200.7	1		3	10.2 µg/L	
Chromium III		✔	1	200.7	5		14	323 µg/L	100 µg/L
Chromium VI	✔		1	SM4500	125		<125	323 µg/L	
Copper		✔	1	200.7	3		88	242 µg/L	3.7 µg/L
Iron		✔	1	200.7	5		46600	5,000 µg/L	
Lead		✔	1	200.7	1		600	160 µg/L	8.5 µg/L
Mercury		✔	1	200.7	0.2		0.2	0.739 µg/L	
Nickel		✔	1	200.7	1		25	1,450 µg/L	8.3 µg/L
Selenium	✔		1	200.7	5		<5	235.8 µg/L	
Silver	✔		1	200.7	1		<1	35.1 µg/L	
Zinc		✔	1	200.7	2		433	420 µg/L	86 µg/L
Cyanide	✔		1	335.4	0.010		<0.010	178 mg/L	
B. Non-Halogenated VOCs									
Total BTEX		✔	1	624	5		1671	100 µg/L	---
Benzene		✔	1	624	5		19	5.0 µg/L	---
1,4 Dioxane	✔		1	8260 Oxy	1000		<1000	200 µg/L	---
Acetone	✔		1	624	0.250		<0.250	7.97 mg/L	---
Phenol	✔		1	625	4.7		<4.7	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	10		<10	4.4 µg/L	
1,2 Dichlorobenzene		✔	1	624	10		13	600 µg/L	---
1,3 Dichlorobenzene	✔		1	624	10		<10	320 µg/L	---
1,4 Dichlorobenzene	✔		1	624	10		<10	5.0 µg/L	---
Total dichlorobenzene			1	624				763 µg/L in NH	---
1,1 Dichloroethane	✔		1	624	10		<10	70 µg/L	---
1,2 Dichloroethane	✔		1	624	6		<6	5.0 µg/L	---
1,1 Dichloroethylene	✔		1	624	10		<10	3.2 µg/L	---
Ethylene Dibromide	✔		1	624	10		<10	0.05 µg/L	---
Methylene Chloride	✔		1	624	5		<5.0	4.6 µg/L	---
1,1,1 Trichloroethane	✔		1	624	5		<5.0	200 µg/L	---
1,1,2 Trichloroethane	✔		1	624	5		<5.0	5.0 µg/L	---
Trichloroethylene	✔		1	624	10		<10	5.0 µg/L	---
Tetrachloroethylene	✔		1	624	10		<10	5.0 µg/L	
cis-1,2 Dichloroethylene	✔		1	624	10		<10	70 µg/L	---
Vinyl Chloride	✔		1	624	10		<10	2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates	✔		1	625.1	4.7		<19.74	190 µg/L	
Diethylhexyl phthalate	✔		1	625.1	0.94		<0.94	101 µg/L	
Total Group I PAHs		✔	1	625.1	0.09		<0.53	1.0 µg/L	---
Benzo(a)anthracene		✔	1	625.1	0.04		0.09	As Total PAHs	0.0038 µg/L
Benzo(a)pyrene			1	625.1	0.05		<0.05		
Benzo(b)fluoranthene	✔		1	625.1	0.05		<0.05		
Benzo(k)fluoranthene		✔	1	625.1	0.05		0.06		0.0038 µg/L
Chrysene		✔	1	625.1	0.05		0.09		0.0038 µg/L
Dibenzo(a,h)anthracene	✔		1	625.1	0.02		<0.02		
Indeno(1,2,3-cd)pyrene		✔	1	625.1	0.05		0.06		0.0038 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
Total Group II PAHs		✔	1	625.1			<129.41	100 µg/L	---
Naphthalene		✔	1	625.1			110	20 µg/L	---
E. Halogenated SVOCs									
Total PCBs	✔		1	E608	0.5		<4.5	0.000064 µg/L	---
Pentachlorophenol	✔		1	625.1	0.05		<0.05	1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons		✔	1	E1664A	1.6		3.6	5.0 mg/L	---
Ethanol	✔		1	8015D	1.0		<1.0	Report mg/L	---
Methyl-tert-Butyl Ether	✔		1	624	1.0		<1.0	70 µg/L	
tert-Butyl Alcohol	✔		1	624	100		<100	120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	✔		1	8260 Oxy	10		<10	90 µg/L in MA 140 µg/L in NH	---
Other (i.e., pH, temperature, hardness, salinity, LC_{50}, additional pollutants present); if so, specify:									
pH			1	pH pen			6.85		
temperature			1	YSI			18.5 C		

E. Treatment system information

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

☐ Adsorption/Absorption ☐ Advanced Oxidation Processes ☐ Air Stripping ■ Granulated Activated Carbon ("GAC")/Liquid Phase Carbon Adsorption
■ Ion Exchange ■ Precipitation/Coagulation/Flocculation ■ Separation/Filtration ☐ Other; if so, specify:

2. Provide a written description of all treatment system(s) or processes that will be applied to the effluent prior to discharge.
Treatment will include fractionation tanks, followed by filtration via bag filters, carbon filtration and clay or resin unit as needed

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: pump Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	350
Provide the proposed maximum effluent flow in gpm.	350
Provide the average effluent flow in gpm.	200
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	

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

F. Chemical and additive information

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

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

2. Provide the following information for each chemical/additive, using attachments, if necessary:

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

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

G. Endangered Species Act eligibility determination

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

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

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

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

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

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

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

H. National Historic Preservation Act eligibility determination

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

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

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

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

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

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

I. Supplemental information

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

Analytical data for sample collected from wetland area of first discharge is included in Attachment C.

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

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

J. Certification requirement

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

BMPP certification statement:	I certify that a BMPP meeting the requirements of this general permit will be developed and implemented upon initiation of discharge
Notification provided to the appropriate State, including a copy of this NOI, if required.	Check one: Yes ■ No ☐
Notification provided to the municipality in which the discharge is located, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐
Notification provided to the owner of a private or municipal storm sewer system, if such system is used for site discharges, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐ NA ☐
Permission obtained from the owner of a private or municipal storm sewer system, if such system is used for site discharges. If yes, attach additional conditions. If no, attach explanation and timeframe for obtaining permission.	Check one: Yes ☐ No ■ NA ☐
Notification provided to the owner/operator of the area associated with activities covered by an additional discharge permit(s). Additional discharge permit is (check one): ☐ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:	Check one: Yes ☐ No ☐ NA ■
Signature: 	Date: 6/27/2019
Print Name and Title: Madeline Soule, Staff Professional II	

ATTACHMENT B

Figures

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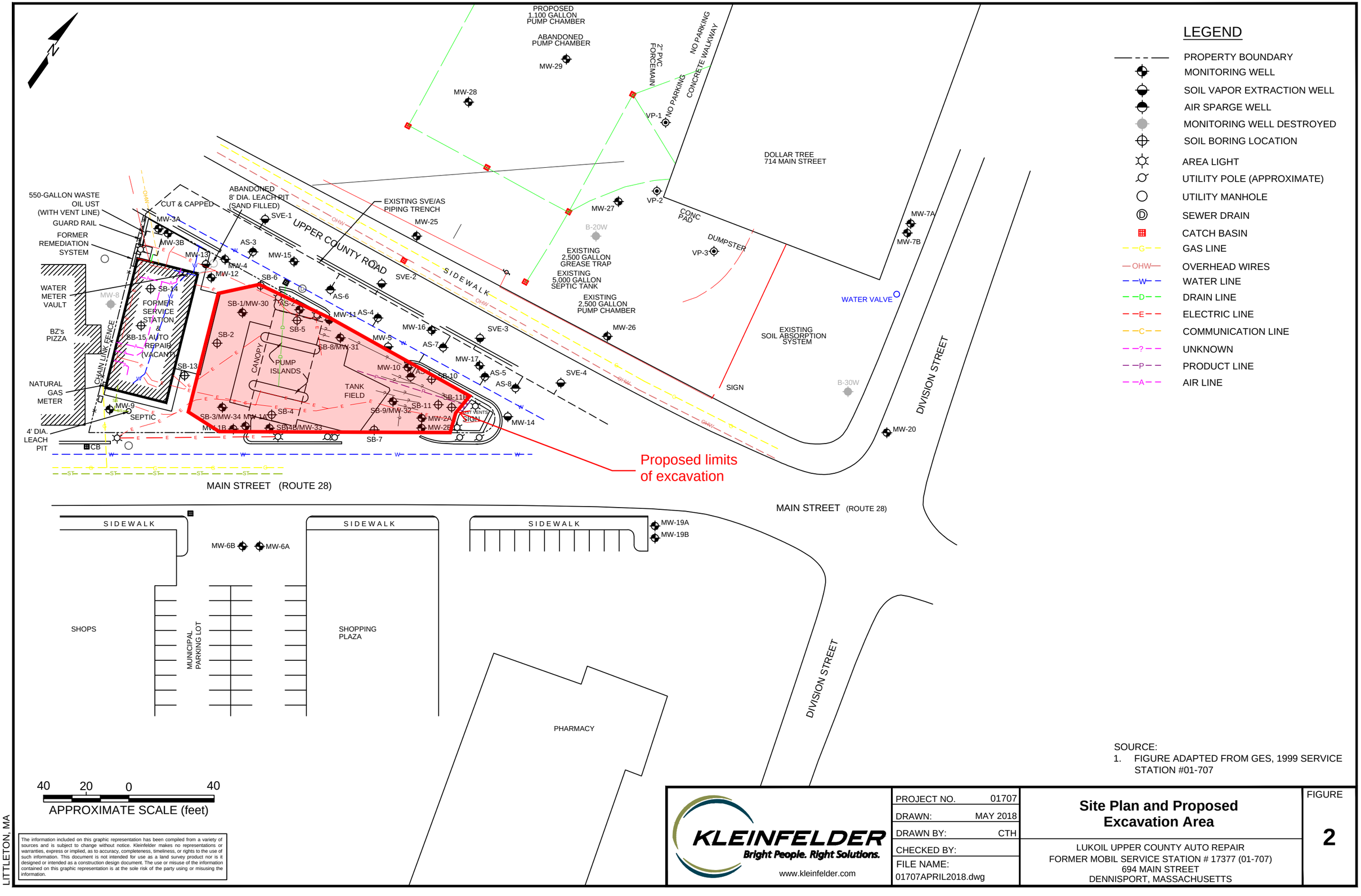
PROJECT NO.	01707
DRAWN:	DEC 2016
DRAWN BY:	ANG
CHECKED BY:	----
FILE NAME:	01707_DENNISPORT_LOC

SITE LOCATION MAP

FORMER MOBIL SERVICE STATION #17377 (01-707)
64 MAIN STREET
DENNISPORT, MASSACHUSETTS

FIGURE
1



SOURCE:
1. FIGURE ADAPTED FROM GES, 1999 SERVICE STATION #01-707

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PROJECT NO.	01707
DRAWN:	MAY 2018
DRAWN BY:	CTH
CHECKED BY:	
FILE NAME:	01707APRIL2018.dwg

Site Plan and Proposed Excavation Area

LUKOIL UPPER COUNTY AUTO REPAIR
FORMER MOBIL SERVICE STATION # 17377 (01-707)
694 MAIN STREET
DENNISPORT, MASSACHUSETTS

FIGURE
2

LITTLETON, MA

U.S. Fish and Wildlife Service
National Wetlands Inventory

Figure 3 - NOI Plan

July 16, 2019

Wetlands

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

Figure 4
Proposed Treatment System Schematic

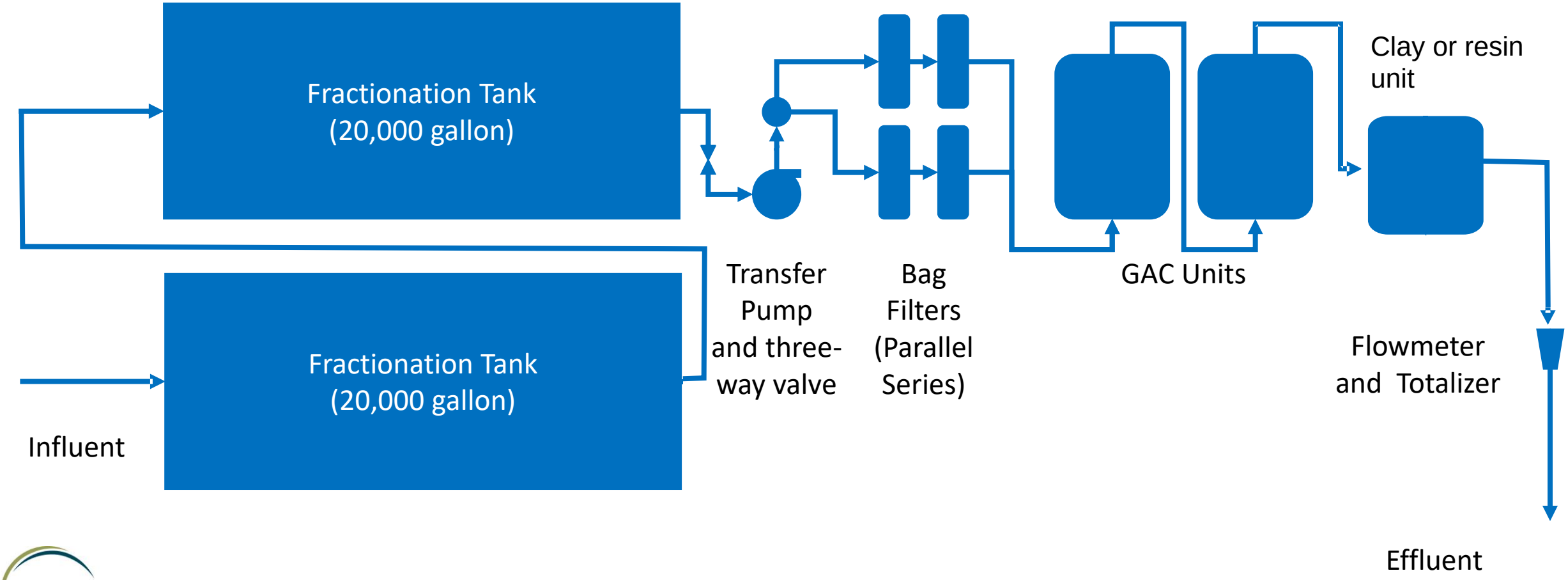

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Figure 5 - Priority Resource Map

MassDEP - Bureau of Waste Site Cleanup

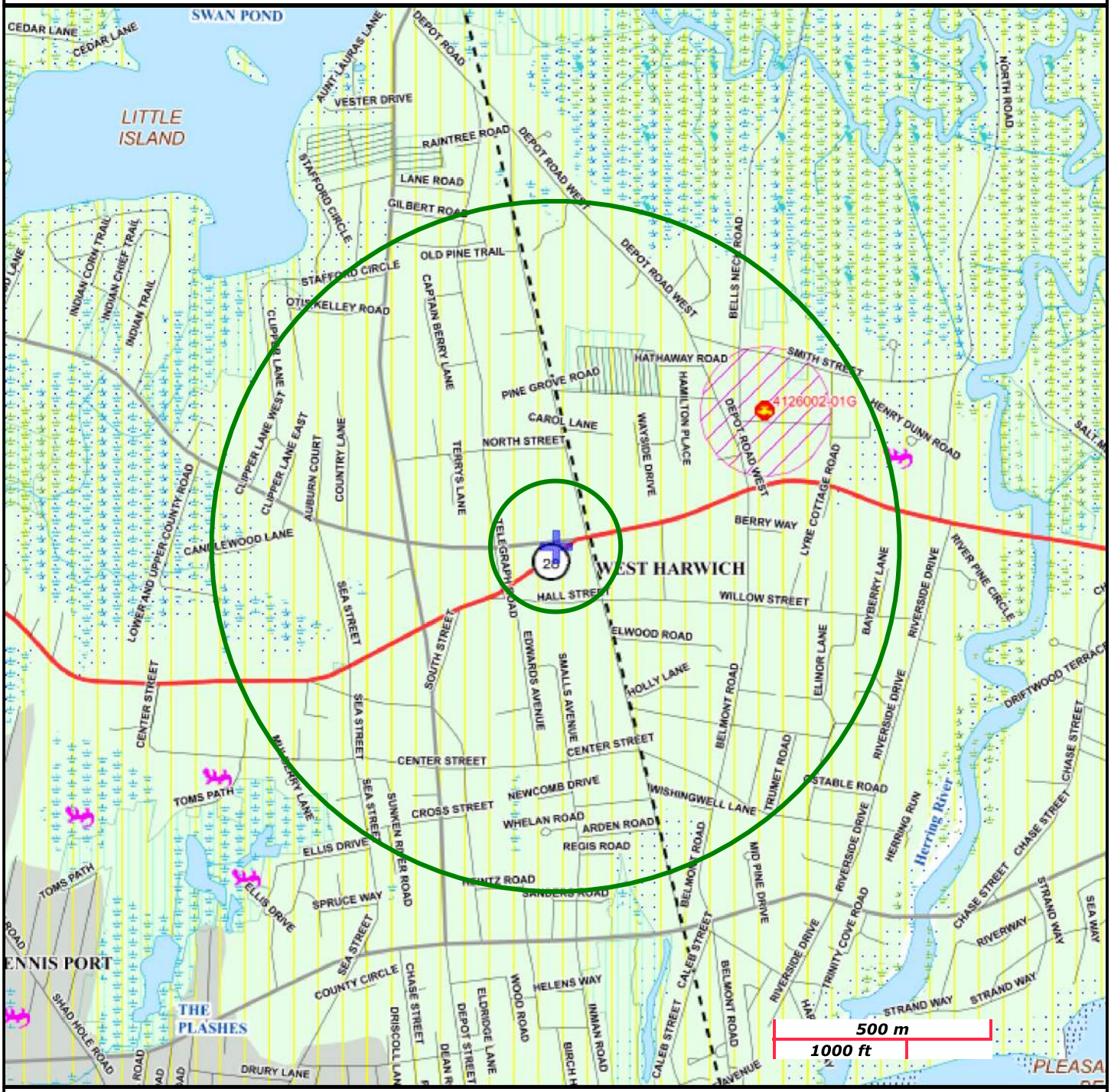
Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:

694 MAIN STREET DENNIS, MA
4-000000933
NAD83 UTM Meters:
4613596mN , 406528mE (Zone: 19)
June 4, 2019

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

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam

Aquifers: Medium Yield, High Yield, EPA Sole Source

Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

FEMA 100yr Floodplain; Protected Open Space; ACEC

Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential

Solid Waste Landfill; PWS: Com.GW,SW, Emerg., Non-Com.

ATTACHMENT C

Laboratory Analytical Data

☐ Final Report
☑ Revised Report

Report Date:
24-Jun-19 16:14

Laboratory Report
SC55030

Kleinfelder, Inc.
4 Technology Drive, Suite 110
Westborough, MA 01851
Attn: Jeremy Blumberg

Project: Exxon Mobil- 694 Main Street-Dennisport, MA
Project #: 1707

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

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

Authorized by:

Erica Troy
Quality Services Manager

Eurofins Spectrum Analytical holds primary certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 43 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: SC55030

Project: Exxon Mobil- 694 Main Street-Dennisport, MA

Project Number: 1707

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC55030-01	NPDES Dewater Sample	Ground Water	05-Jun-19 10:30	05-Jun-19 16:21

CASE NARRATIVE:

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

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

The samples were received 1.6 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

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

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

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

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

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

June 24, 2019

Report has been revised to include tert-butyl alcohol results.

ALCOHOL

HEADSPACE 06/10/19-1: CD29077

The following Continuing Calibration compounds did not meet % deviation criteria:
Samples: CD29077
Preceding CC 610A002 - Butanol 22%H (20%), Ethanol 29%H (20%), Isopropanol 22%H (20%)
Succeeding CC 610A013 - None.

VOA Narration

CHEM23 06/10/19-3: CD29077

The following Initial Calibration compounds did not meet RSD% criteria: 1,2-Dibromo-3-chloropropane 26% (20%), Bromoform 31% (20%), trans-1,4-dichloro-2-butene 25% (20%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: None.
The following Continuing Calibration compounds did not meet % deviation criteria: Bromomethane 40% L (30%)
The following Continuing Calibration compounds did not meet Maximum % deviation criteria: None.
Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

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

E350.1

Blanks:

CD27630-BLK

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

Ammonia as Nitrogen

Laboratory Control Samples:

E350.1

Laboratory Control Samples:

CD27630-LCS

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

Ammonia as Nitrogen

E608

Laboratory Control Samples:

482363A BS

PCB-1221 percent recovery 0 (40-140) 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:

NPDES Dewater Sample

PCB-1232 percent recovery 0 (40-140) 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:

NPDES Dewater Sample

PCB-1242 percent recovery 0 (40-140) 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:

NPDES Dewater Sample

PCB-1248 percent recovery 0 (40-140) 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:

NPDES Dewater Sample

PCB-1254 percent recovery 0 (40-140) 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:

NPDES Dewater Sample

PCB-1262 percent recovery 0 (40-140) 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:

NPDES Dewater Sample

PCB-1268 percent recovery 0 (40-140) 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:

NPDES Dewater Sample

482363A BSD

% DCBP RPD 40.8% (20%) is outside individual acceptance criteria.

CD28874-LCS

This parameter is outside laboratory rpd specified recovery limits.

% DCBP

CD28874-LCSD

This parameter is outside laboratory rpd specified recovery limits.

% DCBP

E624.1

Laboratory Control Samples:

E624.1

Laboratory Control Samples:

482831B BS

Tert-butyl alcohol percent recovery 60 (70-130) 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:

NPDES Dewater Sample

482831B BSD

Tert-butyl alcohol RPD 62.1% (30%) is outside individual acceptance criteria.

CD29614-LCS

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

Tert-butyl alcohol

This parameter is outside laboratory rpd specified recovery limits.

Tert-butyl alcohol

CD29614-LCSD

This parameter is outside laboratory rpd specified recovery limits.

Tert-butyl alcohol

CD30719-LCS

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

tert-butyl alcohol

This parameter is outside laboratory rpd specified recovery limits.

1,4-dioxane
tert-butyl alcohol

CD30719-LCSD

This parameter is outside laboratory rpd specified recovery limits.

1,4-dioxane
tert-butyl alcohol

E625.1/E625.1SIM

Laboratory Control Samples:

482093A BS

2-Nitroaniline percent recovery 132 (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:

NPDES Dewater Sample

Bis(2-chloroisopropyl)ether percent recovery 60 (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:

NPDES Dewater Sample

482093A BSD

% 2-Fluorobiphenyl RPD 28.1% (20%) is outside individual acceptance criteria.

% 2-Fluorobiphenyl RPD 33.3% (20%) is outside individual acceptance criteria.

E625.1/E625.1SIM

Laboratory Control Samples:

482093A BSD

% Nitrobenzene-d5 RPD 138.1% (20%) is outside individual acceptance criteria.

% Nitrobenzene-d5 RPD 143.4% (20%) is outside individual acceptance criteria.

% Phenol-d5 RPD 121.1% (20%) is outside individual acceptance criteria.

% Phenol-d5 RPD 124.7% (20%) is outside individual acceptance criteria.

1,2,4-Trichlorobenzene RPD 137.3% (50%) is outside individual acceptance criteria.

2,6-Dichlorophenol RPD 46.7% (20%) is outside individual acceptance criteria.

2-Chloronaphthalene RPD 32.8% (24%) is outside individual acceptance criteria.

2-Methylnaphthalene RPD 58.6% (20%) is outside individual acceptance criteria.

2-Methylphenol (o-cresol) RPD 88.5% (20%) is outside individual acceptance criteria.

2-Nitrophenol RPD 98.0% (55%) is outside individual acceptance criteria.

3&4-Methylphenol (m&p-cresol) RPD 59.0% (20%) is outside individual acceptance criteria.

4-Chloroaniline RPD 60.7% (20%) is outside individual acceptance criteria.

Benzoic acid RPD 66.7% (20%) is outside individual acceptance criteria.

Benzyl alcohol RPD 79.6% (20%) is outside individual acceptance criteria.

Bis(2-chloroethoxy)methane RPD 74.6% (54%) is outside individual acceptance criteria.

Naphthalene RPD 121.8% (65%) is outside individual acceptance criteria.

Nitrobenzene RPD 135.8% (62%) is outside individual acceptance criteria.

N-Nitrosodimethylamine RPD 128.1% (20%) is outside individual acceptance criteria.

Phenol RPD 122.1% (64%) is outside individual acceptance criteria.

Pyridine RPD 22.6% (20%) is outside individual acceptance criteria.

CD27853-LCS

This parameter is outside laboratory rpd specified recovery limits.

% 2-Fluorobiphenyl
% Nitrobenzene-d5
% Phenol-d5
Nitrobenzene
N-Nitrosodimethylamine
Pyridine

E625.1/E625.1SIM

Laboratory Control Samples:

CD27853-LCSD

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

% 2-Fluorophenol
% Nitrobenzene-d5
Hexachlorobutadiene
Hexachlorocyclopentadiene
Nitrobenzene
N-Nitrosodimethylamine

This parameter is outside laboratory rpd specified recovery limits.

% 2-Fluorobiphenyl
% Nitrobenzene-d5
% Phenol-d5
Nitrobenzene
N-Nitrosodimethylamine
Pyridine

CE27853-LCS

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.

% 2-Fluorobiphenyl
% Nitrobenzene-d5
% Phenol-d5
1,2,4-Trichlorobenzene
2,6-Dichlorophenol
2-Chloronaphthalene
2-Methylnaphthalene
2-Methylphenol (o-cresol)
2-Nitrophenol
3&4-Methylphenol (m&p-cresol)
4-Chloroaniline
Benzoic acid
Benzyl alcohol
Bis(2-chloroethoxy)methane
Naphthalene
Phenol

CE27853-LCSD

E625.1/E625.1SIM

Laboratory Control Samples:

CE27853-LCSD

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

% 2-Fluorophenol
% Nitrobenzene-d5
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4-Dichlorophenol
2-Chloronaphthalene
2-Chlorophenol
2-Methylphenol (o-cresol)
2-Nitrophenol
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Hexachloroethane
Naphthalene
Phenol

This parameter is outside laboratory rpd specified recovery limits.

% 2-Fluorobiphenyl
% Nitrobenzene-d5
% Phenol-d5
1,2,4-Trichlorobenzene
2,6-Dichlorophenol
2-Chloronaphthalene
2-Methylnaphthalene
2-Methylphenol (o-cresol)
2-Nitrophenol
3&4-Methylphenol (m&p-cresol)
4-Chloroaniline
Benzoic acid
Benzyl alcohol
Bis(2-chloroethoxy)methane
Naphthalene
Phenol

SM3500-Cr-B (11)/7196A

Samples:

SC55030-01 *NPDES Dewater Sample*

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

Hexavalent Chromium

SM4500-Cl-G (11)

Samples:

SC55030-01 *NPDES Dewater Sample*

The method for residual chlorine indicates that samples should be analyzed immediately. 40 CFR 136 specifies a holding time of 15 minutes from sampling to analysis.

Total Residual Chlorine

SM4500-Cl-G (11)

Samples:

SC55030-01 *NPDES Dewater Sample*

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

Total Residual Chlorine

SW8015D MOD

Laboratory Control Samples:

482580A BSD

% 2-Pentanol(surr) RPD 30.2% (30%) is outside individual acceptance criteria.

SW8260C (OXY)

Laboratory Control Samples:

482831B BSD

1,4-Dioxane RPD 36.3% (30%) is outside individual acceptance criteria.

CD29614-LCS

This parameter is outside laboratory rpd specified recovery limits.

1,4-Dioxane

CD29614-LCSD

This parameter is outside laboratory rpd specified recovery limits.

1,4-Dioxane

Sample Acceptance Check Form

Client:	Kleinfelder, Inc. - Westborough, MA
Project:	Exxon Mobil- 694 Main Street-Dennisport, MA / 1707
Work Order:	SC55030
Sample(s) received on:	6/5/2019

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: SC55030-01 **Client ID:** NPDES Dewater Sample

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Trivalent Chromium	0.0140		0.0050	mg/l	Calculation
O&G, Non-polar Material	3.6		1.6	mg/l	E1664A
Arsenic	0.040		0.002	mg/l	E200.7
Cadmium	0.003		0.001	mg/l	E200.7
Chromium	0.139		0.001	mg/l	E200.7
Copper	0.088		0.003	mg/l	E200.7
Iron	46.6		0.005	mg/l	E200.7
Lead	0.600		0.001	mg/l	E200.7
Nickel	0.025		0.001	mg/l	E200.7
Zinc	0.433		0.002	mg/l	E200.7
Mercury	0.0002		0.0002	mg/l	E245.1
Ammonia as Nitrogen	2.71		0.50	mg/l	E350.1
1,2,4-Trimethylbenzene	810		10	ug/l	E624
1,2-Dichlorobenzene	13		10	ug/l	E624
1,3,5-Trimethylbenzene	130		10	ug/l	E624
Benzene	19		7.0	ug/l	E624
Ethylbenzene	710		10	ug/l	E624
Isopropylbenzene	56		10	ug/l	E624
m&p-Xylene	790		10	ug/l	E624
Naphthalene	130		10	ug/l	E624
n-Butylbenzene	33		10	ug/l	E624
n-Propylbenzene	130		10	ug/l	E624
o-Xylene	110		10	ug/l	E624
p-Isopropyltoluene	11		10	ug/l	E624
sec-Butylbenzene	22		10	ug/l	E624
Toluene	42		10	ug/l	E624
Total Xylenes	900		10	ug/l	E624
1,2-Dichlorobenzene	13		5.0	ug/l	E624.1
1,4-Dichlorobenzene	5.2		5.0	ug/l	E624.1
Benzene	19		5.0	ug/l	E624.1
Ethylbenzene	710		5.0	ug/l	E624.1
m&p-Xylene	790		5.0	ug/l	E624.1
o-Xylene	110		5.0	ug/l	E624.1
Toluene	42		5.0	ug/l	E624.1
Benzo(a)anthracene	0.09		0.04	ug/l	E625.1/E625.1SIM
Benzo(b)fluoranthene	0.07		0.05	ug/l	E625.1/E625.1SIM
Benzo(k)fluoranthene	0.06		0.05	ug/l	E625.1/E625.1SIM
Chrysene	0.09		0.05	ug/l	E625.1/E625.1SIM
Indeno(1,2,3-c,d)pyrene	0.06		0.05	ug/l	E625.1/E625.1SIM
Phenanthrene	0.42		0.05	ug/l	E625.1/E625.1SIM
Total Suspended Solids	1300		25	mg/l	SM2540D-11
Chloride	68.9		3.0	mg/l	SM4500CLE

Lab ID: SC55030-01RE1 **Client ID:** NPDES Dewater Sample

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Hardness (CaCO3)	149		0.1	mg/l	E200.7
1,2-Dichlorobenzene	8.7		4.7	ug/l	E625.1/E625.1SIM
2-Methylnaphthalene	40		4.7	ug/l	E625.1/E625.1SIM

Lab ID: SC55030-01RE2 **Client ID:** NPDES Dewater Sample

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Naphthalene	110		23	ug/l	E625.1/E625.1SIM

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
NPDES Dewater Sample	1707	Ground Water	05-Jun-19 10:30	05-Jun-19
SC55030-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
General Chemistry Parameters													
16065-83-1	Trivalent Chromium	**0.0140**		mg/l	0.0050		1	Calculation	06-Jun-19	13-Jun-19	EDT	1900777	
7782-50-5	Total Residual Chlorine	< 0.500	ClHT, R01, D,ClHT	mg/l	0.500	0.109	25	SM4500-Cl-G (11)	05-Jun-19 16:15	05-Jun-19 17:12	ABW	1900775	X
18540-29-9	Hexavalent Chromium	< 0.125	R01, D	mg/l	0.125	0.102	25	SM3500-Cr-B (11)/7196A	06-Jun-19 08:00	06-Jun-19 09:02	ABW	1900777	
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
71-55-6	1,1,1-Trichloroethane	< 5.0		ug/l	5.0	5.0	10	E624.1	10-Jun-19 13:44	11-Jun-19 05:47	M-CT007	482787A	
79-34-5	1,1,2,2-tetrachloroethane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	**13**		ug/l	5.0	5.0	10	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	**5.2**		ug/l	5.0	5.0	10	"	"	"	"	"	
71-43-2	Benzene	**19**		ug/l	5.0	5.0	10	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
75-25-2	Bromoform	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
74-83-9	Bromomethane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
108-90-7	Chlorobenzene	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
75-00-3	Chloroethane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
67-66-3	Chloroform	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
74-87-3	Chloromethane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 4.0		ug/l	4.0	4.0	10	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
100-41-4	Ethylbenzene	**710**		ug/l	5.0	5.0	10	"	"	"	"	"	
179601-23-1	m&p-Xylene	**790**		ug/l	5.0	5.0	10	"	"	"	"	"	
1634-04-4	Methyl tert-butyl ether (MTBE)	< 10		ug/l	10	10	10	"	"	"	"	"	
75-09-2	Methylene chloride	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
95-47-6	o-Xylene	**110**		ug/l	5.0	5.0	10	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
108-88-3	Toluene	**42**		ug/l	5.0	5.0	10	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 4.0		ug/l	4.0	4.0	10	"	"	"	"	"	
79-01-6	Trichloroethene	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
75-01-4	Vinyl chloride	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
Surrogate recoveries:													
2199-69-1	*% 1,2-dichlorobenzene-d4*	*101*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*93*			*70-130 %*			"	"	"	"	"	

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
NPDES Dewater Sample SC55030-01	1707	Ground Water	05-Jun-19 10:30	05-Jun-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - M-CT007*													
1868-53-7	% Dibromofluoromethane	101			70-130 %			E624.1	10-Jun-19 13:44	-Jun-19 05:4	M-CT007	482787A	
2037-26-5	% Toluene-d8	97			70-130 %			"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
Surrogate recoveries:													
2199-69-1	% 1,2-dichlorobenzene-d4	101			70-130 %			E624.1	10-Jun-19 13:44	-Jun-19 05:4	M-CT007	482787A	
Re-analysis of Subcontracted Analyses													
Surrogate recoveries:													
460-00-4	% Bromofluorobenzene	93			70-130 %			E624.1	10-Jun-19 13:44	-Jun-19 05:4	M-CT007	482787A	
Re-analysis of Subcontracted Analyses													
Surrogate recoveries:													
1868-53-7	% Dibromofluoromethane	101			70-130 %			E624.1	10-Jun-19 13:44	-Jun-19 05:4	M-CT007	482787A	
Re-analysis of Subcontracted Analyses													
Surrogate recoveries:													
2037-26-5	% Toluene-d8	97			70-130 %			E624.1	10-Jun-19 13:44	-Jun-19 05:4	M-CT007	482787A	
Re-analysis of Subcontracted Analyses													
75-65-0	Tert-butyl alcohol	< 100		ug/l	100	100	10	E624.1	11-Jun-19 05:47	11-Jun-19 05:47	M-CT007	482831B	
Subcontracted Analyses													
Prepared by method E1664A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
	O&G, Non-polar Material	**3.6**		mg/l	1.6	1.6	1.1	E1664A	10-Jun-19 08:36	10-Jun-19 08:36	M-CT007	482485A	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7440-36-0	Antimony	< 0.003		mg/l	0.003	0.003	1	E200.7	07-Jun-19	08-Jun-19 18:18	M-CT007	482295A	
7440-38-2	Arsenic	**0.040**		mg/l	0.002	0.002	1	"	"	"	"	"	
7440-43-9	Cadmium	**0.003**		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-47-3	Chromium	**0.139**		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-50-8	Copper	**0.088**		mg/l	0.003	0.003	1	"	"	"	"	"	
7439-89-6	Iron	**46.6**		mg/l	0.005	0.005	1	"	"	"	"	"	
7439-92-1	Lead	**0.600**		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-02-0	Nickel	**0.025**		mg/l	0.001	0.001	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.005		mg/l	0.005	0.005	1	"	"	"	"	"	
7440-22-4	Silver	< 0.001		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-66-6	Zinc	**0.433**		mg/l	0.002	0.002	1	"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
	Hardness (CaCO3)	**149**		mg/l	0.1	0.1	1	E200.7	12-Jun-19 14:49	12-Jun-19 14:49	M-CT007	482295A	
Prepared by method SW7470A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7439-97-6	Mercury	**0.0002**		mg/l	0.0002	0.0002	1	E245.1	10-Jun-19	10-Jun-19 16:07	M-CT007	482209A	

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Prepared by method SW9012B													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
57-12-5	Total Cyanide	< 0.010		mg/l	0.010	0.010	1	E335.4	07-Jun-19	10-Jun-19 13:04	M-CT007	482323A	
Prepared by method E350.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7664-41-7	Ammonia as Nitrogen	**2.71**		mg/l	0.50	0.50	10	E350.1	08-Jun-19 09:18	08-Jun-19 09:18	M-CT007	482247A	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
12674-11-2	PCB-1016	< 0.50		ug/l	0.50	0.50	1	E608	07-Jun-19	11-Jun-19 02:29	M-CT007	482363A	
11104-28-2	PCB-1221	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
11141-16-5	PCB-1232	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
53469-21-9	PCB-1242	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
12672-29-6	PCB-1248	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
11097-69-1	PCB-1254	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
11096-82-5	PCB-1260	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
37324-23-5	PCB-1262	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
11100-14-4	PCB-1268	< 0.50		ug/l	0.50	0.50	1	"	"	"	"	"	
Surrogate recoveries:													
2051-24-3	*% DCBP*	*95*			*30-150 %*			"	"	"	"	"	
877-09-8	*% TCMX*	*106*			*30-150 %*			"	"	"	"	"	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
630-20-6	1,1,1,2-Tetrachloroethane	< 10		ug/l	10	10	10	E624	10-Jun-19 13:44	11-Jun-19 05:47	M-CT007	482831A	
71-55-6	1,1,1-Trichloroethane	< 10		ug/l	10	10	10	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 10		ug/l	10	10	10	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 10		ug/l	10	10	10	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 10		ug/l	10	10	10	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 10		ug/l	10	10	10	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 10		ug/l	10	10	10	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 10		ug/l	10	10	10	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 10		ug/l	10	10	10	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	**810**		ug/l	10	10	10	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 10		ug/l	10	10	10	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 10		ug/l	10	10	10	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	**13**		ug/l	10	10	10	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 6.0		ug/l	6.0	6.0	10	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 10		ug/l	10	10	10	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	**130**		ug/l	10	10	10	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 10		ug/l	10	10	10	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 10		ug/l	10	10	10	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 10		ug/l	10	10	10	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 10		ug/l	10	10	10	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
NPDES Dewater Sample	1707	Ground Water	05-Jun-19 10:30	05-Jun-19
SC55030-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
95-49-8	2-Chlorotoluene	< 10		ug/l	10	10	10	E624	10-Jun-19 13:44	11-Jun-19 05:47	M-CT007	482831A	
591-78-6	2-Hexanone	< 50		ug/l	50	50	10	"	"	"	"	"	
527-84-4	2-Isopropyltoluene	< 10		ug/l	10	10	10	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 10		ug/l	10	10	10	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 50		ug/l	50	50	10	"	"	"	"	"	
67-64-1	Acetone	< 250		ug/l	250	250	10	"	"	"	"	"	
107-13-1	Acrylonitrile	< 10		ug/l	10	10	10	"	"	"	"	"	
71-43-2	Benzene	**19**		ug/l	7.0	7.0	10	"	"	"	"	"	
108-86-1	Bromobenzene	< 10		ug/l	10	10	10	"	"	"	"	"	
74-97-5	Bromochloromethane	< 10		ug/l	10	10	10	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
75-25-2	Bromoform	< 10		ug/l	10	10	10	"	"	"	"	"	
74-83-9	Bromomethane	< 10		ug/l	10	10	10	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 50		ug/l	50	50	10	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 10		ug/l	10	10	10	"	"	"	"	"	
108-90-7	Chlorobenzene	< 10		ug/l	10	10	10	"	"	"	"	"	
75-00-3	Chloroethane	< 10		ug/l	10	10	10	"	"	"	"	"	
67-66-3	Chloroform	< 10		ug/l	10	10	10	"	"	"	"	"	
74-87-3	Chloromethane	< 10		ug/l	10	10	10	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 10		ug/l	10	10	10	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 4.0		ug/l	4.0	4.0	10	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 5.0		ug/l	5.0	5.0	10	"	"	"	"	"	
74-95-3	Dibromomethane	< 10		ug/l	10	10	10	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 10		ug/l	10	10	10	"	"	"	"	"	
100-41-4	Ethylbenzene	**710**		ug/l	10	10	10	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 4.0		ug/l	4.0	4.0	10	"	"	"	"	"	
98-82-8	Isopropylbenzene	**56**		ug/l	10	10	10	"	"	"	"	"	
179601-23-1	m&p-Xylene	**790**		ug/l	10	10	10	"	"	"	"	"	
78-93-3	Methyl ethyl ketone	< 50		ug/l	50	50	10	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	< 10		ug/l	10	10	10	"	"	"	"	"	
75-09-2	Methylene chloride	< 10		ug/l	10	10	10	"	"	"	"	"	
91-20-3	Naphthalene	**130**		ug/l	10	10	10	"	"	"	"	"	
104-51-8	n-Butylbenzene	**33**		ug/l	10	10	10	"	"	"	"	"	
103-65-1	n-Propylbenzene	**130**		ug/l	10	10	10	"	"	"	"	"	
95-47-6	o-Xylene	**110**		ug/l	10	10	10	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	**11**		ug/l	10	10	10	"	"	"	"	"	
135-98-8	sec-Butylbenzene	**22**		ug/l	10	10	10	"	"	"	"	"	
100-42-5	Styrene	< 10		ug/l	10	10	10	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 10		ug/l	10	10	10	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 10		ug/l	10	10	10	"	"	"	"	"	
109-99-9	Tetrahydrofuran (THF)	< 25		ug/l	25	25	10	"	"	"	"	"	
108-88-3	Toluene	**42**		ug/l	10	10	10	"	"	"	"	"	
1330-20-7	Total Xylenes	**900**		ug/l	10	10	10	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
NPDES Dewater Sample SC55030-01	1707	Ground Water	05-Jun-19 10:30	05-Jun-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
156-60-5	trans-1,2-Dichloroethene	< 10		ug/l	10	10	10	E624	10-Jun-19 13:44	11-Jun-19 05:47	M-CT007	482831A	
10061-02-6	trans-1,3-Dichloropropene	< 4.0		ug/l	4.0	4.0	10	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 50		ug/l	50	50	10	"	"	"	"	"	
79-01-6	Trichloroethene	< 10		ug/l	10	10	10	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 10		ug/l	10	10	10	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 10		ug/l	10	10	10	"	"	"	"	"	
75-01-4	Vinyl chloride	< 10		ug/l	10	10	10	"	"	"	"	"	
Surrogate recoveries:													
2199-69-1	*% 1,2-dichlorobenzene-d4*	*101*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*93*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*101*			*70-130 %*			"	"	"	"	"	
2037-26-5	*% Toluene-d8*	*97*			*70-130 %*			"	"	"	"	"	
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	06-Jun-19	11-Jun-19 02:02	M-CT007	482093A	
208-96-8	Acenaphthylene	< 0.05		ug/l	0.05	0.05	1	"	"	"	"	"	
56-55-3	Benzo(a)anthracene	**0.09**		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	**0.07**		ug/l	0.05	0.05	1	"	"	"	"	"	
191-24-2	Benzo(g,h,i)perylene	< 0.09		ug/l	0.09	0.09	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	**0.06**		ug/l	0.05	0.05	1	"	"	"	"	"	
218-01-9	Chrysene	**0.09**		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	< 0.09		ug/l	0.09	0.09	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadien e	< 0.09		ug/l	0.09	0.09	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-c,d)pyrene	**0.06**		ug/l	0.05	0.05	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 0.09		ug/l	0.09	0.09	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	**0.42**		ug/l	0.05	0.05	1	"	"	"	"	"	
110-86-1	Pyridine	< 0.47		ug/l	0.47	0.47	1	"	"	"	"	"	
Surrogate recoveries:													
118-79-6	*% 2,4,6-Tribromophenol*	*105*			*15-110 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*44*			*30-130 %*			"	"	"	"	"	
367-12-4	*% 2-Fluorophenol*	*32*			*15-110 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*94*			*30-130 %*			"	"	"	"	"	
4165-62-2	*% Phenol-d5*	*37*			*15-110 %*			"	"	"	"	"	
98904-43-9	*% Terphenyl-d14*	*22*			*30-130 %*			"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
120-82-1	1,2,4-Trichlorobenzene	< 4.7		ug/l	4.7	4.7	1	E625.1/E625.1SIM	06-Jun-19	11-Jun-19 13:43	M-CT007	482093A	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
NPDES Dewater Sample	1707	Ground Water	05-Jun-19 10:30	05-Jun-19
SC55030-01				

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													
95-50-1	1,2-Dichlorobenzene	**8.7**		ug/l	4.7	4.7	1	E625.1/E625.1SIM	06-Jun-19	11-Jun-19 13:43	M-CT007	482093A	
122-66-7	1,2-Diphenylhydrazine	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
87-65-0	2,6-Dichlorophenol	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	**40**		ug/l	4.7	4.7	1	"	"	"	"	"	
95-48-7	2-Methylphenol (o-cresol)	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 9.4		ug/l	9.4	9.4	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
	3&4-Methylphenol (m&p-cresol)	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
91-94-1	3,3'-Dichlorobenzidine	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
120-12-7	Anthracene	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
92-87-5	Benzidine	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
65-85-0	Benzoic acid	< 9.4		ug/l	9.4	9.4	1	"	"	"	"	"	
100-51-6	Benzyl alcohol	< 9.4		ug/l	9.4	9.4	1	"	"	"	"	"	
85-68-7	Benzyl butyl phthalate	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
108-60-1	Bis(2-chloroisopropyl)ether	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 0.94		ug/l	0.94	0.94	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 0.94		ug/l	0.94	0.94	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
131-11-3	Dimethylphthalate	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
84-74-2	Di-n-butylphthalate	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
NPDES Dewater Sample SC55030-01	1707	Ground Water	05-Jun-19 10:30	05-Jun-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
Re-analysis of Subcontracted Analyses													
117-84-0	Di-n-octylphthalate	< 4.7		ug/l	4.7	4.7	1	E625.1/E625.1SIM	06-Jun-19	11-Jun-19 13:43	M-CT007	482093A	
206-44-0	Fluoranthene	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
86-73-7	Fluorene	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 0.94		ug/l	0.94	0.94	1	"	"	"	"	"	
78-59-1	Isophorone	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
108-95-2	Phenol	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
129-00-0	Pyrene	< 4.7		ug/l	4.7	4.7	1	"	"	"	"	"	
Surrogate recoveries:													
118-79-6	*% 2,4,6-Tribromophenol*	*72*			*15-130 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*58*			*30-130 %*			"	"	"	"	"	
367-12-4	*% 2-Fluorophenol*	*43*			*10-130 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*75*			*15-130 %*			"	"	"	"	"	
4165-62-2	*% Phenol-d5*	*30*			*10-130 %*			"	"	"	"	"	
98904-43-9	*% Terphenyl-d14*	*21*			*30-130 %*			"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
91-20-3	Naphthalene	**110**		ug/l	23	23	5	E625.1/E625.1SIM	06-Jun-19	11-Jun-19 16:10	M-CT007	482093A	
Surrogate recoveries:													
118-79-6	*% 2,4,6-Tribromophenol*	*93*			*15-130 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*52*			*30-130 %*			"	"	"	"	"	
367-12-4	*% 2-Fluorophenol*	*55*			*10-130 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*21*			*15-130 %*			"	"	"	"	"	
4165-62-2	*% Phenol-d5*	*36*			*10-130 %*			"	"	"	"	"	
98904-43-9	*% Terphenyl-d14*	*23*			*30-130 %*			"	"	"	"	"	
Prepared by method SM2540D-11													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
	Total Suspended Solids	**1,300**		mg/l	25	25	5	SM2540D-11	07-Jun-19 06:26	07-Jun-19 06:26	M-CT007	482192A	
Prepared by method SM4500CLE													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
16887-00-6	Chloride	**68.9**		mg/l	3.0	3.0	1	SM4500CLE	07-Jun-19 04:37	07-Jun-19 04:37	M-CT007	482272A	
Subcontracted Analyses Prepared by method SW8015D MOD													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
64-17-5	Ethanol	< 1.0		mg/l	1.0	1.0	1	SW8015D MOD	10-Jun-19	10-Jun-19 23:16	M-CT007	482580A	
Surrogate recoveries:													
6032-29-7	*% 2-Pentanol(surr)*	*87*			*70-130 %*			"	"	"	"	"	
Subcontracted Analyses Prepared by method SW8260C (OXY)													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
123-91-1	1,4-Dioxane	< 1000		ug/l	1000	1000	10	SW8260C (OXY)	10-Jun-19 13:44	11-Jun-19 05:47	M-CT007	482831B	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
NPDES Dewater Sample SC55030-01	1707	Ground Water	05-Jun-19 10:30	05-Jun-19

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
60-29-7	Diethyl ether	< 10		ug/l	10	10	10	SW8260C (OXY)	10-Jun-19 13:44	11-Jun-19 05:47	M-CT007	482831B	
108-20-3	Di-isopropyl ether	< 10		ug/l	10	10	10	"	"	"	"	"	
637-92-3	Ethyl tert-butyl ether	< 10		ug/l	10	10	10	"	"	"	"	"	
994-05-8	tert-amyl methyl ether	< 10		ug/l	10	10	10	"	"	"	"	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SM3500-Cr-B (11)/7196A										
Batch 1900777 - General Preparation										
Blank (1900777-BLK1)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	< 0.005		mg/l	0.005						
LCS (1900777-BS1)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**0.050**		mg/l	0.005	0.0500		100	90-111		
Calibration Blank (1900777-CCB1)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**-0.002**		mg/l							
Calibration Blank (1900777-CCB2)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**-0.003**		mg/l							
Calibration Check (1900777-CCV1)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**0.050**		mg/l	0.005	0.0500		100	90-110		
Calibration Check (1900777-CCV2)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**0.049**		mg/l	0.005	0.0500		99	90-110		
Reference (1900777-SRM1)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**0.078**		mg/l	0.005	0.0742		105	83.3-116		
SM4500-Cl-G (11)										
Batch 1900775 - General Preparation										
Blank (1900775-BLK1)						Prepared & Analyzed: 05-Jun-19				
Total Residual Chlorine	< 0.020		mg/l	0.020						
LCS (1900775-BS1)						Prepared & Analyzed: 05-Jun-19				
Total Residual Chlorine	**0.048**		mg/l	0.020	0.0500		95	90-110		
Calibration Blank (1900775-CCB1)						Prepared & Analyzed: 05-Jun-19				
Total Residual Chlorine	**0.001**		mg/l							
Calibration Blank (1900775-CCB2)						Prepared & Analyzed: 05-Jun-19				
Total Residual Chlorine	**-0.0006**		mg/l							
Calibration Check (1900775-CCV1)						Prepared & Analyzed: 05-Jun-19				
Total Residual Chlorine	**0.048**		mg/l	0.020	0.0500		96	90-110		
Calibration Check (1900775-CCV2)						Prepared & Analyzed: 05-Jun-19				
Total Residual Chlorine	**0.054**		mg/l	0.020	0.0500		108	90-110		
MRL Check (1900775-MRL1)						Prepared & Analyzed: 05-Jun-19				
Total Residual Chlorine	**0.018**		mg/l	0.020	0.0200		92	70-130		
Reference (1900775-SRM1)						Prepared & Analyzed: 05-Jun-19				
Total Residual Chlorine	**0.110**		mg/l	0.020	0.112		98	90-110		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E624.1										
Batch 482787A - E624.1										
Blank (CD30719-BLK)						Prepared & Analyzed: 10-Jun-19				
Bromobenzene	**ND**		ug/l	1.0			ND	-		
Ethyl ether	**ND**		ug/l	1.0			ND	-		
1,4-dioxane	**ND**		ug/l	100			ND	-		
2,2-Dichloropropane	**ND**		ug/l	1.0			ND	-		
2-Chlorotoluene	**ND**		ug/l	1.0			ND	-		
2-Hexanone	**ND**		ug/l	5.0			ND	-		
2-Isopropyltoluene	**ND**		ug/l	1.0			ND	-		
4-Chlorotoluene	**ND**		ug/l	1.0			ND	-		
4-Methyl-2-pentanone	**ND**		ug/l	5.0			ND	-		
Acetone	**ND**		ug/l	5.0			ND	-		
Acrylonitrile	**ND**		ug/l	5.0			ND	-		
Bromochloromethane	**ND**		ug/l	1.0			ND	-		
n-Propylbenzene	**ND**		ug/l	1.0			ND	-		
n-Butylbenzene	**ND**		ug/l	1.0			ND	-		
Naphthalene	**ND**		ug/l	1.0			ND	-		
Carbon Disulfide	**ND**		ug/l	1.0			ND	-		
Methyl ethyl ketone	**ND**		ug/l	5.0			ND	-		
p-Isopropyltoluene	**ND**		ug/l	1.0			ND	-		
Hexachlorobutadiene	**ND**		ug/l	0.40			ND	-		
1,2-Dibromoethane	**ND**		ug/l	1.0			ND	-		
Dibromomethane	**ND**		ug/l	1.0			ND	-		
Isopropylbenzene	**ND**		ug/l	1.0			ND	-		
1,2,4-Trichlorobenzene	**ND**		ug/l	1.0			ND	-		
1,1,1,2-Tetrachloroethane	**ND**		ug/l	1.0			ND	-		
trans-1,4-dichloro-2-butene	**ND**		ug/l	5.0			ND	-		
Trichlorotrifluoroethane	**ND**		ug/l	1.0			ND	-		
1,3-Dichloropropane	**ND**		ug/l	1.0			ND	-		
1,2,3-Trichlorobenzene	**ND**		ug/l	1.0			ND	-		
1,2,3-Trichloropropane	**ND**		ug/l	1.0			ND	-		
1,1-Dichloropropene	**ND**		ug/l	1.0			ND	-		
1,2,4-Trimethylbenzene	**ND**		ug/l	1.0			ND	-		
1,2-Dibromo-3-chloropropane	**ND**		ug/l	1.0			ND	-		
Tetrahydrofuran (THF)	**ND**		ug/l	2.5			ND	-		
tert-Butylbenzene	**ND**		ug/l	1.0			ND	-		
Dichlorodifluoromethane	**ND**		ug/l	1.0			ND	-		
Styrene	**ND**		ug/l	1.0			ND	-		
1,3,5-Trimethylbenzene	**ND**		ug/l	1.0			ND	-		
sec-Butylbenzene	**ND**		ug/l	1.0			ND	-		
m&p-Xylene	**ND**		ug/l	1.0			ND	-		
Ethylbenzene	**ND**		ug/l	1.0			ND	-		
Trichlorofluoromethane	**ND**		ug/l	1.0			ND	-		
Vinyl chloride	**ND**		ug/l	1.0			ND	-		
Trichloroethene	**ND**		ug/l	1.0			ND	-		
Methyl tert-butyl ether (MTBE)	**ND**		ug/l	1.0			ND	-		
Methylene chloride	**ND**		ug/l	1.0			ND	-		
trans-1,3-Dichloropropene	**ND**		ug/l	0.40			ND	-		
tert-butyl alcohol	**ND**		ug/l	10			ND	-		
Tetrachloroethene	**ND**		ug/l	1.0			ND	-		
o-Xylene	**ND**		ug/l	1.0			ND	-		
trans-1,2-Dichloroethene	**ND**		ug/l	1.0			ND	-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E624.1										
Batch 482787A - E624.1										
Blank (CD30719-BLK)						Prepared & Analyzed: 10-Jun-19				
Benzene	**ND**		ug/l	0.70			ND	-		
1,1,2,2-tetrachloroethane	**ND**		ug/l	0.50			ND	-		
1,1,2-Trichloroethane	**ND**		ug/l	1.0			ND	-		
1,1-Dichloroethane	**ND**		ug/l	1.0			ND	-		
1,1-Dichloroethene	**ND**		ug/l	1.0			ND	-		
Toluene	**ND**		ug/l	1.0			ND	-		
1,2-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
1,2-Dichloroethane	**ND**		ug/l	1.0			ND	-		
1,2-Dichloropropane	**ND**		ug/l	1.0			ND	-		
Dibromochloromethane	**ND**		ug/l	0.50			ND	-		
1,4-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
1,1,1-Trichloroethane	**ND**		ug/l	1.0			ND	-		
Bromodichloromethane	**ND**		ug/l	0.50			ND	-		
Bromoform	**ND**		ug/l	1.0			ND	-		
Bromomethane	**ND**		ug/l	1.0			ND	-		
Carbon tetrachloride	**ND**		ug/l	1.0			ND	-		
Chlorobenzene	**ND**		ug/l	1.0			ND	-		
Chloroethane	**ND**		ug/l	1.0			ND	-		
Chloroform	**ND**		ug/l	1.0			ND	-		
Chloromethane	**ND**		ug/l	1.0			ND	-		
cis-1,2-Dichloroethene	**ND**		ug/l	1.0			ND	-		
cis-1,3-Dichloropropene	**ND**		ug/l	0.40			ND	-		
1,3-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
Surrogate: % 1,2-dichlorobenzene-d4	*101*		ug/l		*30*		*101*	*70-130*		
Surrogate: % Bromofluorobenzene	*94*		ug/l		*30*		*94*	*70-130*		
Surrogate: % Toluene-d8	*100*		ug/l		*30*		*100*	*70-130*		
Surrogate: % Dibromofluoromethane	*103*		ug/l		*30*		*103*	*70-130*		
LCS (CD30719-LCS)						Prepared & Analyzed: 10-Jun-19				
4-Methyl-2-pentanone	**20.28**		ug/l	5.0	20		101	70-130		30
Methyl ethyl ketone	**21.35**		ug/l	5.0	20		107	70-130		30
Dibromomethane	**20.49**		ug/l	1.0	20		102	70-130		30
1,3,5-Trimethylbenzene	**20.84**		ug/l	1.0	20		104	70-130		30
1,3-Dichloropropane	**21.39**		ug/l	1.0	20		107	70-130		30
Isopropylbenzene	**20.46**		ug/l	1.0	20		102	70-130		30
1,4-dioxane	**279.2**	r	ug/l	100	400		70	70-130		30
2,2-Dichloropropane	**20.22**		ug/l	1.0	20		101	70-130		30
2-Chlorotoluene	**20.26**		ug/l	1.0	20		101	70-130		30
2-Hexanone	**20.40**		ug/l	5.0	20		102	70-130		30
4-Chlorotoluene	**20.35**		ug/l	1.0	20		102	70-130		30
Acetone	**20.13**		ug/l	5.0	20		101	70-130		30
Acrylonitrile	**19.51**		ug/l	5.0	20		98	70-130		20
Hexachlorobutadiene	**19.73**		ug/l	0.40	20		99	70-130		30
Bromobenzene	**20.48**		ug/l	1.0	20		102	70-130		30
Bromochloromethane	**21.46**		ug/l	1.0	20		107	70-130		30
Ethyl ether	**20.17**		ug/l	1.0	20		101	70-130		30
Dichlorodifluoromethane	**19.08**		ug/l	1.0	20		95	70-130		30
Carbon Disulfide	**19.11**		ug/l	1.0	20		96	70-130		30
n-Propylbenzene	**20.35**		ug/l	1.0	20		102	70-130		30
2-Isopropyltoluene	**18.93**		ug/l	1.0	20		95	70-130		30
1,1,1,2-Tetrachloroethane	**22.48**		ug/l	1.0	20		112	70-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E624.1										
Batch 482787A - E624.1										
LCS (CD30719-LCS)					Prepared & Analyzed: 10-Jun-19					
Tetrahydrofuran (THF)	**48.98**		ug/l	2.5	50		98	70-130		30
tert-Butylbenzene	**20.51**		ug/l	1.0	20		103	70-130		30
Trichlorotrifluoroethane	**19.35**		ug/l	1.0	20		97	70-130		30
Styrene	**21.10**		ug/l	1.0	20		106	70-130		30
trans-1,4-dichloro-2-butene	**107.2**		ug/l	5.0	100		107	70-130		30
sec-Butylbenzene	**22.20**		ug/l	1.0	20		111	70-130		30
Naphthalene	**20.14**		ug/l	1.0	20		101	70-130		30
p-Isopropyltoluene	**20.64**		ug/l	1.0	20		103	70-130		30
1,2-Dibromoethane	**22.13**		ug/l	1.0	20		111	70-130		30
n-Butylbenzene	**20.84**		ug/l	1.0	20		104	70-130		30
1,2,3-Trichloropropane	**22.36**		ug/l	1.0	20		112	70-130		30
1,1-Dichloropropene	**20.19**		ug/l	1.0	20		101	70-130		30
1,2,3-Trichlorobenzene	**18.83**		ug/l	1.0	20		94	70-130		30
1,2-Dibromo-3-chloropropane	**24.13**		ug/l	1.0	20		121	70-130		30
1,2,4-Trimethylbenzene	**20.55**		ug/l	1.0	20		103	70-130		30
1,2,4-Trichlorobenzene	**19.42**		ug/l	1.0	20		97	70-130		30
cis-1,3-Dichloropropene	**20.78**		ug/l	0.40	20		104	25-175		20
Dibromochloromethane	**23.95**		ug/l	0.50	20		120	70-135		20
Tetrachloroethene	**19.87**		ug/l	1.0	20		99	70-130		20
o-Xylene	**21.22**		ug/l	1.0	20		106	70-130		30
tert-butyl alcohol	**120.8**	l, r	ug/l	10	200		60	70-130		30
cis-1,2-Dichloroethene	**21.06**		ug/l	1.0	20		105	70-130		20
m&p-Xylene	**42.00**		ug/l	1.0	40		105	70-130		30
Methyl tert-butyl ether (MTBE)	**18.50**		ug/l	1.0	20		92	70-130		30
Methylene chloride	**20.82**		ug/l	1.0	20		104	60-140		20
1,2-Dichlorobenzene	**20.69**		ug/l	1.0	20		103	65-135		20
Ethylbenzene	**20.91**		ug/l	1.0	20		105	60-140		20
1,2-Dichloroethane	**21.14**		ug/l	1.0	20		106	70-130		20
Vinyl chloride	**19.03**		ug/l	1.0	20		95	10-195		20
Trichlorofluoromethane	**17.88**		ug/l	1.0	20		89	50-150		20
Trichloroethene	**20.33**		ug/l	1.0	20		102	65-135		20
trans-1,3-Dichloropropene	**20.80**		ug/l	0.40	20		104	50-150		20
trans-1,2-Dichloroethene	**21.14**		ug/l	1.0	20		106	70-130		20
Toluene	**20.24**		ug/l	1.0	20		101	70-130		20
1,1,1-Trichloroethane	**20.52**		ug/l	1.0	20		103	70-130		20
1,1,2,2-tetrachloroethane	**22.92**		ug/l	0.50	20		115	60-140		20
1,1,2-Trichloroethane	**20.56**		ug/l	1.0	20		103	70-130		20
1,2-Dichloropropane	**20.68**		ug/l	1.0	20		103	35-165		20
1,1-Dichloroethene	**21.52**		ug/l	1.0	20		108	50-150		20
Chloromethane	**18.36**		ug/l	1.0	20		92	10-200		20
1,3-Dichlorobenzene	**20.90**		ug/l	1.0	20		104	70-130		20
1,4-Dichlorobenzene	**20.85**		ug/l	1.0	20		104	65-135		20
Benzene	**20.26**		ug/l	0.70	20		101	65-135		20
Bromodichloromethane	**21.54**		ug/l	0.50	20		108	65-135		20
Bromoform	**23.94**		ug/l	1.0	20		120	70-130		20
Bromomethane	**16.23**		ug/l	1.0	20		81	15-185		20
Carbon tetrachloride	**22.12**		ug/l	1.0	20		111	70-130		20
Chlorobenzene	**20.98**		ug/l	1.0	20		105	65-135		20
Chloroethane	**18.64**		ug/l	1.0	20		93	40-160		20
Chloroform	**20.69**		ug/l	1.0	20		103	70-135		20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E624.1										
Batch 482787A - E624.1										
LCS (CD30719-LCS)					Prepared & Analyzed: 10-Jun-19					
1,1-Dichloroethane	**21.06**		ug/l	1.0	20		105	70-130		20
Surrogate: % Bromofluorobenzene	*30.34*		ug/l		*30*		*101*	*70-130*		
Surrogate: % Dibromofluoromethane	*30.87*		ug/l		*30*		*103*	*70-130*		
Surrogate: % 1,2-dichlorobenzene-d4	*30.56*		ug/l		*30*		*102*	*70-130*		
Surrogate: % Toluene-d8	*29.73*		ug/l		*30*		*99*	*70-130*		
LCS Dup (CD30719-LCSD)			**Source: CD30719-LCS**		Prepared & Analyzed: 10-Jun-19					
2-Isopropyltoluene	**19.23**		ug/l	1.0	20		96	70-130	1.0	30
Dibromomethane	**20.90**		ug/l	1.0	20		104	70-130	1.9	30
Carbon Disulfide	**19.78**		ug/l	1.0	20		99	70-130	3.1	30
Bromochloromethane	**21.72**		ug/l	1.0	20		109	70-130	1.9	30
Bromobenzene	**20.96**		ug/l	1.0	20		105	70-130	2.9	30
Acrylonitrile	**19.97**		ug/l	5.0	20		100	70-130	2.0	20
Acetone	**20.50**		ug/l	5.0	20		102	70-130	1.0	30
4-Chlorotoluene	**20.86**		ug/l	1.0	20		104	70-130	1.9	30
Hexachlorobutadiene	**19.02**		ug/l	0.40	20		95	70-130	4.1	30
2-Hexanone	**20.23**		ug/l	5.0	20		101	70-130	1.0	30
2-Chlorotoluene	**20.78**		ug/l	1.0	20		104	70-130	2.9	30
2,2-Dichloropropane	**19.95**		ug/l	1.0	20		100	70-130	1.0	30
1,4-dioxane	**405.8**	r	ug/l	100	400		101	70-130	36.3	30
1,3-Dichloropropane	**23.30**		ug/l	1.0	20		116	70-130	8.1	30
4-Methyl-2-pentanone	**20.45**		ug/l	5.0	20		102	70-130	1.0	30
Ethyl ether	**20.25**		ug/l	1.0	20		101	70-130	0.0	30
1,3,5-Trimethylbenzene	**21.30**		ug/l	1.0	20		106	70-130	1.9	30
Isopropylbenzene	**21.09**		ug/l	1.0	20		105	70-130	2.9	30
Methyl ethyl ketone	**21.29**		ug/l	5.0	20		106	70-130	0.9	30
Naphthalene	**19.47**		ug/l	1.0	20		97	70-130	4.0	30
n-Propylbenzene	**20.83**		ug/l	1.0	20		104	70-130	1.9	30
p-Isopropyltoluene	**20.97**		ug/l	1.0	20		105	70-130	1.9	30
sec-Butylbenzene	**22.44**		ug/l	1.0	20		112	70-130	0.9	30
Styrene	**21.51**		ug/l	1.0	20		108	70-130	1.9	30
Trichlorotrifluoroethane	**20.09**		ug/l	1.0	20		100	70-130	3.0	30
trans-1,4-dichloro-2-butene	**108.5**		ug/l	5.0	100		109	70-130	1.9	30
Tetrahydrofuran (THF)	**49.19**		ug/l	2.5	50		98	70-130	0.0	30
tert-Butylbenzene	**21.16**		ug/l	1.0	20		106	70-130	2.9	30
n-Butylbenzene	**21.21**		ug/l	1.0	20		106	70-130	1.9	30
Dichlorodifluoromethane	**20.05**		ug/l	1.0	20		100	70-130	5.1	30
1,1-Dichloropropene	**20.60**		ug/l	1.0	20		103	70-130	2.0	30
1,1,1,2-Tetrachloroethane	**22.87**		ug/l	1.0	20		114	70-130	1.8	30
1,2-Dibromoethane	**21.87**		ug/l	1.0	20		109	70-130	1.8	30
1,2-Dibromo-3-chloropropane	**22.41**		ug/l	1.0	20		112	70-130	7.7	30
1,2,4-Trimethylbenzene	**20.98**		ug/l	1.0	20		105	70-130	1.9	30
1,2,4-Trichlorobenzene	**19.20**		ug/l	1.0	20		96	70-130	1.0	30
1,2,3-Trichloropropane	**22.58**		ug/l	1.0	20		113	70-130	0.9	30
1,2,3-Trichlorobenzene	**18.43**		ug/l	1.0	20		92	70-130	2.2	30
Dibromochloromethane	**23.12**		ug/l	0.50	20		116	70-135	3.4	20
1,1,1-Trichloroethane	**21.20**		ug/l	1.0	20		106	70-130	2.9	20
Ethylbenzene	**21.21**		ug/l	1.0	20		106	60-140	0.9	20
m&p-Xylene	**43.32**		ug/l	1.0	40		108	70-130	2.8	30
Methyl tert-butyl ether (MTBE)	**18.58**		ug/l	1.0	20		93	70-130	1.1	30
Methylene chloride	**21.13**		ug/l	1.0	20		106	60-140	1.9	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E624.1										
Batch 482787A - E624.1										
LCS Dup (CD30719-LCSD)			**Source: CD30719-LCS**			Prepared & Analyzed: 10-Jun-19				
o-Xylene	**21.89**		ug/l	1.0	20		109	70-130	2.8	30
tert-butyl alcohol	**227.9**	r	ug/l	10	200		114	70-130	62.1	30
Tetrachloroethene	**20.06**		ug/l	1.0	20		100	70-130	1.0	20
cis-1,3-Dichloropropene	**20.87**		ug/l	0.40	20		104	25-175	0.0	20
trans-1,2-Dichloroethene	**21.53**		ug/l	1.0	20		108	70-130	1.9	20
Trichloroethene	**20.15**		ug/l	1.0	20		101	65-135	1.0	20
trans-1,3-Dichloropropene	**20.66**		ug/l	0.40	20		103	50-150	1.0	20
Trichlorofluoromethane	**19.54**		ug/l	1.0	20		98	50-150	9.6	20
Vinyl chloride	**20.06**		ug/l	1.0	20		100	10-195	5.1	20
1,2-Dichloropropane	**21.21**		ug/l	1.0	20		106	35-165	2.9	20
Toluene	**20.83**		ug/l	1.0	20		104	70-130	2.9	20
Bromomethane	**18.37**		ug/l	1.0	20		92	15-185	12.7	20
1,1,2-Trichloroethane	**20.59**		ug/l	1.0	20		103	70-130	0.0	20
1,1-Dichloroethene	**22.18**		ug/l	1.0	20		111	50-150	2.7	20
1,2-Dichlorobenzene	**20.63**		ug/l	1.0	20		103	65-135	0.0	20
1,3-Dichlorobenzene	**21.16**		ug/l	1.0	20		106	70-130	1.9	20
Bromodichloromethane	**21.74**		ug/l	0.50	20		109	65-135	0.9	20
1,4-Dichlorobenzene	**20.93**		ug/l	1.0	20		105	65-135	1.0	20
1,2-Dichloroethane	**21.09**		ug/l	1.0	20		105	70-130	0.9	20
cis-1,2-Dichloroethene	**21.34**		ug/l	1.0	20		107	70-130	1.9	20
Benzene	**20.58**		ug/l	0.70	20		103	65-135	2.0	20
Bromoform	**23.60**		ug/l	1.0	20		118	70-130	1.7	20
1,1-Dichloroethane	**21.54**		ug/l	1.0	20		108	70-130	2.8	20
1,1,2,2-tetrachloroethane	**23.07**		ug/l	0.50	20		115	60-140	0.0	20
Carbon tetrachloride	**21.54**		ug/l	1.0	20		108	70-130	2.7	20
Chlorobenzene	**21.31**		ug/l	1.0	20		107	65-135	1.9	20
Chloroethane	**21.27**		ug/l	1.0	20		106	40-160	13.1	20
Chloroform	**21.30**		ug/l	1.0	20		106	70-135	2.9	20
Chloromethane	**19.05**		ug/l	1.0	20		95	10-200	3.2	20
Surrogate: % Bromofluorobenzene	*30.71*		ug/l		*30*		*102*	*70-130*		
Surrogate: % Dibromofluoromethane	*29.97*		ug/l		*30*		*100*	*70-130*		
Surrogate: % Toluene-d8	*29.91*		ug/l		*30*		*100*	*70-130*		
Surrogate: % 1,2-dichlorobenzene-d4	*30.04*		ug/l		*30*		*100*	*70-130*		
Batch 482831B - E624.1										
Blank (CD29614-BLK)						Prepared & Analyzed: 10-Jun-19				
Tert-butyl alcohol	**ND**		ug/l	10			ND	-		
Surrogate: % Bromofluorobenzene	*94*		ug/l		*30*		*94*	*70-130*		
Surrogate: % Dibromofluoromethane	*103*		ug/l		*30*		*103*	*70-130*		
Surrogate: % 1,2-dichlorobenzene-d4	*101*		ug/l		*30*		*101*	*70-130*		
Surrogate: % Toluene-d8	*100*		ug/l		*30*		*100*	*70-130*		
LCS (CD29614-LCS)						Prepared & Analyzed: 10-Jun-19				
Tert-butyl alcohol	**120.8**	l, r	ug/l	10	200		60	70-130		30
Surrogate: % 1,2-dichlorobenzene-d4	*30.56*		ug/l		*30*		*102*	*70-130*		
Surrogate: % Bromofluorobenzene	*30.34*		ug/l		*30*		*101*	*70-130*		
Surrogate: % Dibromofluoromethane	*30.87*		ug/l		*30*		*103*	*70-130*		
Surrogate: % Toluene-d8	*29.73*		ug/l		*30*		*99*	*70-130*		
LCS Dup (CD29614-LCSD)			**Source: CD29614-LCS**			Prepared & Analyzed: 10-Jun-19				
Tert-butyl alcohol	**227.9**	r	ug/l	10	200		114	70-130	62.1	30
Surrogate: % 1,2-dichlorobenzene-d4	*30.04*		ug/l		*30*		*100*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E624.1										
Batch 482831B - E624.1										
LCS Dup (CD29614-LCSD)			**Source: CD29614-LCS**		Prepared & Analyzed: 10-Jun-19					
Surrogate: % Toluene-d8	*29.91*		ug/l		*30*		*100*	*70-130*		
Surrogate: % Bromofluorobenzene	*30.71*		ug/l		*30*		*102*	*70-130*		
Surrogate: % Dibromofluoromethane	*29.97*		ug/l		*30*		*100*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E1664A										
Batch 482485A - E1664A										
Blank (CD28410-BLK)						Prepared & Analyzed: 10-Jun-19				
O&G, Non-polar Material	< 1.4		mg/l	1.4	20		BRL	-		
LCS (CD28410-LCS)						Prepared & Analyzed: 10-Jun-19				
O&G, Non-polar Material	**18.10**		mg/l	1.4	20		91	85-115		20
E200.7										
Batch 482295A - 200.7										
Blank (CD28124-BLK)						Prepared: 07-Jun-19 Analyzed: 08-Jun-19				
Zinc	< 0.0020		mg/l	0.0020			BRL	-		
Silver	< 0.0005		mg/l	0.0005			BRL	-		
Selenium	< 0.0050		mg/l	0.0050			BRL	-		
Cadmium	< 0.0005		mg/l	0.0005			BRL	-		
Lead	< 0.0010		mg/l	0.0010			BRL	-		
Chromium	< 0.0005		mg/l	0.0005			BRL	-		
Arsenic	< 0.0020		mg/l	0.0020			BRL	-		
Antimony	< 0.0025		mg/l	0.0025			BRL	-		
Iron	< 0.0050		mg/l	0.0050			BRL	-		
Copper	< 0.0025		mg/l	0.0025			BRL	-		
LCS (CD28124-LCS)						Prepared: 07-Jun-19 Analyzed: 08-Jun-19				
Copper	**1.072**		mg/l	0.0025	1		107	75-125		20
Zinc	**1.048**		mg/l	0.0020	1		105	75-125		20
Silver	**0.2581**		mg/l	0.0005	0.25		103	75-125		20
Selenium	**1.011**		mg/l	0.0050	1		101	75-125		20
Nickel	**1.077**		mg/l	0.0005	1		108	75-125		20
Iron	**1.047**		mg/l	0.0050	1		105	75-125		20
Chromium	**1.045**		mg/l	0.0005	1		105	75-125		20
Cadmium	**1.047**		mg/l	0.0005	1		105	75-125		20
Arsenic	**2.059**		mg/l	0.0020	2		103	75-125		20
Antimony	**2.245**		mg/l	0.0025	2		112	75-125		20
Lead	**2.105**		mg/l	0.0010	2		105	75-125		20
LCS Dup (CD28124-LCSD)			**Source: CD28124-LCS**			Prepared: 07-Jun-19 Analyzed: 08-Jun-19				
Cadmium	**1.032**		mg/l	0.0005	1		103	75-125	1.9	20
Silver	**0.2511**		mg/l	0.0005	0.25		100	75-125	3.0	20
Selenium	**0.9974**		mg/l	0.0050	1		99.7	75-125	1.3	20
Nickel	**1.060**		mg/l	0.0005	1		106	75-125	1.9	20
Zinc	**1.029**		mg/l	0.0020	1		103	75-125	1.9	20
Lead	**2.076**		mg/l	0.0010	2		104	75-125	1.0	20
Chromium	**1.030**		mg/l	0.0005	1		103	75-125	1.9	20
Arsenic	**2.025**		mg/l	0.0020	2		101	75-125	2.0	20
Antimony	**2.211**		mg/l	0.0025	2		111	75-125	0.9	20
Copper	**1.049**		mg/l	0.0025	1		105	75-125	1.9	20
Iron	**1.047**		mg/l	0.0050	1		105	75-125	0.0	20
Blank (CE28124-BLK)						Prepared: 07-Jun-19 Analyzed: 10-Jun-19				
Nickel	< 0.0005		mg/l	0.0005			BRL	-		
E245.1										
Batch 482209A - SW7470A										
Blank (CD29056-BLK)						Prepared & Analyzed: 10-Jun-19				
Mercury	< 0.0002		mg/l	0.0002			BRL	-		
LCS (CD29056-LCS)						Prepared & Analyzed: 10-Jun-19				
Mercury	**0.002413**		mg/l	0.0002	0.0025		96.5	75-125		30
E335.4										

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E335.4										
Batch 482323A - SW9012B										
Blank (CD27173-BLK)						Prepared: 07-Jun-19 Analyzed: 10-Jun-19				
Total Cyanide	< 0.010		mg/l	0.010			BRL	-		
LCS (CD27173-LCS)						Prepared: 07-Jun-19 Analyzed: 10-Jun-19				
Total Cyanide	**0.4010**		mg/l	0.010	0.429		93.5	90-110		30
E350.1										
Batch 482247A - E350.1										
Blank (CD27630-BLK)						Prepared: 07-Jun-19 Analyzed: 08-Jun-19				
Ammonia as Nitrogen	< 0.05	c1	mg/l	0.05			BRL	-		
LCS (CD27630-LCS)						Prepared: 07-Jun-19 Analyzed: 08-Jun-19				
Ammonia as Nitrogen	**4.860**	c1	mg/l	0.05	4.72		103	90-110		20
E608										
Batch 482363A - SW3510C										
Blank (CD28874-BLK)						Prepared: 07-Jun-19 Analyzed: 10-Jun-19				
PCB-1248	**ND**		ug/l	0.050			ND	-		
PCB-1016	**ND**		ug/l	0.050			ND	-		
PCB-1268	**ND**		ug/l	0.050			ND	-		
PCB-1262	**ND**		ug/l	0.050			ND	-		
PCB-1260	**ND**		ug/l	0.050			ND	-		
PCB-1254	**ND**		ug/l	0.050			ND	-		
PCB-1232	**ND**		ug/l	0.050			ND	-		
PCB-1242	**ND**		ug/l	0.050			ND	-		
PCB-1221	**ND**		ug/l	0.050			ND	-		
Surrogate: % TCMX	*87*		ug/l		*100*		*87*	*30-150*		
Surrogate: % DCBP	*70*		ug/l		*100*		*70*	*30-150*		
LCS (CD28874-LCS)						Prepared: 07-Jun-19 Analyzed: 10-Jun-19				
PCB-1232	**ND**		ug/l	0.050	500			40-140		20
PCB-1268	**ND**		ug/l	0.050	500			40-140		20
PCB-1262	**ND**		ug/l	0.050				40-140		20
PCB-1260	**577.7**		ug/l	0.050	500		116	40-140		20
PCB-1254	**ND**		ug/l	0.050	500			40-140		20
PCB-1242	**ND**		ug/l	0.050	500			40-140		20
PCB-1221	**ND**		ug/l	0.050	500			40-140		20
PCB-1016	**545.0**		ug/l	0.050	500		109	40-140		20
PCB-1248	**ND**		ug/l	0.050	500			40-140		20
Surrogate: % TCMX	*41.68*		ug/l		*40*		*104*	*30-150*		
Surrogate: % DCBP	*33.76*	r	ug/l		*40*		*84*	*30-150*		
LCS Dup (CD28874-LCSD)			**Source: CD28874-LCS**			Prepared: 07-Jun-19 Analyzed: 10-Jun-19				
PCB-1232	**ND**		ug/l	0.050	500			40-140		20
PCB-1268	**ND**		ug/l	0.050	500			40-140		20
PCB-1262	**ND**		ug/l	0.050				40-140		20
PCB-1260	**522.6**		ug/l	0.050	500		105	40-140	10.0	20
PCB-1254	**ND**		ug/l	0.050	500			40-140		20
PCB-1221	**ND**		ug/l	0.050	500			40-140		20
PCB-1016	**567.1**		ug/l	0.050	500		113	40-140	3.6	20
PCB-1242	**ND**		ug/l	0.050	500			40-140		20
PCB-1248	**ND**		ug/l	0.050	500			40-140		20
Surrogate: % TCMX	*48.40*		ug/l		*40*		*121*	*30-150*		
Surrogate: % DCBP	*50.77*	r	ug/l		*40*		*127*	*30-150*		
E624										

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E624										
Batch 482831A - E624										
Blank (CD29614-BLK)						Prepared & Analyzed: 10-Jun-19				
Dibromochloromethane	**ND**		ug/l	0.50			ND	-		
Methyl t-butyl ether (MTBE)	**ND**		ug/l	1.0			ND	-		
Methyl ethyl ketone	**ND**		ug/l	5.0			ND	-		
m&p-Xylene	**ND**		ug/l	1.0			ND	-		
Isopropylbenzene	**ND**		ug/l	1.0			ND	-		
Hexachlorobutadiene	**ND**		ug/l	0.40			ND	-		
Chlorobenzene	**ND**		ug/l	1.0			ND	-		
Ethylbenzene	**ND**		ug/l	1.0			ND	-		
Chloroethane	**ND**		ug/l	1.0			ND	-		
Dibromomethane	**ND**		ug/l	1.0			ND	-		
cis-1,3-Dichloropropene	**ND**		ug/l	0.40			ND	-		
cis-1,2-Dichloroethene	**ND**		ug/l	1.0			ND	-		
Chloromethane	**ND**		ug/l	1.0			ND	-		
Chloroform	**ND**		ug/l	1.0			ND	-		
Methylene chloride	**ND**		ug/l	1.0			ND	-		
Dichlorodifluoromethane	**ND**		ug/l	1.0			ND	-		
Tetrahydrofuran (THF)	**ND**		ug/l	2.5			ND	-		
Vinyl chloride	**ND**		ug/l	1.0			ND	-		
Trichlorotrifluoroethane	**ND**		ug/l	1.0			ND	-		
Trichlorofluoromethane	**ND**		ug/l	1.0			ND	-		
Trichloroethene	**ND**		ug/l	1.0			ND	-		
trans-1,4-dichloro-2-butene	**ND**		ug/l	5.0			ND	-		
2-Hexanone	**ND**		ug/l	5.0			ND	-		
trans-1,3-Dichloropropene	**ND**		ug/l	0.40			ND	-		
trans-1,2-Dichloroethene	**ND**		ug/l	1.0			ND	-		
Toluene	**ND**		ug/l	1.0			ND	-		
Naphthalene	**ND**		ug/l	1.0			ND	-		
Tetrachloroethene	**ND**		ug/l	1.0			ND	-		
tert-Butylbenzene	**ND**		ug/l	1.0			ND	-		
Styrene	**ND**		ug/l	1.0			ND	-		
sec-Butylbenzene	**ND**		ug/l	1.0			ND	-		
p-Isopropyltoluene	**ND**		ug/l	1.0			ND	-		
o-Xylene	**ND**		ug/l	1.0			ND	-		
n-Propylbenzene	**ND**		ug/l	1.0			ND	-		
n-Butylbenzene	**ND**		ug/l	1.0			ND	-		
Carbon tetrachloride	**ND**		ug/l	1.0			ND	-		
1,1-Dichloropropene	**ND**		ug/l	1.0			ND	-		
Carbon Disulfide	**ND**		ug/l	1.0			ND	-		
1,2-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
4-Chlorotoluene	**ND**		ug/l	1.0			ND	-		
1,2-Dibromo-3-chloropropane	**ND**		ug/l	1.0			ND	-		
1,2,4-Trimethylbenzene	**ND**		ug/l	1.0			ND	-		
1,2,4-Trichlorobenzene	**ND**		ug/l	1.0			ND	-		
1,2-Dichloropropane	**ND**		ug/l	1.0			ND	-		
1,2,3-Trichlorobenzene	**ND**		ug/l	1.0			ND	-		
1,2-Dichloroethane	**ND**		ug/l	1.0			ND	-		
1,1-Dichloroethene	**ND**		ug/l	1.0			ND	-		
1,1,1-Trichloroethane	**ND**		ug/l	1.0			ND	-		
1,1-Dichloroethane	**ND**		ug/l	1.0			ND	-		
1,1,2-Trichloroethane	**ND**		ug/l	1.0			ND	-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E624										
Batch 482831A - E624										
Blank (CD29614-BLK)						Prepared & Analyzed: 10-Jun-19				
1,1,2,2-Tetrachloroethane	**ND**		ug/l	0.50			ND	-		
1,1,1,2-Tetrachloroethane	**ND**		ug/l	1.0			ND	-		
1,2,3-Trichloropropane	**ND**		ug/l	1.0			ND	-		
Benzene	**ND**		ug/l	0.70			ND	-		
Bromomethane	**ND**		ug/l	1.0			ND	-		
Bromoform	**ND**		ug/l	1.0			ND	-		
Bromodichloromethane	**ND**		ug/l	0.50			ND	-		
1,2-Dibromoethane	**ND**		ug/l	1.0			ND	-		
Bromobenzene	**ND**		ug/l	1.0			ND	-		
1,3,5-Trimethylbenzene	**ND**		ug/l	1.0			ND	-		
Acrylonitrile	**ND**		ug/l	5.0			ND	-		
Acetone	**ND**		ug/l	5.0			ND	-		
4-Methyl-2-pentanone	**ND**		ug/l	5.0			ND	-		
2-Isopropyltoluene	**ND**		ug/l	1.0			ND	-		
2-Chlorotoluene	**ND**		ug/l	1.0			ND	-		
2,2-Dichloropropane	**ND**		ug/l	1.0			ND	-		
1,4-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
1,3-Dichloropropane	**ND**		ug/l	1.0			ND	-		
1,3-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
Bromochloromethane	**ND**		ug/l	1.0			ND	-		
Surrogate: % 1,2-dichlorobenzene-d4	*101*		ug/l		*30*		*101*	*70-130*		
Surrogate: % Bromofluorobenzene	*94*		ug/l		*30*		*94*	*70-130*		
Surrogate: % Dibromofluoromethane	*103*		ug/l		*30*		*103*	*70-130*		
Surrogate: % Toluene-d8	*100*		ug/l		*30*		*100*	*70-130*		
LCS (CD29614-LCS)						Prepared & Analyzed: 10-Jun-19				
Trichlorofluoromethane	**17.88**		ug/l	1.0	20		89	70-130		30
Dibromochloromethane	**23.95**		ug/l	0.50	20		120	70-130		30
trans-1,4-dichloro-2-butene	**107.2**		ug/l	5.0	100		107	70-130		30
Methyl ethyl ketone	**21.35**		ug/l	5.0	20		107	40-160		30
m&p-Xylene	**42.00**		ug/l	1.0	40		105	70-130		30
Isopropylbenzene	**20.46**		ug/l	1.0	20		102	70-130		30
Hexachlorobutadiene	**19.73**		ug/l	0.40	20		99	70-130		30
Ethylbenzene	**20.91**		ug/l	1.0	20		105	70-130		30
Methylene chloride	**20.82**		ug/l	1.0	20		104	70-130		30
Dibromomethane	**20.49**		ug/l	1.0	20		102	70-130		30
Naphthalene	**20.14**		ug/l	1.0	20		101	70-130		30
cis-1,3-Dichloropropene	**20.78**		ug/l	0.40	20		104	70-130		30
cis-1,2-Dichloroethene	**21.06**		ug/l	1.0	20		105	70-130		30
Chloromethane	**18.36**		ug/l	1.0	20		92	40-160		30
Chloroform	**20.69**		ug/l	1.0	20		103	70-130		30
Chloroethane	**18.64**		ug/l	1.0	20		93	70-130		30
Chlorobenzene	**20.98**		ug/l	1.0	20		105	70-130		30
Dichlorodifluoromethane	**19.08**		ug/l	1.0	20		95	40-160		30
tert-Butylbenzene	**20.51**		ug/l	1.0	20		103	70-130		30
Vinyl chloride	**19.03**		ug/l	1.0	20		95	70-130		30
Trichlorotrifluoroethane	**19.35**		ug/l	1.0	20		97	70-130		30
Trichloroethene	**20.33**		ug/l	1.0	20		102	70-130		30
trans-1,3-Dichloropropene	**20.80**		ug/l	0.40	20		104	70-130		30
trans-1,2-Dichloroethene	**21.14**		ug/l	1.0	20		106	70-130		30
Toluene	**20.24**		ug/l	1.0	20		101	70-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E624										
Batch 482831A - E624										
LCS (CD29614-LCS)					Prepared & Analyzed: 10-Jun-19					
Methyl t-butyl ether (MTBE)	**18.50**		ug/l	1.0	20		92	70-130		30
Tetrachloroethene	**19.87**		ug/l	1.0	20		99	70-130		30
Bromomethane	**16.23**		ug/l	1.0	20		81	40-160		30
Styrene	**21.10**		ug/l	1.0	20		106	70-130		30
sec-Butylbenzene	**22.20**		ug/l	1.0	20		111	70-130		30
p-Isopropyltoluene	**20.64**		ug/l	1.0	20		103	70-130		30
o-Xylene	**21.22**		ug/l	1.0	20		106	70-130		30
n-Propylbenzene	**20.35**		ug/l	1.0	20		102	70-130		30
n-Butylbenzene	**20.84**		ug/l	1.0	20		104	70-130		30
Tetrahydrofuran (THF)	**48.98**		ug/l	2.5	50		98	70-130		30
1,2,3-Trichlorobenzene	**18.83**		ug/l	1.0	20		94	70-130		30
1,2-Dichloropropane	**20.68**		ug/l	1.0	20		103	70-130		30
1,2-Dichloroethane	**21.14**		ug/l	1.0	20		106	70-130		30
1,2-Dichlorobenzene	**20.69**		ug/l	1.0	20		103	70-130		30
1,2-Dibromoethane	**22.13**		ug/l	1.0	20		111	70-130		30
1,2-Dibromo-3-chloropropane	**24.13**		ug/l	1.0	20		121	70-130		30
1,2,4-Trimethylbenzene	**20.55**		ug/l	1.0	20		103	70-130		30
Carbon tetrachloride	**22.12**		ug/l	1.0	20		111	70-130		30
1,2,3-Trichloropropane	**22.36**		ug/l	1.0	20		112	70-130		30
1,3-Dichloropropane	**21.39**		ug/l	1.0	20		107	70-130		30
1,1-Dichloropropene	**20.19**		ug/l	1.0	20		101	70-130		30
1,1-Dichloroethene	**21.52**		ug/l	1.0	20		108	70-130		30
1,1-Dichloroethane	**21.06**		ug/l	1.0	20		105	70-130		30
1,1,2-Trichloroethane	**20.56**		ug/l	1.0	20		103	70-130		30
1,1,2,2-Tetrachloroethane	**22.92**		ug/l	0.50	20		115	70-130		30
1,1,1-Trichloroethane	**20.52**		ug/l	1.0	20		103	70-130		30
1,2,4-Trichlorobenzene	**19.42**		ug/l	1.0	20		97	70-130		30
4-Methyl-2-pentanone	**20.28**		ug/l	5.0	20		101	40-160		30
1,1,1,2-Tetrachloroethane	**22.48**		ug/l	1.0	20		112	70-130		30
Bromoform	**23.94**		ug/l	1.0	20		120	70-130		30
Bromodichloromethane	**21.54**		ug/l	0.50	20		108	70-130		30
Bromochloromethane	**21.46**		ug/l	1.0	20		107	70-130		30
Bromobenzene	**20.48**		ug/l	1.0	20		102	70-130		30
Benzene	**20.26**		ug/l	0.70	20		101	70-130		30
1,3,5-Trimethylbenzene	**20.84**		ug/l	1.0	20		104	70-130		30
Acetone	**20.13**		ug/l	5.0	20		101	40-160		30
1,3-Dichlorobenzene	**20.90**		ug/l	1.0	20		104	70-130		30
4-Chlorotoluene	**20.35**		ug/l	1.0	20		102	70-130		30
2-Isopropyltoluene	**18.93**		ug/l	1.0	20		95	70-130		30
2-Hexanone	**20.40**		ug/l	5.0	20		102	40-160		30
2-Chlorotoluene	**20.26**		ug/l	1.0	20		101	70-130		30
2,2-Dichloropropane	**20.22**		ug/l	1.0	20		101	70-130		30
1,4-Dichlorobenzene	**20.85**		ug/l	1.0	20		104	70-130		30
Carbon Disulfide	**19.11**		ug/l	1.0	20		96	70-130		30
Acrylonitrile	**19.51**		ug/l	5.0	20		98	70-130		30
Surrogate: % Bromofluorobenzene	*30.34*		ug/l		*30*		*101*	*70-130*		
Surrogate: % Dibromofluoromethane	*30.87*		ug/l		*30*		*103*	*70-130*		
Surrogate: % Toluene-d8	*29.73*		ug/l		*30*		*99*	*70-130*		
Surrogate: % 1,2-dichlorobenzene-d4	*30.56*		ug/l		*30*		*102*	*70-130*		
LCS Dup (CD29614-LCSD)			**Source: CD29614-LCS**		Prepared & Analyzed: 10-Jun-19					

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E624										
Batch 482831A - E624										
LCS Dup (CD29614-LCSD)			**Source: CD29614-LCS**		Prepared & Analyzed: 10-Jun-19					
Chloromethane	**19.05**		ug/l	1.0	20		95	40-160	3.2	30
Methyl ethyl ketone	**21.29**		ug/l	5.0	20		106	40-160	0.9	30
m&p-Xylene	**43.32**		ug/l	1.0	40		108	70-130	2.8	30
Isopropylbenzene	**21.09**		ug/l	1.0	20		105	70-130	2.9	30
Hexachlorobutadiene	**19.02**		ug/l	0.40	20		95	70-130	4.1	30
Ethylbenzene	**21.21**		ug/l	1.0	20		106	70-130	0.9	30
Dichlorodifluoromethane	**20.05**		ug/l	1.0	20		100	40-160	5.1	30
Dibromomethane	**20.90**		ug/l	1.0	20		104	70-130	1.9	30
Dibromochloromethane	**23.12**		ug/l	0.50	20		116	70-130	3.4	30
Methylene chloride	**21.13**		ug/l	1.0	20		106	70-130	1.9	30
cis-1,2-Dichloroethene	**21.34**		ug/l	1.0	20		107	70-130	1.9	30
o-Xylene	**21.89**		ug/l	1.0	20		109	70-130	2.8	30
Chloroform	**21.30**		ug/l	1.0	20		106	70-130	2.9	30
Chloroethane	**21.27**		ug/l	1.0	20		106	70-130	13.1	30
Chlorobenzene	**21.31**		ug/l	1.0	20		107	70-130	1.9	30
Carbon tetrachloride	**21.54**		ug/l	1.0	20		108	70-130	2.7	30
Carbon Disulfide	**19.78**		ug/l	1.0	20		99	70-130	3.1	30
cis-1,3-Dichloropropene	**20.87**		ug/l	0.40	20		104	70-130	0.0	30
Tetrahydrofuran (THF)	**49.19**		ug/l	2.5	50		98	70-130	0.0	30
Vinyl chloride	**20.06**		ug/l	1.0	20		100	70-130	5.1	30
Trichlorotrifluoroethane	**20.09**		ug/l	1.0	20		100	70-130	3.0	30
Trichlorofluoromethane	**19.54**		ug/l	1.0	20		98	70-130	9.6	30
Trichloroethene	**20.15**		ug/l	1.0	20		101	70-130	1.0	30
trans-1,4-dichloro-2-butene	**108.5**		ug/l	5.0	100		109	70-130	1.9	30
trans-1,3-Dichloropropene	**20.66**		ug/l	0.40	20		103	70-130	1.0	30
n-Butylbenzene	**21.21**		ug/l	1.0	20		106	70-130	1.9	30
Toluene	**20.83**		ug/l	1.0	20		104	70-130	2.9	30
Bromomethane	**18.37**		ug/l	1.0	20		92	40-160	12.7	30
Tetrachloroethene	**20.06**		ug/l	1.0	20		100	70-130	1.0	30
tert-Butylbenzene	**21.16**		ug/l	1.0	20		106	70-130	2.9	30
Styrene	**21.51**		ug/l	1.0	20		108	70-130	1.9	30
sec-Butylbenzene	**22.44**		ug/l	1.0	20		112	70-130	0.9	30
p-Isopropyltoluene	**20.97**		ug/l	1.0	20		105	70-130	1.9	30
Methyl t-butyl ether (MTBE)	**18.58**		ug/l	1.0	20		93	70-130	1.1	30
n-Propylbenzene	**20.83**		ug/l	1.0	20		104	70-130	1.9	30
trans-1,2-Dichloroethene	**21.53**		ug/l	1.0	20		108	70-130	1.9	30
1,1-Dichloroethane	**21.54**		ug/l	1.0	20		108	70-130	2.8	30
1,2-Dichloroethane	**21.09**		ug/l	1.0	20		105	70-130	0.9	30
1,2-Dichlorobenzene	**20.63**		ug/l	1.0	20		103	70-130	0.0	30
1,2-Dibromoethane	**21.87**		ug/l	1.0	20		109	70-130	1.8	30
1,2-Dibromo-3-chloropropane	**22.41**		ug/l	1.0	20		112	70-130	7.7	30
1,2,4-Trimethylbenzene	**20.98**		ug/l	1.0	20		105	70-130	1.9	30
1,2,4-Trichlorobenzene	**19.20**		ug/l	1.0	20		96	70-130	1.0	30
1,2-Dichloropropane	**21.21**		ug/l	1.0	20		106	70-130	2.9	30
1,1-Dichloropropene	**20.60**		ug/l	1.0	20		103	70-130	2.0	30
1,2,3-Trichlorobenzene	**18.43**		ug/l	1.0	20		92	70-130	2.2	30
1,1,2-Trichloroethane	**20.59**		ug/l	1.0	20		103	70-130	0.0	30
1,1,2,2-Tetrachloroethane	**23.07**		ug/l	0.50	20		115	70-130	0.0	30
1,1,1-Trichloroethane	**21.20**		ug/l	1.0	20		106	70-130	2.9	30
1,1,1,2-Tetrachloroethane	**22.87**		ug/l	1.0	20		114	70-130	1.8	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E624										
Batch 482831A - E624										
LCS Dup (CD29614-LCSD)			**Source: CD29614-LCS**		Prepared & Analyzed: 10-Jun-19					
Bromoform	**23.60**		ug/l	1.0	20		118	70-130	1.7	30
Naphthalene	**19.47**		ug/l	1.0	20		97	70-130	4.0	30
1,2,3-Trichloropropane	**22.58**		ug/l	1.0	20		113	70-130	0.9	30
2-Hexanone	**20.23**		ug/l	5.0	20		101	40-160	1.0	30
Benzene	**20.58**		ug/l	0.70	20		103	70-130	2.0	30
Acrylonitrile	**19.97**		ug/l	5.0	20		100	70-130	2.0	30
Acetone	**20.50**		ug/l	5.0	20		102	40-160	1.0	30
4-Methyl-2-pentanone	**20.45**		ug/l	5.0	20		102	40-160	1.0	30
1,3,5-Trimethylbenzene	**21.30**		ug/l	1.0	20		106	70-130	1.9	30
4-Chlorotoluene	**20.86**		ug/l	1.0	20		104	70-130	1.9	30
Bromobenzene	**20.96**		ug/l	1.0	20		105	70-130	2.9	30
2-Isopropyltoluene	**19.23**		ug/l	1.0	20		96	70-130	1.0	30
Bromochloromethane	**21.72**		ug/l	1.0	20		109	70-130	1.9	30
2-Chlorotoluene	**20.78**		ug/l	1.0	20		104	70-130	2.9	30
2,2-Dichloropropane	**19.95**		ug/l	1.0	20		100	70-130	1.0	30
1,4-Dichlorobenzene	**20.93**		ug/l	1.0	20		105	70-130	1.0	30
1,3-Dichloropropane	**23.30**		ug/l	1.0	20		116	70-130	8.1	30
1,1-Dichloroethene	**22.18**		ug/l	1.0	20		111	70-130	2.7	30
1,3-Dichlorobenzene	**21.16**		ug/l	1.0	20		106	70-130	1.9	30
Bromodichloromethane	**21.74**		ug/l	0.50	20		109	70-130	0.9	30
Surrogate: % Dibromofluoromethane	*29.97*		ug/l		*30*		*100*	*70-130*		
Surrogate: % 1,2-dichlorobenzene-d4	*30.04*		ug/l		*30*		*100*	*70-130*		
Surrogate: % Toluene-d8	*29.91*		ug/l		*30*		*100*	*70-130*		
Surrogate: % Bromofluorobenzene	*30.71*		ug/l		*30*		*102*	*70-130*		
E625.1/E625.1SIM										
Batch 482093A - E625.1										
Blank (CD27853-BLK)						Prepared: 06-Jun-19 Analyzed: 10-Jun-19				
Acenaphthylene	**ND**		ug/l	0.50			ND	-		
Hexachlorocyclopentadiene	**ND**		ug/l	0.50			ND	-		
Hexachlorobutadiene	**ND**		ug/l	0.50			ND	-		
Hexachlorobenzene	**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(g,h,i)perylene	**ND**		ug/l	0.50			ND	-		
Benzo(b)fluoranthene	**ND**		ug/l	0.50			ND	-		
Benzo(a)anthracene	**ND**		ug/l	0.50			ND	-		
Acenaphthene	**ND**		ug/l	0.50			ND	-		
Nitrobenzene	**ND**		ug/l	0.50			ND	-		
N-Nitrosodimethylamine	**ND**		ug/l	0.05			ND	-		
Pentachlorophenol	**ND**		ug/l	0.50			ND	-		
Phenanthrene	**ND**		ug/l	0.50			ND	-		
Pyridine	**ND**		ug/l	0.50			ND	-		
Indeno(1,2,3-c,d)pyrene	**ND**		ug/l	0.50			ND	-		
Benzo(a)pyrene	**ND**		ug/l	0.50			ND	-		
Surrogate: % 2,4,6-Tribromophenol	*91*		ug/l		*7.5*		*91*	*15-130*		
Surrogate: % Phenol-d5	*72*		ug/l		*7.5*		*72*	*10-130*		
Surrogate: % Nitrobenzene-d5	*83*		ug/l		*5*		*83*	*15-130*		
Surrogate: % 2-Fluorobiphenyl	*61*		ug/l		*5*		*61*	*30-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E625.1/E625.1SIM										
Batch 482093A - E625.1										
Blank (CD27853-BLK)					Prepared: 06-Jun-19 Analyzed: 10-Jun-19					
Surrogate: % Terphenyl-d14	*78*		ug/l		*5*		*78*	*30-130*		
Surrogate: % 2-Fluorophenol	*72*		ug/l		*7.5*		*72*	*10-130*		
LCS (CD27853-LCS)					Prepared: 06-Jun-19 Analyzed: 10-Jun-19					
Hexachlorocyclopentadiene	**1.647**		ug/l	0.50	5		33	30-130		20
Acenaphthylene	**3.820**		ug/l	0.50	5		76	54-126		74
Benzo(a)anthracene	**5.137**		ug/l	0.50	5		103	42-133		53
Pyridine	**2.531**	r	ug/l	0.50	5		51	30-130		20
Benzo(b)fluoranthene	**5.042**		ug/l	0.50	5		101	42-140		71
Benzo(a)pyrene	**4.505**		ug/l	0.50	5		90	32-148		72
Benzo(k)fluoranthene	**5.441**		ug/l	0.50	5		109	25-146		63
Chrysene	**4.682**		ug/l	0.50	5		94	44-140		87
Dibenz(a,h)anthracene	**5.769**		ug/l	0.50	5		115	10-200		126
Hexachlorobutadiene	**3.188**		ug/l	0.50	5		64	38-120		62
Indeno(1,2,3-c,d)pyrene	**5.717**		ug/l	0.50	5		114	10-151		99
Nitrobenzene	**3.379**	r	ug/l	0.50	5		68	54-158		62
N-Nitrosodimethylamine	**3.638**	r	ug/l	0.05	5		73	30-130		20
Pentachlorophenol	**3.104**		ug/l	0.50	5		62	38-152		86
Phenanthrene	**3.763**		ug/l	0.50	5		75	65-120		39
Acenaphthene	**3.786**		ug/l	0.50	5		76	60-132		48
Hexachlorobenzene	**4.160**		ug/l	0.50	5		83	8-142		55
Benzo(g,h,i)perylene	**4.618**		ug/l	0.50	5		92	10-195		97
Surrogate: % 2-Fluorobiphenyl	*3.269*	r	ug/l		*5*		*65*	*30-130*		
Surrogate: % 2-Fluorophenol	*3.892*		ug/l		*7.5*		*52*	*10-130*		
Surrogate: % Nitrobenzene-d5	*4.247*	r	ug/l		*5*		*85*	*15-130*		
Surrogate: % Phenol-d5	*5.172*	r	ug/l		*7.5*		*69*	*10-130*		
Surrogate: % Terphenyl-d14	*4.259*		ug/l		*5*		*85*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*7.974*		ug/l		*7.5*		*106*	*15-130*		
LCS Dup (CD27853-LCSD)			**Source: CD27853-LCS**		Prepared: 06-Jun-19 Analyzed: 10-Jun-19					
Pyridine	**3.191**	r	ug/l	0.50	5		64	30-130	22.6	20
Hexachlorobenzene	**4.224**		ug/l	0.50	5		84	8-142	1.2	55
Hexachlorobutadiene	**0**	I	ug/l	0.50	5		<10	38-120	NC	62
Indeno(1,2,3-c,d)pyrene	**5.758**		ug/l	0.50	5		115	10-151	0.9	99
N-Nitrosodimethylamine	**0.7990**	I, r	ug/l	0.05	5		16	30-130	128.1	20
Dibenz(a,h)anthracene	**6.150**		ug/l	0.50	5		123	10-200	6.7	126
Phenanthrene	**3.784**		ug/l	0.50	5		76	65-120	1.3	39
Hexachlorocyclopentadiene	**0.4188**	I	ug/l	0.50	5		<10	30-130	NC	20
Pentachlorophenol	**3.149**		ug/l	0.50	5		63	38-152	1.6	86
Acenaphthene	**3.362**		ug/l	0.50	5		67	60-132	12.6	48
Benzo(k)fluoranthene	**5.558**		ug/l	0.50	5		111	25-146	1.8	63
Benzo(g,h,i)perylene	**4.646**		ug/l	0.50	5		93	10-195	1.1	97
Benzo(b)fluoranthene	**5.127**		ug/l	0.50	5		103	42-140	2.0	71
Benzo(a)pyrene	**4.550**		ug/l	0.50	5		91	32-148	1.1	72
Benzo(a)anthracene	**5.218**		ug/l	0.50	5		104	42-133	1.0	53
Acenaphthylene	**3.235**		ug/l	0.50	5		65	54-126	15.6	74
Nitrobenzene	**0.6252**	I, r	ug/l	0.50	5		13	54-158	135.8	62
Chrysene	**4.721**		ug/l	0.50	5		94	44-140	0.0	87
Surrogate: % Nitrobenzene-d5	*0.7094*	I, r	ug/l		*5*		*14*	*15-130*		
Surrogate: % 2-Fluorophenol	*0.06900*	I	ug/l		*7.5*		*<10*	*10-130*		
Surrogate: % 2-Fluorobiphenyl	*2.461*	r	ug/l		*5*		*49*	*30-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E625.1/E625.1SIM										
Batch 482093A - E625.1										
LCS Dup (CD27853-LCSD)			**Source: CD27853-LCS**			Prepared: 06-Jun-19 Analyzed: 10-Jun-19				
Surrogate: % 2,4,6-Tribromophenol	*8.135*		ug/l		*7.5*		*108*	*15-130*		
Surrogate: % Terphenyl-d14	*4.518*		ug/l		*5*		*90*	*30-130*		
Surrogate: % Phenol-d5	*1.217*	r	ug/l		*7.5*		*16*	*10-130*		
Blank (CE27853-BLK)						Prepared: 06-Jun-19 Analyzed: 11-Jun-19				
2,4-Dinitrotoluene	**ND**		ug/l	3.5			ND	-		
1,2-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
2,6-Dichlorophenol	**ND**		ug/l	10			ND	-		
2,4-Dinitrophenol	**ND**		ug/l	1.0			ND	-		
2,4-Dimethylphenol	**ND**		ug/l	1.0			ND	-		
2,4-Dichlorophenol	**ND**		ug/l	1.0			ND	-		
2,4,5-Trichlorophenol	**ND**		ug/l	1.0			ND	-		
1,2-Diphenylhydrazine	**ND**		ug/l	1.6			ND	-		
1,2,4-Trichlorobenzene	**ND**		ug/l	3.5			ND	-		
2,4,6-Trichlorophenol	**ND**		ug/l	1.0			ND	-		
1,3-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
4,6-Dinitro-2-methylphenol	**ND**		ug/l	1.0			ND	-		
Benzyl butyl phthalate	**ND**		ug/l	1.5			ND	-		
Benzyl alcohol	**ND**		ug/l	5.0			ND	-		
Benzoic acid	**ND**		ug/l	10			ND	-		
Benzidine	**ND**		ug/l	4.5			ND	-		
Pyrene	**ND**		ug/l	1.5			ND	-		
4-Nitrophenol	**ND**		ug/l	1.0			ND	-		
1,4-Dichlorobenzene	**ND**		ug/l	1.0			ND	-		
4-Chlorophenyl phenyl ether	**ND**		ug/l	1.0			ND	-		
4-Chloroaniline	**ND**		ug/l	3.5			ND	-		
Bis(2-chloroethoxy)methane	**ND**		ug/l	3.5			ND	-		
4-Bromophenyl phenyl ether	**ND**		ug/l	3.5			ND	-		
Anthracene	**ND**		ug/l	1.5			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-Nitrophenol	**ND**		ug/l	1.0			ND	-		
2-Nitroaniline	**ND**		ug/l	3.5			ND	-		
2-Methylphenol (o-cresol)	**ND**		ug/l	1.0			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	-		
4-Chloro-3-methylphenol	**ND**		ug/l	1.0			ND	-		
Hexachloroethane	**ND**		ug/l	3.5			ND	-		
Phenol	**ND**		ug/l	1.0			ND	-		
N-Nitrosodiphenylamine	**ND**		ug/l	3.5			ND	-		
N-Nitrosodi-n-propylamine	**ND**		ug/l	3.5			ND	-		
4-Nitroaniline	**ND**		ug/l	5.0			ND	-		
Isophorone	**ND**		ug/l	3.5			ND	-		
Bis(2-chloroethyl)ether	**ND**		ug/l	1.0			ND	-		
Fluorene	**ND**		ug/l	1.5			ND	-		
Fluoranthene	**ND**		ug/l	1.5			ND	-		
Di-n-octylphthalate	**ND**		ug/l	1.5			ND	-		
Di-n-butylphthalate	**ND**		ug/l	1.5			ND	-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E625.1/E625.1SIM										
Batch 482093A - E625.1										
Blank (CE27853-BLK)					Prepared: 06-Jun-19 Analyzed: 11-Jun-19					
Diethyl phthalate	**ND**		ug/l	1.5			ND	-		
Naphthalene	**ND**		ug/l	1.5			ND	-		
Dibenzofuran	**ND**		ug/l	3.5			ND	-		
Bis(2-ethylhexyl)phthalate	**3.2**		ug/l	1.5			3.2	-		
Dimethylphthalate	**ND**		ug/l	1.5			ND	-		
Bis(2-chloroisopropyl)ether	**ND**		ug/l	1.0			ND	-		
Surrogate: % 2-Fluorophenol	*51*		ug/l		*7.5*		*51*	*10-130*		
Surrogate: % 2-Fluorobiphenyl	*72*		ug/l		*5*		*72*	*30-130*		
Surrogate: % Nitrobenzene-d5	*70*		ug/l		*5*		*70*	*15-130*		
Surrogate: % Phenol-d5	*61*		ug/l		*7.5*		*61*	*10-130*		
Surrogate: % Terphenyl-d14	*75*		ug/l		*5*		*75*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*72*		ug/l		*7.5*		*72*	*15-130*		
LCS (CE27853-LCS)					Prepared: 06-Jun-19 Analyzed: 11-Jun-19					
N-Nitrosodiphenylamine	**38.85**		ug/l	3.5	50		78	30-130		20
Fluoranthene	**45.03**		ug/l	1.5	50		90	43-121		66
Diethyl phthalate	**45.71**		ug/l	1.5	50		91	10-120		100
Bis(2-ethylhexyl)phthalate	**49.09**		ug/l	1.5	50		98	29-137		82
Bis(2-chloroisopropyl)ether	**30.17**	I	ug/l	1.0	50		60	63-139		76
Di-n-butylphthalate	**47.85**		ug/l	1.5	50		96	8-120		47
Di-n-octylphthalate	**51.63**		ug/l	1.5	50		103	19-132		69
Fluorene	**41.21**		ug/l	1.5	50		82	70-120		38
Hexachloroethane	**30.58**		ug/l	3.5	50		61	55-120		52
Isophorone	**40.02**		ug/l	3.5	50		80	47-180		93
N-Nitrosodi-n-propylamine	**43.39**		ug/l	3.5	50		87	14-198		87
Phenol	**30.89**	r	ug/l	1.0	50		62	17-120		64
Pyrene	**44.87**		ug/l	1.5	50		90	70-120		49
Dibenzofuran	**40.59**		ug/l	3.5	50		81	30-130		20
Bis(2-chloroethyl)ether	**30.86**		ug/l	1.0	50		62	43-126		108
Naphthalene	**34.84**	r	ug/l	1.5	50		70	36-120		65
2,4,6-Trichlorophenol	**44.41**		ug/l	1.0	50		89	52-129		58
2-Methylnaphthalene	**37.55**	r	ug/l	3.5	50		75	30-130		20
2-Chloronaphthalene	**38.79**	r	ug/l	3.5	50		78	65-120		24
2,6-Dinitrotoluene	**45.45**		ug/l	3.5	50		91	68-137		48
2,6-Dichlorophenol	**37.23**	r	ug/l	10	50		74	30-130		20
2,4-Dinitrotoluene	**49.09**		ug/l	3.5	50		98	48-127		42
2,4-Dinitrophenol	**43.43**		ug/l	1.0	50		87	10-173		132
1,2,4-Trichlorobenzene	**34.79**	r	ug/l	3.5	50		70	57-130		50
2,4-Dichlorophenol	**41.32**		ug/l	1.0	50		83	53-122		50
2-Methylphenol (o-cresol)	**37.33**	r	ug/l	1.0	50		75	30-130		20
2,4,5-Trichlorophenol	**43.51**		ug/l	1.0	50		87	30-130		20
1,4-Dichlorobenzene	**29.70**		ug/l	1.0	50		59	30-130		20
1,3-Dichlorobenzene	**30.18**		ug/l	1.0	50		60	46-154		20
1,2-Diphenylhydrazine	**44.37**		ug/l	1.6	50		89	30-130		20
1,2-Dichlorobenzene	**30.13**		ug/l	1.0	50		60	30-130		20
Dimethylphthalate	**44.25**		ug/l	1.5	50		89	10-120		183
Bis(2-chloroethoxy)methane	**40.51**	r	ug/l	3.5	50		81	49-165		54
2,4-Dimethylphenol	**40.91**		ug/l	1.0	50		82	42-120		58
4-Chloroaniline	**43.97**	r	ug/l	3.5	50		88	30-130		20
Benzyl butyl phthalate	**48.76**		ug/l	1.5	50		98	10-140		60
Benzyl alcohol	**39.28**	r	ug/l	5.0	50		79	30-130		20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E625.1/E625.1SIM										
Batch 482093A - E625.1										
LCS (CE27853-LCS)					Prepared: 06-Jun-19 Analyzed: 11-Jun-19					
Benzoic acid	**18.23**	r	ug/l	10	50		36	30-130		20
Benzidine	**43.17**		ug/l	4.5	50		86	30-130		20
Anthracene	**43.68**		ug/l	1.5	50		87	43-120		66
4-Nitrophenol	**55.13**		ug/l	1.0	50		110	13-129		131
2-Chlorophenol	**33.94**		ug/l	1.0	50		68	36-120		61
4-Chlorophenyl phenyl ether	**42.21**		ug/l	1.0	50		84	38-145		61
2-Nitroaniline	**66.10**	l	ug/l	3.5	50		132	30-130		20
4-Chloro-3-methylphenol	**48.52**		ug/l	1.0	50		97	41-128		73
4-Bromophenyl phenyl ether	**43.42**		ug/l	3.5	50		87	65-120		43
4,6-Dinitro-2-methylphenol	**49.47**		ug/l	1.0	50		99	30-130		20
3-Nitroaniline	**52.23**		ug/l	5.0	50		104	30-130		20
3,3'-Dichlorobenzidine	**32.84**		ug/l	5.0	50		66	8-213		108
3&4-Methylphenol (m&p-cresol)	**44.79**	r	ug/l	1.0	50		90	30-130		20
2-Nitrophenol	**38.20**	r	ug/l	1.0	50		76	45-167		55
4-Nitroaniline	**45.95**		ug/l	5.0	50		92	30-130		20
Surrogate: % 2-Fluorobiphenyl	*35.17*	r	ug/l		*50*		*70*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*69.29*		ug/l		*75*		*92*	*15-130*		
Surrogate: % Nitrobenzene-d5	*35.40*	r	ug/l		*50*		*71*	*15-130*		
Surrogate: % 2-Fluorophenol	*36.69*		ug/l		*75*		*49*	*10-130*		
Surrogate: % Terphenyl-d14	*40.01*		ug/l		*50*		*80*	*30-130*		
Surrogate: % Phenol-d5	*45.97*	r	ug/l		*75*		*61*	*10-130*		
LCS Dup (CE27853-LCSD)			**Source: CD27853-LCS**		Prepared: 06-Jun-19 Analyzed: 11-Jun-19					
Benzoic acid	**36.07**	r	ug/l	10	50		72	30-130	66.7	20
Bis(2-chloroisopropyl)ether	**2.158**	l	ug/l	1.0	50		<10	63-139	NC	76
Bis(2-chloroethyl)ether	**1.546**	l	ug/l	1.0	50		<10	43-126	NC	108
2,4-Dinitrophenol	**45.59**		ug/l	1.0	50		91	10-173	4.5	132
Bis(2-chloroethoxy)methane	**18.35**	l, r	ug/l	3.5	50		37	49-165	74.6	54
Benzyl alcohol	**17.20**	r	ug/l	5.0	50		34	30-130	79.6	20
Diethyl phthalate	**44.65**		ug/l	1.5	50		89	10-120	2.2	100
Benzidine	**47.52**		ug/l	4.5	50		95	30-130	9.9	20
Anthracene	**42.45**		ug/l	1.5	50		85	43-120	2.3	66
4-Nitrophenol	**55.74**		ug/l	1.0	50		111	13-129	0.9	131
4-Nitroaniline	**43.02**		ug/l	5.0	50		86	30-130	6.7	20
4-Chlorophenyl phenyl ether	**39.42**		ug/l	1.0	50		79	38-145	6.1	61
4-Chloroaniline	**23.57**	r	ug/l	3.5	50		47	30-130	60.7	20
Benzyl butyl phthalate	**47.92**		ug/l	1.5	50		96	10-140	2.1	60
Dibenzofuran	**36.37**		ug/l	3.5	50		73	30-130	10.4	20
Dimethylphthalate	**43.06**		ug/l	1.5	50		86	10-120	3.4	183
Di-n-butylphthalate	**47.23**		ug/l	1.5	50		94	8-120	2.1	47
Di-n-octylphthalate	**50.67**		ug/l	1.5	50		101	19-132	2.0	69
Fluoranthene	**44.12**		ug/l	1.5	50		88	43-121	2.2	66
Fluorene	**38.47**		ug/l	1.5	50		77	70-120	6.3	38
Hexachloroethane	**1.144**	l	ug/l	3.5	50		<10	55-120	NC	52
Isophorone	**27.98**		ug/l	3.5	50		56	47-180	35.3	93
Naphthalene	**8.591**	l, r	ug/l	1.5	50		17	36-120	121.8	65
N-Nitrosodi-n-propylamine	**20.99**		ug/l	3.5	50		42	14-198	69.8	87
N-Nitrosodiphenylamine	**37.77**		ug/l	3.5	50		76	30-130	2.6	20
Phenol	**7.654**	l, r	ug/l	1.0	50		15	17-120	122.1	64
Pyrene	**43.65**		ug/l	1.5	50		87	70-120	3.4	49
4-Chloro-3-methylphenol	**43.16**		ug/l	1.0	50		86	41-128	12.0	73

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E625.1/E625.1SIM										
Batch 482093A - E625.1										
LCS Dup (CE27853-LCSD)			**Source: CD27853-LCS**		Prepared: 06-Jun-19 Analyzed: 11-Jun-19					
Bis(2-ethylhexyl)phthalate	**48.79**		ug/l	1.5	50		98	29-137	0.0	82
2,6-Dinitrotoluene	**43.27**		ug/l	3.5	50		87	68-137	4.5	48
2,6-Dichlorophenol	**22.87**	r	ug/l	10	50		46	30-130	46.7	20
4-Bromophenyl phenyl ether	**41.38**		ug/l	3.5	50		83	65-120	4.7	43
1,2-Dichlorobenzene	**1.033**	I	ug/l	1.0	50		<10	30-130	NC	20
1,2-Diphenylhydrazine	**41.83**		ug/l	1.6	50		84	30-130	5.8	20
1,3-Dichlorobenzene	**1.118**	I	ug/l	1.0	50		<10	46-154	NC	20
1,4-Dichlorobenzene	**1.055**	I	ug/l	1.0	50		<10	30-130	NC	20
2,4,5-Trichlorophenol	**40.76**		ug/l	1.0	50		82	30-130	5.9	20
2,4,6-Trichlorophenol	**39.91**		ug/l	1.0	50		80	52-129	10.7	58
2,4-Dichlorophenol	**26.19**	I	ug/l	1.0	50		52	53-122	45.9	50
2,4-Dinitrotoluene	**47.28**		ug/l	3.5	50		95	48-127	3.1	42
1,2,4-Trichlorobenzene	**6.470**	I, r	ug/l	3.5	50		13	57-130	137.3	50
2-Chloronaphthalene	**28.03**	I, r	ug/l	3.5	50		56	65-120	32.8	24
2-Chlorophenol	**1.937**	I	ug/l	1.0	50		<10	36-120	NC	61
2-Methylnaphthalene	**20.44**	r	ug/l	3.5	50		41	30-130	58.6	20
2-Methylphenol (o-cresol)	**14.32**	I, r	ug/l	1.0	50		29	30-130	88.5	20
2-Nitroaniline	**60.90**		ug/l	3.5	50		122	30-130	7.9	20
2-Nitrophenol	**12.77**	I, r	ug/l	1.0	50		26	45-167	98.0	55
3&4-Methylphenol (m&p-cresol)	**24.30**	r	ug/l	1.0	50		49	30-130	59.0	20
3,3'-Dichlorobenzidine	**32.05**		ug/l	5.0	50		64	8-213	3.1	108
3-Nitroaniline	**42.87**		ug/l	5.0	50		86	30-130	18.9	20
4,6-Dinitro-2-methylphenol	**48.63**		ug/l	1.0	50		97	30-130	2.0	20
2,4-Dimethylphenol	**27.88**		ug/l	1.0	50		56	42-120	37.7	58
Surrogate: % 2-Fluorobiphenyl	*24.95*	r	ug/l		*50*		*50*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*66.25*		ug/l		*75*		*88*	*15-130*		
Surrogate: % Nitrobenzene-d5	*6.523*	I, r	ug/l		*50*		*13*	*15-130*		
Surrogate: % Terphenyl-d14	*39.55*		ug/l		*50*		*79*	*30-130*		
Surrogate: % Phenol-d5	*11.54*	r	ug/l		*75*		*15*	*10-130*		
Surrogate: % 2-Fluorophenol	*0.2452*	I	ug/l		*75*		*<10*	*10-130*		
SM2540D-11										
Batch 482192A - SM2540D-11										
Blank (CD27905-BLK)					Prepared & Analyzed: 07-Jun-19					
Total Suspended Solids	< 5.0		mg/l	5.0	87.1		BRL	-		
LCS (CD27905-LCS)					Prepared & Analyzed: 07-Jun-19					
Total Suspended Solids	**78.00**		mg/l	5.0	87.1		90	85-115		
SM4500CLE										
Batch 482272A - SM4500CLE										
Blank (CD28960-BLK)					Prepared & Analyzed: 07-Jun-19					
Chloride	< 3.0		mg/l	3.0			BRL	-		
LCS (CD28960-LCS)					Prepared & Analyzed: 07-Jun-19					
Chloride	**29.09**		mg/l	3.0	89690721€		97.0	90-110		20
SW8015D MOD										
Batch 482580A - SW8015D MOD										
Blank (CD28482-BLK)					Prepared & Analyzed: 10-Jun-19					
Ethanol	**ND**		mg/l	1.0			ND	-		
Surrogate: % 2-Pentanol(surr)	*95*		mg/l		*10*		*95*	*70-130*		
LCS (CD28482-LCS)					Prepared & Analyzed: 10-Jun-19					

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8015D MOD										
Batch 482580A - SW8015D MOD										
LCS (CD28482-LCS)							Prepared & Analyzed: 10-Jun-19			
Ethanol	**12.89**		mg/l	1.0	10		129	70-130		30
Surrogate: % 2-Pentanol(surr)	*10.26*		mg/l		*10*		*103*	*70-130*		
LCS Dup (CD28482-LCSD)			**Source: CD28482-LCS**				Prepared & Analyzed: 10-Jun-19			
Ethanol	**10.35**		mg/l	1.0	10		104	70-130	21.5	30
Surrogate: % 2-Pentanol(surr)	*7.585*		mg/l		*10*		*76*	*70-130*		
SW8260C (OXY)										
Batch 482831B - SW8260C (OXY)										
Blank (CD29614-BLK)							Prepared & Analyzed: 10-Jun-19			
1,4-Dioxane	**ND**		ug/l	100			ND	-		
Diethyl ether	**ND**		ug/l	1.0			ND	-		
LCS (CD29614-LCS)							Prepared & Analyzed: 10-Jun-19			
1,4-Dioxane	**279.2**	r	ug/l	100	400		70	40-160		30
Diethyl ether	**20.17**		ug/l	1.0	20		101	70-130		30
LCS Dup (CD29614-LCSD)			**Source: CD29614-LCS**				Prepared & Analyzed: 10-Jun-19			
Diethyl ether	**20.25**		ug/l	1.0	20		101	70-130	0.0	30
1,4-Dioxane	**405.8**	r	ug/l	100	400		101	40-160	36.3	30

Notes and Definitions

c1	TKN is reported as Organic Nitrogen in the Blank, LCS, DUP and MS.
ClHT	The method for residual chlorine indicates that samples should be analyzed immediately. 40 CFR 136 specifies a holding time of 15 minutes from sampling to analysis.
D	Data reported from a dilution
l	This parameter is outside laboratory lcs/lcsd specified recovery limits.
r	This parameter is outside laboratory rpd specified recovery limits.
R01	The Reporting Limit has been raised to account for matrix interference.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
[2C]	Indicates concentration was reported from the secondary, confirmation column.
ClHT	The method for residual chlorine indicates that samples should be analyzed immediately. 40 CFR 136 specifies a holding time of 15 minutes from sampling to analysis. Therefore all aqueous residual chlorine samples not analyzed in the field are considered out of hold time at the time of sample receipt.

Interpretation of Total Petroleum Hydrocarbon Report

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

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

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

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

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

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

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

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

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

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

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

SLS55030

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Exxon Mobil
CHAIN OF CUSTODY RECORD

Page ____ of ____

Special Handling:

☑ Standard TAT - 7 to 10 business days

☐ Rush TAT - Date Needed: 7 day TAT

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

Report To: Kleinfelder - Attn: Robin Yarnell
4 Technology Drive, Suite 110
Westborough, MA 01581
ryarnell@kleinfelder.com
Telephone #: P:508-370-8256 / F: 508-628-1401
Project Mgr:

Invoice To: Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101
AccountsPayableUS@kleinfelder.com
P.O No.: 51341-337177 Quote #:

Project No: 1707
Site Name: ExxonMobil-Dennisport
Location: 694 Main Street, Dennisport State: MA
Sampler(s): Katie Dwyer

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

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

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Ammonia via method 350.1; Hardness 130.1	Chloride-300.0; Total Residual Chlorine-4500-Cl G and E	Total Suspended Solids via SM2540D	Total Metals via 200.7*** Hex Chrom.	Cyanide via 335.4	USEPA VOCs via 624* VOCs via 8260*	PAHs & phenols via 625 SIM**	Total PCBs 8082	TPH via 1664A Ethanol via 1666, 1671~	Check if chlorinated
						Containers					Analysis								
						3/4					List Preservative Code below: 11	11	4	5	2	11	11	11	
SLS55030-01	NPDES Dewater Sample	6/5/2019	1030	G	GW	7	6		6	X	X	X	X	X	X	X	X	X	☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐
																			☐

QA/QC Reporting Notes:
* additional charges may appply

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

* See attached for analytes to be reported
** Total Phthalates, Diethylhexyl phthalate, Benzo(a)anthracene
**Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene
**Chrysene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene
**Napthalene, phenol, pentachlorophenol
***Sb, As, Cd, Cr3, Cr6, Cu, Fe, Pb, Hg
***Ni, Se, Ag, Zn
~ or D3695

Relinquished by:	Received by:	Date:	Time:	Temp °C
Katie Dwyer on behalf of David Dec	David Dec	6-5-19	13:02	Observed 1.6
David Dec	[illegible]	6/5/19	1621	Correction Factor 0
				Corrected 1.6
				IR ID # 01

☑ EDD format:
☑ E-mail to: ryarnell@kleinfelder.com, msoule@kleinfelder.com
Jblumberg@kleinfelder.com

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

Batch Summary

1900775

General Chemistry Parameters

1900775-BLK1
1900775-BS1
1900775-CCB1
1900775-CCB2
1900775-CCV1
1900775-CCV2
1900775-MRL1
1900775-SRM1
SC55030-01 (NPDES Dewater Sample)

1900777

General Chemistry Parameters

1900777-BLK1
1900777-BS1
1900777-CCB1
1900777-CCB2
1900777-CCV1
1900777-CCV2
1900777-SRM1
SC55030-01 (NPDES Dewater Sample)

482093A

Subcontracted Analyses

CD27853-BLK
CD27853-LCS
CD27853-LCSD
CE27853-BLK
CE27853-LCS
CE27853-LCSD
SC55030-01 (NPDES Dewater Sample)
SC55030-01RE1 (NPDES Dewater Sample)
SC55030-01RE2 (NPDES Dewater Sample)

482192A

Subcontracted Analyses

CD27905-BLK
CD27905-LCS
SC55030-01 (NPDES Dewater Sample)

482209A

Subcontracted Analyses

CD29056-BLK
CD29056-LCS
SC55030-01 (NPDES Dewater Sample)

482247A

Subcontracted Analyses

CD27630-BLK
CD27630-LCS
SC55030-01 (NPDES Dewater Sample)

482272A

Subcontracted Analyses

CD28960-BLK
CD28960-LCS
SC55030-01 (NPDES Dewater Sample)

482295A

Subcontracted Analyses

CD28124-BLK
CD28124-LCS
CD28124-LCSD
CE28124-BLK
SC55030-01 (NPDES Dewater Sample)
SC55030-01RE1 (NPDES Dewater Sample)

482323A

Subcontracted Analyses

CD27173-BLK
CD27173-LCS
SC55030-01 (NPDES Dewater Sample)

482363A

Subcontracted Analyses

CD28874-BLK
CD28874-LCS
CD28874-LCSD
SC55030-01 (NPDES Dewater Sample)

482485A

Subcontracted Analyses

CD28410-BLK
CD28410-LCS
SC55030-01 (NPDES Dewater Sample)

482580A

Subcontracted Analyses

CD28482-BLK
CD28482-LCS
CD28482-LCSD
SC55030-01 (NPDES Dewater Sample)

482787A

Subcontracted Analyses

CD30719-BLK
CD30719-LCS
CD30719-LCSD
SC55030-01 (NPDES Dewater Sample)
SC55030-01RE1 (NPDES Dewater Sample)
SC55030-01RE2 (NPDES Dewater Sample)
SC55030-01RE3 (NPDES Dewater Sample)
SC55030-01RE4 (NPDES Dewater Sample)

482831A

Subcontracted Analyses

CD29614-BLK
CD29614-LCS
CD29614-LCSD
SC55030-01 (NPDES Dewater Sample)

482831B

Subcontracted Analyses

CD29614-BLK
CD29614-LCS
CD29614-LCSD
SC55030-01 (NPDES Dewater Sample)
SC55030-01RE5 (NPDES Dewater Sample)

☑ Final Report
☐ Revised Report

Report Date:
14-Jun-19 13:38

Laboratory Report
SC55031

Kleinfelder, Inc.
4 Technology Drive, Suite 110
Westborough, MA 01851
Attn: Jeremy Blumberg

Project: Exxon Mobil- 694 Main Street-Dennisport, MA
Project #: 1707

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

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

Authorized by:

Dawn Wojcik
Laboratory Director

Eurofins Spectrum Analytical holds primary certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 9 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

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

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

Sample Summary

Work Order: SC55031

Project: Exxon Mobil- 694 Main Street-Dennisport, MA

Project Number: 1707

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC55031-01	NPDES Receiving Water	Ground Water	05-Jun-19 12:00	05-Jun-19 16:21

CASE NARRATIVE:

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

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

The samples were received 1.6 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

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

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

E350.1

Blanks:

CD27630-BLK

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

Ammonia as Nitrogen

Laboratory Control Samples:

CD27630-LCS

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

Ammonia as Nitrogen

Sample Acceptance Check Form

Client:	Kleinfelder, Inc. - Westborough, MA
Project:	Exxon Mobil- 694 Main Street-Dennisport, MA / 1707
Work Order:	SC55031
Sample(s) received on:	6/5/2019

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: SC55031-01 **Client ID:** NPDES Receiving Water

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Iron	0.170		0.005	mg/l	E200.7
Lead	0.001		0.001	mg/l	E200.7
Zinc	0.014		0.002	mg/l	E200.7
Ammonia as Nitrogen	0.09		0.05	mg/l	E350.1

Lab ID: SC55031-01RE1 **Client ID:** NPDES Receiving Water

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Hardness (CaCO3)	30.1		0.1	mg/l	E200.7

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

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
NPDES Receiving Water SC55031-01	1707	Ground Water	05-Jun-19 12:00	05-Jun-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
General Chemistry Parameters													
16065-83-1	Trivalent Chromium	< 0.0050		mg/l	0.0050		1	Calculation	06-Jun-19	13-Jun-19	EDT	1900777	
18540-29-9	Hexavalent Chromium	< 0.005		mg/l	0.005	0.004	1	SM3500-Cr-B (11)/7196A	06-Jun-19 08:00	06-Jun-19 09:06	ABW	"	
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7440-36-0	Antimony	< 0.003		mg/l	0.003	0.003	1	E200.7	07-Jun-19	08-Jun-19 18:15	M-CT007	482295A	
7440-38-2	Arsenic	< 0.002		mg/l	0.002	0.002	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.001		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.001		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-50-8	Copper	< 0.003		mg/l	0.003	0.003	1	"	"	"	"	"	
7439-89-6	Iron	**0.170**		mg/l	0.005	0.005	1	"	"	"	"	"	
7439-92-1	Lead	**0.001**		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-02-0	Nickel	< 0.001		mg/l	0.001	0.001	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.005		mg/l	0.005	0.005	1	"	"	"	"	"	
7440-22-4	Silver	< 0.001		mg/l	0.001	0.001	1	"	"	"	"	"	
7440-66-6	Zinc	**0.014**		mg/l	0.002	0.002	1	"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
	Hardness (CaCO3)	**30.1**		mg/l	0.1	0.1	1	E200.7	11-Jun-19 16:30	11-Jun-19 16:30	M-CT007	482295A	
Prepared by method SW7470A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7439-97-6	Mercury	< 0.0002		mg/l	0.0002	0.0002	1	E245.1	10-Jun-19	10-Jun-19 16:05	M-CT007	482209A	
Prepared by method E350.1													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7664-41-7	Ammonia as Nitrogen	**0.09**		mg/l	0.05	0.05	1	E350.1	08-Jun-19 09:16	08-Jun-19 09:16	M-CT007	482247A	

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SM3500-Cr-B (11)/7196A										
Batch 1900777 - General Preparation										
Blank (1900777-BLK1)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	< 0.005		mg/l	0.005						
LCS (1900777-BS1)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**0.050**		mg/l	0.005	0.0500		100	90-111		
Calibration Blank (1900777-CCB1)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**-0.002**		mg/l							
Calibration Blank (1900777-CCB2)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**-0.003**		mg/l							
Calibration Check (1900777-CCV1)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**0.050**		mg/l	0.005	0.0500		100	90-110		
Calibration Check (1900777-CCV2)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**0.049**		mg/l	0.005	0.0500		99	90-110		
Duplicate (1900777-DUP1)			**Source: SC55031-01**			Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	< 0.005		mg/l	0.005		BRL				20
Matrix Spike (1900777-MS1)			**Source: SC55031-01**			Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**0.050**		mg/l	0.005	0.0500	BRL	101	85-115		
Matrix Spike Dup (1900777-MSD1)			**Source: SC55031-01**			Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**0.050**		mg/l	0.005	0.0500	BRL	101	85-115	0.2	20
Reference (1900777-SRM1)						Prepared & Analyzed: 06-Jun-19				
Hexavalent Chromium	**0.078**		mg/l	0.005	0.0742		105	83.3-116		

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E200.7										
Batch 482295A - 200.7										
Blank (CD28124-BLK)						Prepared: 07-Jun-19 Analyzed: 08-Jun-19				
Antimony	< 0.0025		mg/l	0.0025			BRL	-		
Zinc	< 0.0020		mg/l	0.0020			BRL	-		
Silver	< 0.0005		mg/l	0.0005			BRL	-		
Selenium	< 0.0050		mg/l	0.0050			BRL	-		
Lead	< 0.0010		mg/l	0.0010			BRL	-		
Iron	< 0.0050		mg/l	0.0050			BRL	-		
Copper	< 0.0025		mg/l	0.0025			BRL	-		
Chromium	< 0.0005		mg/l	0.0005			BRL	-		
Arsenic	< 0.0020		mg/l	0.0020			BRL	-		
Cadmium	< 0.0005		mg/l	0.0005			BRL	-		
LCS (CD28124-LCS)						Prepared: 07-Jun-19 Analyzed: 08-Jun-19				
Cadmium	**1.047**		mg/l	0.0005	1		105	75-125		20
Antimony	**2.245**		mg/l	0.0025	2		112	75-125		20
Chromium	**1.045**		mg/l	0.0005	1		105	75-125		20
Copper	**1.072**		mg/l	0.0025	1		107	75-125		20
Iron	**1.047**		mg/l	0.0050	1		105	75-125		20
Lead	**2.105**		mg/l	0.0010	2		105	75-125		20
Nickel	**1.077**		mg/l	0.0005	1		108	75-125		20
Selenium	**1.011**		mg/l	0.0050	1		101	75-125		20
Silver	**0.2581**		mg/l	0.0005	0.25		103	75-125		20
Zinc	**1.048**		mg/l	0.0020	1		105	75-125		20
Arsenic	**2.059**		mg/l	0.0020	2		103	75-125		20
LCS Dup (CD28124-LCSD)			**Source: CD28124-LCS**			Prepared: 07-Jun-19 Analyzed: 08-Jun-19				
Cadmium	**1.032**		mg/l	0.0005	1		103	75-125	1.9	20
Zinc	**1.029**		mg/l	0.0020	1		103	75-125	1.9	20
Silver	**0.2511**		mg/l	0.0005	0.25		100	75-125	3.0	20
Selenium	**0.9974**		mg/l	0.0050	1		99.7	75-125	1.3	20
Nickel	**1.060**		mg/l	0.0005	1		106	75-125	1.9	20
Lead	**2.076**		mg/l	0.0010	2		104	75-125	1.0	20
Iron	**1.047**		mg/l	0.0050	1		105	75-125	0.0	20
Chromium	**1.030**		mg/l	0.0005	1		103	75-125	1.9	20
Arsenic	**2.025**		mg/l	0.0020	2		101	75-125	2.0	20
Antimony	**2.211**		mg/l	0.0025	2		111	75-125	0.9	20
Copper	**1.049**		mg/l	0.0025	1		105	75-125	1.9	20
Blank (CE28124-BLK)						Prepared: 07-Jun-19 Analyzed: 10-Jun-19				
Nickel	< 0.0005		mg/l	0.0005			BRL	-		
E245.1										
Batch 482209A - SW7470A										
Blank (CD29056-BLK)						Prepared & Analyzed: 10-Jun-19				
Mercury	< 0.0002		mg/l	0.0002			BRL	-		
LCS (CD29056-LCS)						Prepared & Analyzed: 10-Jun-19				
Mercury	**0.002413**		mg/l	0.0002	0.0025		96.5	75-125		30
E350.1										
Batch 482247A - E350.1										
Blank (CD27630-BLK)						Prepared: 07-Jun-19 Analyzed: 08-Jun-19				
Ammonia as Nitrogen	< 0.05	c1	mg/l	0.05			BRL	-		
LCS (CD27630-LCS)						Prepared: 07-Jun-19 Analyzed: 08-Jun-19				
Ammonia as Nitrogen	**4.860**	c1	mg/l	0.05	4.72		103	90-110		20

Notes and Definitions

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

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

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

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

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

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

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

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

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

SCS55031

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Exxon Mobil
CHAIN OF CUSTODY RECORD

Page ____ of ____

Special Handling:

☑ Standard TAT - 7 to 10 business days

☐ Rush TAT - Date Needed: 7 day TAT

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

Report To: Kleinfelder - Attn: Robin Yarnell
4 Technology Drive, Suite 110
Westborough, MA 01581
ryarnell@kleinfelder.com
Telephone #: P:508-370-8256 / F: 508-628-1401
Project Mgr:

Invoice To: Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101
AccountsPayableUS@kleinfelder.com
P.O No.: 51341-337177 Quote #:

Project No: 1707
Site Name: ExxonMobil-Dennisport
Location: 694 Main Street, Dennisport State: MA
Sampler(s): Katie Dwyer

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

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

G= Grab C=Compsite

List Preservative Code below: 3 | 4 | 4 | 11

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: Ammonia via method 350.1	Hardness via method 130.1	Total Metals via 200.7***	200.7 Hex. Chrom.	Check if chlorinated
SCS55031	NPDES Receiving Water	6/5/2019	1200	G	SW				4	X	X	X	X	☐
														☐
														☐
														☐
														☐
														☐
														☐
														☐
														☐
														☐

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: NPDES RGP
State-specific reporting standards:

***Sb, As, Cd, Cr3, Cr6, Cu, Fe, Pb, Hg
***Ni, Se, Ag, Zn

Relinquished by:	Received by:	Date:	Time:	Temp °C
Katie Dwyer	Dave Dee	6-5-19	13:02	Observed 1.6
Dave Dee	[illegible]	6/5/19	1621	Correction Factor 0
				Corrected 1.6
				IR ID # 01

☑ EDD format:
☑ E-mail to: ryarnell@kleinfelder.com, msoule@kleinfelder.com
Jblumberg@kleinfelder.com

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

Batch Summary

1900777

General Chemistry Parameters

1900777-BLK1
1900777-BS1
1900777-CCB1
1900777-CCB2
1900777-CCV1
1900777-CCV2
1900777-DUP1
1900777-MS1
1900777-MSD1
1900777-SRM1
SC55031-01 (NPDES Receiving Water)

482209A

Subcontracted Analyses

CD29056-BLK
CD29056-LCS
SC55031-01 (NPDES Receiving Water)

482247A

Subcontracted Analyses

CD27630-BLK
CD27630-LCS
SC55031-01 (NPDES Receiving Water)

482295A

Subcontracted Analyses

CD28124-BLK
CD28124-LCS
CD28124-LCSD
CE28124-BLK
SC55031-01 (NPDES Receiving Water)
SC55031-01RE1 (NPDES Receiving Water)

☑ Final Report
☐ Revised Report

Report Date:
20-Jun-19 16:43

Laboratory Report
SC55037

Kleinfelder, Inc.
4 Technology Drive, Suite 110
Westborough, MA 01851
Attn: Jeremy Blumberg

Project: Exxon Mobil- 694 Main Street-Dennisport, MA
Project #: 1707

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

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

Authorized by:

Dawn Wojcik
Laboratory Director

Eurofins Spectrum Analytical holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 9 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

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

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

Sample Summary

Work Order: SC55037

Project: Exxon Mobil- 694 Main Street-Dennisport, MA

Project Number: 1707

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC55037-01	NPDES Dewater Sample	Ground Water	05-Jun-19 10:55	05-Jun-19 16:22

MassDEP Analytical Protocol Certification Form

Laboratory Name: Eurofins Spectrum Analytical, Inc.	**Project #:** 1707
Project Location: Exxon Mobil- 694 Main Street-Dennisport, MA	**RTN:**
This form provides certifications for the following data set: SC55037-01	
Matrices: Ground Water	

CAM Protocol

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

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

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

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

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

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

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

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

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

Dawn E. Wojcik
Laboratory Director
Date: 6/20/2019

CASE NARRATIVE:

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

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

The samples were received 1.6 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

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

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

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

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

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

EPA 200.7/3005A/6010

Samples:

SC55037-01 *NPDES Dewater Sample*

Field filtered. Laboratory preserved.

Filtration

Sample Acceptance Check Form

Client:	Kleinfelder, Inc. - Westborough, MA
Project:	Exxon Mobil- 694 Main Street-Dennisport, MA / 1707
Work Order:	SC55037
Sample(s) received on:	6/5/2019

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: SC55037-01 **Client ID:** NPDES Dewater Sample

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic (Dissolved)	0.021		0.004	mg/l	E200.7
Iron (Dissolved)	12.1		0.011	mg/l	E200.7
Zinc (Dissolved)	0.004		0.002	mg/l	E200.7

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

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
NPDES Dewater Sample SC55037-01	1707	Ground Water	05-Jun-19 10:55	05-Jun-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Soluble Metals by EPA 200/6000 Series Methods													
Prepared by method General Prep-Metal													
	Filtration	**Field filtered. Laboratory preserved.**		N/A			1	EPA 200.7/3005A/6010	06-Jun-19 09:52		ABW	1900779	
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - MACT007*													
7440-38-2	Arsenic (Dissolved)	**0.021**		mg/l	0.004	0.004	1	E200.7	18-Jun-19	19-Jun-19 23:26	M-CT007	483871A	
7440-47-3	Chromium (Dissolved)	< 0.001		mg/l	0.001	0.001	1	"	"	"	"	"	
7439-89-6	Iron (Dissolved)	**12.1**		mg/l	0.011	0.011	1	"	"	"	"	"	
7439-92-1	Lead (Dissolved)	< 0.002		mg/l	0.002	0.002	1	"	"	"	"	"	
7440-66-6	Zinc (Dissolved)	**0.004**		mg/l	0.002	0.002	1	"	"	"	"	"	

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
E200.7										
Batch 483871A - SW3005A										
Blank (CD36727-BLK)					Prepared: 18-Jun-19 Analyzed: 19-Jun-19					
Zinc (Dissolved)	< 0.002		mg/l	0.002			BRL	-		
Lead (Dissolved)	< 0.002		mg/l	0.002			BRL	-		
Iron (Dissolved)	< 0.011		mg/l	0.011			BRL	-		
Chromium (Dissolved)	< 0.001		mg/l	0.001			BRL	-		
Arsenic (Dissolved)	< 0.004		mg/l	0.004			BRL	-		
LCS (CD36727-LCS)					Prepared: 18-Jun-19 Analyzed: 19-Jun-19					
Zinc (Dissolved)	**0.9412**		mg/l	0.002	1.087		86.6	75-125		20
Lead (Dissolved)	**1.876**		mg/l	0.002	2.173		86.3	75-125		20
Iron (Dissolved)	**0.9545**		mg/l	0.011	1.087		87.8	75-125		20
Chromium (Dissolved)	**0.9349**		mg/l	0.001	1.087		86.0	75-125		20
Arsenic (Dissolved)	**1.846**		mg/l	0.004	2.173		85.0	75-125		20
LCS Dup (CD36727-LCSD)			**Source: CD36727-LCS**		Prepared: 18-Jun-19 Analyzed: 19-Jun-19					
Zinc (Dissolved)	**0.9578**		mg/l	0.002	1.087		88.1	75-125	1.7	20
Lead (Dissolved)	**1.949**		mg/l	0.002	2.173		89.7	75-125	3.9	20
Iron (Dissolved)	**0.9813**		mg/l	0.011	1.087		90.3	75-125	2.8	20
Chromium (Dissolved)	**0.9548**		mg/l	0.001	1.087		87.8	75-125	2.1	20
Arsenic (Dissolved)	**1.924**		mg/l	0.004	2.173		88.5	75-125	4.0	20

Notes and Definitions

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

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

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

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

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

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

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

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

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

SC55037 By

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Exxon Mobil
CHAIN OF CUSTODY RECORD

Page ____ of ____

Special Handling:

☑ Standard TAT - 7 to 10 business days

☐ Rush TAT - Date Needed: 7 day TAT

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

Report To: Kleinfelder - Attn: Robin Yarnell
4 Technology Drive, Suite 110
Westborough, MA 01581
ryarnell@kleinfelder.com
Telephone #: P:508-370-8256 / F: 508-628-1401
Project Mgr:

Invoice To: Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101
AccountsPayableUS@kleinfelder.com
P.O No.: 51341-337177 Quote #:

Project No: 1707
Site Name: ExxonMobil-Dennisport
Location: 694 Main Street, Dennisport State: MA
Sampler(s): Katie Dwyer

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

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

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: Total Metals via 200.7***	Check if chlorinated
SC55037-01	NPDES Dewater Sample	6/5/2019	1055	G	GW				1	X	☐
											☐
											☐
											☐
											☐
											☐
											☐
											☐
											☐
											☐

List Preservative Code below: 4

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: NPDES RGP
State-specific reporting standards:

HOLD
*** Have 1 L unpreserved filtered sample. Please add HNO_3!!

Relinquished by:	Received by:	Date:	Time:
Katie Dwyer	Dustin Dec	6-5-19	13:02
Dustin Dec	[illegible]	6/5/19	1622

Temp °C: Observed 1.6; Correction Factor 0; Corrected 1.6; IR ID # 01

☑ EDD format: ____
☑ E-mail to: ryarnell@kleinfelder.com, msoule@kleinfelder.com
Jblumberg@kleinfelder.com

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

SC55037 BM

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Exxon Mobil
CHAIN OF CUSTODY RECORD

Page ____ of ____

Special Handling:

☑ Standard TAT - 7 to 10 business days

☐ Rush TAT - Date Needed: 7 day TAT

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

Report To: Kleinfelder - Attn: Robin Yarnell
4 Technology Drive, Suite 110
Westborough, MA 01581
ryarnell@kleinfelder.com
Telephone #: P: 508-370-8256 / F: 508-628-1401
Project Mgr:

Invoice To: Kleinfelder
550 West C Street, Suite 1200
San Diego, CA 92101
AccountsPayableUS@kleinfelder.com
P.O No.: 51341-337177 Quote #:

Project No: 1707
Site Name: ExxonMobil-Dennisport
Location: 694 Main Street, Dennisport State: MA
Sampler(s): Katie Dwyer

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

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

G= Grab C=Compsite

List Preservative Code below: 4

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: ~~Total Metals 6010/200.7~~ Bm 6/17	Diss. Metals	Check if chlorinated
SC55037-01	NPDES Dewater Sample	6/5/2019	1055	G	GW				1	X	✓	☐
												☐
												☐
												☐
												☐
												☐
												☐
												☐
												☐
												☐

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: NPDES RGP
State-specific reporting standards:

HOLD
*** Have 1 L unpreserved filtered sample. Please add HNO_3!!
* As, Cr, Fe, Pb, Zn.
Bm 6/17

Relinquished by:	Received by:	Date:	Time:
Katie Dwyer	Dottie Dec	6-5-19	13:02
Dottie Dec	[illegible]	6/5/19	1622

Temp °C: Observed 1.6; Correction Factor 0; Corrected 1.6; IR ID # 01

☑ EDD format: ____
☑ E-mail to: ryarnell@kleinfelder.com, msoule@kleinfelder.com, Jblumberg@kleinfelder.com

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

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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*
SC55037-01	NPDES Dewater Sample	Soluble Arsenic by ICP	6/17/2019
SC55037-01	NPDES Dewater Sample	Soluble Chromium by ICP	6/17/2019
SC55037-01	NPDES Dewater Sample	Soluble Iron by ICP	6/17/2019
SC55037-01	NPDES Dewater Sample	Soluble Lead by ICP	6/17/2019
SC55037-01	NPDES Dewater Sample	Soluble Zinc by ICP	6/17/2019

Batch Summary

1900779

Soluble Metals by EPA 200/6000 Series Methods

SC55037-01 (NPDES Dewater Sample)

483871A

Subcontracted Analyses

CD36727-BLK
CD36727-LCS
CD36727-LCSD
SC55037-01 (NPDES Dewater Sample)

ANALYTICAL REPORT

Lab Number:	L1930275
Client:	Kleinfelder One Beacon Street Suite 8100 Boston, MA 02108
ATTN:	Madeline Soule
Phone:	(617) 497-7800
Project Name:	DENNISPORT, MA
Project Number:	01707
Report Date:	07/15/19

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: DENNISPORT, MA
Project Number: 01707

Lab Number: L1930275
Report Date: 07/15/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1930275-01	NPDES RECEIVING WATER-NS	SEAWATER	694 MAIN ST.	07/10/19 17:00	07/11/19

Project Name:	DENNISPORT, MA	**Lab Number:**	L1930275
Project Number:	01707	**Report Date:**	07/15/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: DENNISPORT, MA
Project Number: 01707
Lab Number: L1930275
Report Date: 07/15/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

The analyses performed were specified by the client.

Total Metals

L1930275-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the high concentrations of non-target elements.

Dissolved Metals

L1930275-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the high concentrations of non-target elements.

The WG1259863-3 MS recovery for antimony (154%), performed on L1930275-01, recovered outside the 70-130% acceptance criteria. The result for this analyte is considered suspect due to either the heterogeneous nature of the sample or matrix interference.

Hexavalent Chromium

L1930275-01 was analyzed with the method required holding time exceeded.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Amita Naik

Title: Technical Director/Representative Date: 07/15/19

METALS

Project Name: DENNISPORT, MA
Project Number: 01707
Lab Number: L1930275
Report Date: 07/15/19

SAMPLE RESULTS

Lab ID: L1930275-01
Client ID: NPDES RECEIVING WATER-NS
Sample Location: 694 MAIN ST.
Sample Depth:
Matrix: Seawater

Date Collected: 07/10/19 17:00
Date Received: 07/11/19
Field Prep: None

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	0.02642	J	mg/l	0.08000	0.00858	20	07/13/19 11:00	07/15/19 14:53	EPA 3005A	3,200.8	AM
Arsenic, Total	ND		mg/l	0.02000	0.00330	20	07/13/19 11:00	07/15/19 14:53	EPA 3005A	3,200.8	AM
Beryllium, Total	ND		mg/l	0.02000	0.00214	20	07/13/19 11:00	07/15/19 14:53	EPA 3005A	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00400	0.00119	20	07/13/19 11:00	07/15/19 14:53	EPA 3005A	3,200.8	AM
Chromium, Total	ND		mg/l	0.02000	0.00356	20	07/13/19 11:00	07/15/19 14:53	EPA 3005A	3,200.8	AM
Copper, Total	ND		mg/l	0.02000	0.00768	20	07/13/19 11:00	07/15/19 14:53	EPA 3005A	3,200.8	AM
Lead, Total	ND		mg/l	0.02000	0.00686	20	07/13/19 11:00	07/15/19 14:53	EPA 3005A	3,200.8	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/12/19 12:51	07/12/19 21:18	EPA 7470A	1,7470A	GD
Nickel, Total	ND		mg/l	0.04000	0.01112	20	07/13/19 11:00	07/15/19 14:53	EPA 3005A	3,200.8	AM
Selenium, Total	ND		mg/l	0.1000	0.03460	20	07/13/19 11:00	07/15/19 14:53	EPA 3005A	3,200.8	AM
Silver, Total	ND		mg/l	0.00800	0.00326	20	07/13/19 11:00	07/15/19 14:53	EPA 3005A	3,200.8	AM
Thallium, Total	ND		mg/l	0.02000	0.00286	20	07/13/19 11:00	07/15/19 14:53	EPA 3005A	3,200.8	AM
Zinc, Total	ND		mg/l	0.2000	0.06820	20	07/13/19 11:00	07/15/19 14:53	EPA 3005A	3,200.8	AM
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.020	0.020	1		07/15/19 14:53	NA	107,-	
Dissolved Metals - Mansfield Lab											
Antimony, Dissolved	0.0117	J	mg/l	0.0800	0.0086	20	07/15/19 08:24	07/15/19 13:44	EPA 3005A	3,200.8	AM
Arsenic, Dissolved	ND		mg/l	0.0200	0.0033	20	07/15/19 08:24	07/15/19 13:44	EPA 3005A	3,200.8	AM
Beryllium, Dissolved	ND		mg/l	0.0200	0.0021	20	07/15/19 08:24	07/15/19 13:44	EPA 3005A	3,200.8	AM
Cadmium, Dissolved	ND		mg/l	0.0040	0.0012	20	07/15/19 08:24	07/15/19 13:44	EPA 3005A	3,200.8	AM
Chromium, Dissolved	ND		mg/l	0.0200	0.0036	20	07/15/19 08:24	07/15/19 13:44	EPA 3005A	3,200.8	AM
Copper, Dissolved	ND		mg/l	0.0200	0.0077	20	07/15/19 08:24	07/15/19 13:44	EPA 3005A	3,200.8	AM
Lead, Dissolved	ND		mg/l	0.0200	0.0069	20	07/15/19 08:24	07/15/19 13:44	EPA 3005A	3,200.8	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/12/19 11:47	07/12/19 20:50	EPA 7470A	1,7470A	GD
Nickel, Dissolved	ND		mg/l	0.0400	0.0111	20	07/15/19 08:24	07/15/19 13:44	EPA 3005A	3,200.8	AM
Selenium, Dissolved	ND		mg/l	0.1000	0.0346	20	07/15/19 08:24	07/15/19 13:44	EPA 3005A	3,200.8	AM
Silver, Dissolved	ND		mg/l	0.0080	0.0033	20	07/15/19 08:24	07/15/19 13:44	EPA 3005A	3,200.8	AM

Project Name: DENNISPORT, MA
Lab Number: L1930275
Project Number: 01707
Report Date: 07/15/19

SAMPLE RESULTS

Lab ID: L1930275-01
Client ID: NPDES RECEIVING WATER-NS
Sample Location: 694 MAIN ST.
Sample Depth:
Matrix: Seawater

Date Collected: 07/10/19 17:00
Date Received: 07/11/19
Field Prep: None

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Thallium, Dissolved	ND		mg/l	0.0200	0.0029	20	07/15/19 08:24	07/15/19 13:44	EPA 3005A	3,200.8	AM
Zinc, Dissolved	ND		mg/l	0.2000	0.0682	20	07/15/19 08:24	07/15/19 13:44	EPA 3005A	3,200.8	AM

Project Name: DENNISPORT, MA
Project Number: 01707
Lab Number: L1930275
Report Date: 07/15/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01 Batch: WG1259196-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	07/12/19 11:47	07/12/19 20:27	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1259209-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	07/12/19 12:51	07/12/19 20:52	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1259493-1										
Antimony, Total	0.00093	J	mg/l	0.00400	0.00042	1	07/13/19 11:00	07/15/19 14:21	3,200.8	AM
Arsenic, Total	ND		mg/l	0.00100	0.00016	1	07/13/19 11:00	07/15/19 14:21	3,200.8	AM
Beryllium, Total	ND		mg/l	0.00100	0.00010	1	07/13/19 11:00	07/15/19 14:21	3,200.8	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	07/13/19 11:00	07/15/19 14:21	3,200.8	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	07/13/19 11:00	07/15/19 14:21	3,200.8	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	07/13/19 11:00	07/15/19 14:21	3,200.8	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	07/13/19 11:00	07/15/19 14:21	3,200.8	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	07/13/19 11:00	07/15/19 14:21	3,200.8	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	07/13/19 11:00	07/15/19 14:21	3,200.8	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	07/13/19 11:00	07/15/19 14:21	3,200.8	AM
Thallium, Total	0.00034	J	mg/l	0.00100	0.00014	1	07/13/19 11:00	07/15/19 14:21	3,200.8	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	07/13/19 11:00	07/15/19 14:21	3,200.8	AM

Project Name: DENNISPORT, MA
Project Number: 01707
Lab Number: L1930275
Report Date: 07/15/19

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01 Batch: WG1259863-1										
Antimony, Dissolved	0.0016	J	mg/l	0.0040	0.0004	1	07/15/19 08:24	07/15/19 13:26	3,200.8	AM
Arsenic, Dissolved	ND		mg/l	0.0010	0.0002	1	07/15/19 08:24	07/15/19 13:26	3,200.8	AM
Beryllium, Dissolved	ND		mg/l	0.0010	0.0001	1	07/15/19 08:24	07/15/19 13:26	3,200.8	AM
Cadmium, Dissolved	ND		mg/l	0.0002	0.0001	1	07/15/19 08:24	07/15/19 13:26	3,200.8	AM
Chromium, Dissolved	ND		mg/l	0.0010	0.0002	1	07/15/19 08:24	07/15/19 13:26	3,200.8	AM
Copper, Dissolved	ND		mg/l	0.0010	0.0004	1	07/15/19 08:24	07/15/19 13:26	3,200.8	AM
Lead, Dissolved	ND		mg/l	0.0010	0.0003	1	07/15/19 08:24	07/15/19 13:26	3,200.8	AM
Nickel, Dissolved	ND		mg/l	0.0020	0.0006	1	07/15/19 08:24	07/15/19 13:26	3,200.8	AM
Selenium, Dissolved	ND		mg/l	0.0050	0.0017	1	07/15/19 08:24	07/15/19 13:26	3,200.8	AM
Silver, Dissolved	ND		mg/l	0.0004	0.0002	1	07/15/19 08:24	07/15/19 13:26	3,200.8	AM
Thallium, Dissolved	0.0003	J	mg/l	0.0010	0.0001	1	07/15/19 08:24	07/15/19 13:26	3,200.8	AM
Zinc, Dissolved	ND		mg/l	0.0100	0.0034	1	07/15/19 08:24	07/15/19 13:26	3,200.8	AM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: DENNISPORT, MA

Project Number: 01707

Lab Number: L1930275

Report Date: 07/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1259196-2								
Mercury, Dissolved	90		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1259209-2								
Mercury, Total	103		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1259493-2								
Antimony, Total	93		-		85-115	-		
Arsenic, Total	105		-		85-115	-		
Beryllium, Total	104		-		85-115	-		
Cadmium, Total	110		-		85-115	-		
Chromium, Total	104		-		85-115	-		
Copper, Total	104		-		85-115	-		
Lead, Total	111		-		85-115	-		
Nickel, Total	104		-		85-115	-		
Selenium, Total	111		-		85-115	-		
Silver, Total	96		-		85-115	-		
Thallium, Total	107		-		85-115	-		
Zinc, Total	108		-		85-115	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: DENNISPORT, MA

Project Number: 01707

Lab Number: L1930275

Report Date: 07/15/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1259863-2					
Antimony, Dissolved	96	-	85-115	-	
Arsenic, Dissolved	98	-	85-115	-	
Beryllium, Dissolved	101	-	85-115	-	
Cadmium, Dissolved	101	-	85-115	-	
Chromium, Dissolved	98	-	85-115	-	
Copper, Dissolved	95	-	85-115	-	
Lead, Dissolved	108	-	85-115	-	
Nickel, Dissolved	97	-	85-115	-	
Selenium, Dissolved	101	-	85-115	-	
Silver, Dissolved	94	-	85-115	-	
Thallium, Dissolved	106	-	85-115	-	
Zinc, Dissolved	101	-	85-115	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: DENNISPORT, MA
Project Number: 01707

Lab Number: L1930275
Report Date: 07/15/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1259196-3 QC Sample: L1928797-01 Client ID: MS Sample												
Mercury, Dissolved	ND	0.005	0.00473	95		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1259209-3 WG1259209-4 QC Sample: L1928870-06 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00481	96		0.00484	97		75-125	1		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1259493-3 QC Sample: L1930741-01 Client ID: MS Sample												
Antimony, Total	0.00546	0.5	0.7762	**154**	Q	-	-		70-130	-		20
Arsenic, Total	0.0017	0.12	0.1309	108		-	-		70-130	-		20
Beryllium, Total	ND	0.05	0.05212	104		-	-		70-130	-		20
Cadmium, Total	ND	0.051	0.05678	111		-	-		70-130	-		20
Chromium, Total	ND	0.2	0.2051	102		-	-		70-130	-		20
Copper, Total	ND	0.25	0.2510	100		-	-		70-130	-		20
Lead, Total	ND	0.51	0.6343	124		-	-		70-130	-		20
Nickel, Total	ND	0.5	0.5031	101		-	-		70-130	-		20
Selenium, Total	ND	0.12	0.1341	112		-	-		70-130	-		20
Silver, Total	ND	0.05	0.04522	90		-	-		70-130	-		20
Thallium, Total	ND	0.12	0.1485	124		-	-		70-130	-		20
Zinc, Total	ND	0.5	0.5316	106		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: DENNISPORT, MA
Project Number: 01707

Lab Number: L1930275
Report Date: 07/15/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1259863-3 QC Sample: L1930275-01 Client ID: NPDES RECEIVING WATER-NS										
Antimony, Dissolved	0.0117J	0.5	0.7702	**154**	Q	-	-	70-130	-	20
Arsenic, Dissolved	ND	0.12	0.1408	117		-	-	70-130	-	20
Beryllium, Dissolved	ND	0.05	0.0542	108		-	-	70-130	-	20
Cadmium, Dissolved	ND	0.051	0.0646	127		-	-	70-130	-	20
Chromium, Dissolved	ND	0.2	0.2047	102		-	-	70-130	-	20
Copper, Dissolved	ND	0.25	0.2628	105		-	-	70-130	-	20
Lead, Dissolved	ND	0.51	0.6192	121		-	-	70-130	-	20
Nickel, Dissolved	ND	0.5	0.5315	106		-	-	70-130	-	20
Selenium, Dissolved	ND	0.12	0.1333	111		-	-	70-130	-	20
Silver, Dissolved	ND	0.05	0.0427	85		-	-	70-130	-	20
Thallium, Dissolved	ND	0.12	0.1290	108		-	-	70-130	-	20
Zinc, Dissolved	ND	0.5	0.5866	117		-	-	70-130	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: DENNISPORT, MA

Project Number: 01707

Lab Number: L1930275

Report Date: 07/15/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1259196-4 QC Sample: L1928797-01 Client ID: DUP Sample						
Mercury, Dissolved	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1259493-4 QC Sample: L1930741-01 Client ID: DUP Sample						
Antimony, Total	0.00546	0.01002	mg/l	**59**	Q	20
Beryllium, Total	ND	ND	mg/l	NC		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	ND	ND	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Nickel, Total	ND	ND	mg/l	NC		20
Selenium, Total	ND	ND	mg/l	NC		20
Zinc, Total	ND	ND	mg/l	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: DENNISPORT, MA

Project Number: 01707

Lab Number: L1930275

Report Date: 07/15/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1259863-4 QC Sample: L1930275-01 Client ID: NPDES RECEIVING WATER-NS					
Antimony, Dissolved	0.0117J	0.0241J	mg/l	NC	20
Arsenic, Dissolved	ND	ND	mg/l	NC	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Chromium, Dissolved	ND	ND	mg/l	NC	20
Copper, Dissolved	ND	ND	mg/l	NC	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Nickel, Dissolved	ND	ND	mg/l	NC	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Thallium, Dissolved	ND	0.0045J	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20

INORGANICS
&
MISCELLANEOUS

Project Name: DENNISPORT, MA
Project Number: 01707
Lab Number: L1930275
Report Date: 07/15/19

SAMPLE RESULTS

Lab ID: L1930275-01
Client ID: NPDES RECEIVING WATER-NS
Sample Location: 694 MAIN ST.
Sample Depth:
Matrix: Seawater
Date Collected: 07/10/19 17:00
Date Received: 07/11/19
Field Prep: None

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
SALINITY	28		SU	2.0	2.0	1	-	07/12/19 08:07	121,2520B	MA
Nitrogen, Ammonia	0.070	J	mg/l	0.075	0.024	1	07/12/19 19:30	07/12/19 22:22	121,4500NH3-BH	ML
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/12/19 04:00	07/12/19 05:51	1,7196A	EJ

Project Name: DENNISPORT, MA
Project Number: 01707
Lab Number: L1930275
Report Date: 07/15/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1258991-1										
Chromium, Hexavalent	ND		mg/l	0.010	0.003	1	07/12/19 04:00	07/12/19 05:41	1,7196A	EJ
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1259351-1										
Nitrogen, Ammonia	0.025	J	mg/l	0.075	0.024	1	07/12/19 19:30	07/12/19 22:15	121,4500NH3-BH	ML

Lab Control Sample Analysis

Batch Quality Control

Project Name: DENNISPORT, MA

Project Number: 01707

Lab Number: L1930275

Report Date: 07/15/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1258991-2								
Chromium, Hexavalent	98		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1259070-1								
SALINITY	100		-			-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1259351-2								
Nitrogen, Ammonia	97		-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: DENNISPORT, MA
Project Number: 01707

Lab Number: L1930275
Report Date: 07/15/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1258991-4 QC Sample: L1930275-01 Client ID: NPDES RECEIVING WATER-NS												
Chromium, Hexavalent	ND	0.1	0.104	104		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1259351-3 QC Sample: L1929884-01 Client ID: MS Sample												
Nitrogen, Ammonia	0.405	4	3.96	89		-	-		80-120	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: DENNISPORT, MA

Project Number: 01707

Lab Number: L1930275

Report Date: 07/15/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1258991-3 QC Sample: L1930275-01 Client ID: NPDES RECEIVING WATER-NS						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1259070-2 QC Sample: L1930275-01 Client ID: NPDES RECEIVING WATER-NS						
SALINITY	28	28	SU	0		
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1259351-4 QC Sample: L1929884-01 Client ID: DUP Sample						
Nitrogen, Ammonia	0.405	0.358	mg/l	12		20

Project Name: DENNISPORT, MA
Project Number: 01707

Lab Number: L1930275
Report Date: 07/15/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1930275-01A	Plastic 500ml HNO3 preserved	A	<2	<2	2.4	Y	Absent		CD-2008T(180),NI-2008T(180),BE-2008T(180),ZN-2008T(180),CU-2008T(180),AG-2008T(180),AS-2008T(180),SE-2008T(180),HG-T(28),CR-2008T(180),PB-2008T(180),SB-2008T(180),TL-2008T(180)
L1930275-01B	Plastic 500ml H2SO4 preserved	A	<2	<2	2.4	Y	Absent		NH3-4500(28)
L1930275-01C	Plastic 950ml unpreserved	A	7	7	2.4	Y	Absent		HEXCR-7196(1)
L1930275-01D	Amber 1000ml unpreserved	A	7	7	2.4	Y	Absent		-
L1930275-01E	Amber 1000ml unpreserved	A	7	7	2.4	Y	Absent		SALINITY(28)
L1930275-01X	Plastic 120ml HNO3 preserved Filtrates	A	NA		2.4	Y	Absent		AG-2008S(180),CR-2008S(180),BE-2008S(180),AS-2008S(180),PB-2008S(180),ZN-2008S(180),NI-2008S(180),SE-2008S(180),TL-2008S(180),CD-2008S(180),CU-2008S(180),SB-2008S(180),HG-S(28)

*Values in parentheses indicate holding time in days

Project Name:	DENNISPORT, MA	**Lab Number:**	L1930275
Project Number:	01707	**Report Date:**	07/15/19

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	DENNISPORT, MA	**Lab Number:**	L1930275
Project Number:	01707	**Report Date:**	07/15/19

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	DENNISPORT, MA	**Lab Number:**	L1930275
Project Number:	01707	**Report Date:**	07/15/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

107 Alpha Analytical - In-house calculation method.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

ALPHA ANALYTICAL
World Class Chemistry

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 7/12/19

ALPHA Job #: L1930275

Westborough, MA
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client: Kleinfelder
Address: One Beacon St
Suite 8100
Phone: 617-497-7800
Fax:
Email: msoule@kleinfelder.com;

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Dennisport, MA
Project Location: 694 Main St
Project #: 01707
Project Manager: Jeremy Blumberg
ALPHA Quote #: 8657

Turn-Around Time

☐ Standard ☒ Rush (ONLY IF PRE-APPROVED)

Due Date: 7/15/19 Time:

Report Information Data Deliverables

☐ FAX ☒ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info
PO #: 51341-3376

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
EPA	NPDES RGP

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes ☒ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:
EPA NPDES RGP
Saltwater sample
Dissolved metals sample to be lab filtered

ANALYSIS

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☒ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Ammonia via 350.1	Salinity via 2520B	Total metals* via 200.7 (Cr6 via 218.6)	Dissovled metals* via 200.7 (Cr6 via 218.6)									Sample Specific Comments	TOTAL # BOTTLES
30275-01	NPDES Receiving Water-NS	7/10/19	1700	SW	KMD	☒	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	SALTWATER SAMPLE	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	* Sb, As, Cd, Cr3	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	*Cr6, Cu, Fe, Pb	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	*Hg, Ni, Se, Ag	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	*Zn	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
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						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		

PLEASE ANSWER QUESTIONS ABOVE!

Container Type	P	A	P	P	-	-	-	-	-	-	-	-
Preservative	D	A	C	A	-	-	-	-	-	-	-	-

IS YOUR PROJECT MA MCP *or* CT RCP?

FORM NO: 01-01(I) (rev. 5-JAN-12)

Relinquished By:	Date/Time	Received By:	Date/Time
Kirian Dwyer	7/11/19 0900	Boston KLF Sample Fridge	7/11/19 0900
Martin [illegible]	7/11/19 1150	[illegible]	7/11/19 1150
[illegible]	7-11-19 1814	[illegible]	7/11/19 1814

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

ATTACHMENT D

Safety Data Sheets

SAFETY DATA SHEET

1. Identification

Product identifier **PetroFix**

Other means of identification None.

Recommended use Remediation of contaminants in soil and groundwater.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company Name Regenesis

Address 1011 Calle Sombra
San Clemente, CA 92673 USA

General information 949-366-8000

E-mail CustomerService@regenesis.com

Emergency phone number For Hazardous Materials Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC 24/7 at:

USA, Canada, Mexico 1-800-424-9300

International 1-703-527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Activated carbon <10 µm	7440-44-0	>25
Calcium sulfate dihydrate	10101-41-4	<10
Additive	-	<2

Composition comments All concentrations are in percent by weight unless otherwise indicated.
Components not listed are either non-hazardous or are below reportable limits.
Chemical ingredient identity and/or concentration information withheld for some or all components present is confidential business information (trade secret), and is being withheld as permitted by 29 CFR 1910.1200(i).

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed. Combustion products may include: carbon oxides, nitrogen oxides, sulfur oxides, calcium oxide.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	This material will not burn until the water has evaporated. Residue can burn. When dry may form combustible dust concentrations in air.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Activated carbon <10 µm (CAS 7440-44-0)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Activated carbon <10 µm (CAS 7440-44-0)	TWA	2 mg/m3	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Skin protection

Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Aqueous suspension.

Color Not available.

Odor Not available.

Odor threshold Not available.

pH 8 - 10

Melting point/freezing point Not available.

Initial boiling point and boiling range 212 °F (100 °C)

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Explosive properties Not explosive.

Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Avoid drying out product. May generate combustible dust if material dries.
Incompatible materials	Strong oxidizing agents. Acids.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Spray mist may irritate the respiratory system. For dry material: Dust may irritate respiratory system.
Skin contact	Prolonged or repeated exposure may cause minor irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May cause discomfort if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test Results
Activated carbon <10 µm (CAS 7440-44-0)		
Acute		
Oral		
LD50	Rat	> 10000 mg/kg

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	None known.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.

15. Regulatory information

US federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (CAS 10101-41-4)

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Activated carbon <10 µm (CAS 7440-44-0)
Calcium sulfate dihydrate (CAS 10101-41-4)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 15-February-2018

Revision date -

Version # 01

HMIS® ratings Health: 1
Flammability: 1
Physical hazard: 0

NFPA ratings

Disclaimer Regenesis cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

SAFETY DATA SHEET

1. Identification

Product identifier **PetroFix Electron Acceptor Blend**

Other means of identification None.

Recommended use Remediation of soils and groundwater.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company Name Regenesis

Address 1011 Calle Sombra
San Clemente, CA 92673 USA

General information 949-366-8000

E-mail CustomerService@regenesis.com

Emergency phone number For Hazardous Materials Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC 24/7 at:

USA, Canada, Mexico 1-800-424-9300

International 1-703-527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Serious eye damage/eye irritation Category 2B

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word Warning

Hazard statement Causes eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling.

Response If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Ammonium sulfate	7783-20-2	40 - 60
Sodium nitrate	7631-99-4	40 - 60

Composition comments All concentrations are in percent by weight unless otherwise indicated.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact	Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Dusts may irritate the respiratory tract, skin and eyes.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Use extinguishing agent suitable for type of surrounding fire.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed. Combustion products may include: nitrogen oxides, sulfur oxides, ammonia.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Material will not burn.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk. Large Spills: Wet down with water and dike for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. Shovel the material into waste container. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection	Unvented, tight fitting goggles should be worn in dusty areas.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
Skin protection	
Other	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Wear NIOSH approved respirator appropriate for airborne exposure at the point of use. Appropriate respirator selection should be made by a qualified professional. Recommended use: Wear respirator with dust filter.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Powder.
Color	White.
Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	This material will not burn.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Heat.
Incompatible materials	Strong reducing agents. Strong acids.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Dust may irritate respiratory system.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Causes eye irritation.
Ingestion	May cause discomfort if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity	Not expected to be acutely toxic.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Causes eye irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Further information	Nitrate poisoning resulting in methemoglobinemia manifested as cyanosis is rare, but possible for people with specific susceptibility traits.

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	The product solely consists of inorganic compounds which are not biodegradable.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	None known.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	Yes
Classified hazard categories	Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Ammonium sulfate	7783-20-2	40 - 60
Sodium nitrate	7631-99-4	40 - 60

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)	Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Ammonium sulfate (CAS 7783-20-2)
Sodium nitrate (CAS 7631-99-4)

US. New Jersey Worker and Community Right-to-Know Act

Sodium nitrate (CAS 7631-99-4)

US. Pennsylvania Worker and Community Right-to-Know Law

Ammonium sulfate (CAS 7783-20-2)
Sodium nitrate (CAS 7631-99-4)

US. Rhode Island RTK

Ammonium sulfate (CAS 7783-20-2)
Sodium nitrate (CAS 7631-99-4)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 15-August-2018

Revision date -

Version # 01

HMIS® ratings Health: 1
Flammability: 0
Physical hazard: 0

NFPA ratings

Disclaimer Regenesis cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

ATTACHMENT E

Fish and Wildlife Consistency Letter

United States Department of the Interior

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

In Reply Refer To: May 28, 2019
Consultation Code: 05E1NE00-2019-TA-1805
Event Code: 05E1NE00-2019-E-04458
Project Name: Dennisport, MA

Subject: Verification letter for the 'Dennisport, MA' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Madeline Soule:

The U.S. Fish and Wildlife Service (Service) received on May 28, 2019 your effects determination for the 'Dennisport, MA' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"[1] prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

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[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Dennisport, MA

2. Description

The following description was provided for the project 'Dennisport, MA':

> Dewatering and treatment of groundwater, to be discharged to existing municipal stormwater system under an EPA NPDES Remediation General Permit.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/41.6685921650352N70.12288686389572W

Determination Key Result

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

   Yes

2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")

   No

3. Will your activity purposefully **Take** northern long-eared bats?

   No

4. Is the project action area located wholly outside the White-nose Syndrome Zone?

   Automatically answered
   No

5. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

   Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

   Yes

6. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

   No

7. Will the action involve Tree Removal?
   No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

0

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?
0

ATTACHMENT F

Massachusetts Cultural Resources in Vicinity of Site

Massachusetts Cultural Resource Information System
MACRIS

MACRIS Search Results

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

Inv. No.	Property Name	Street	Town	Year
DEN.374	Ellis, Ross G. - Hopkins, Capt. Reuben House	11 Center St	Dennis	1830
DEN.375	Capron, Luther House	53 Center St	Dennis	r 1870
DEN.376	Capron, Alonzo Everett House	59 Center St	Dennis	c 1875
DEN.378	Ocean, Old Seminary	83 Center St	Dennis	1855
DEN.377	Kelley, Capt. Fernandes Geoffrey House	89 Center St	Dennis	1847
DEN.379	Peterson, Isaac Warsaw House	122 Center St	Dennis	1879
DEN.347	Sears, Bartlett House	187 Center St	Dennis	c 1750
DEN.356	Small, Augusta P. House	2 Chase Ave	Dennis	c 1910
DEN.355	Small, Augusta P. House	6 Chase Ave	Dennis	1910
DEN.354	Swift, Dr. Alfred House	45 Chase Ave	Dennis	c 1800
DEN.330	Hedge, Capt. John - Hedge, Dr. John House	46 Chase Ave	Dennis	1721
DEN.352	Kelley, Edward B. House	57 Chase Ave	Dennis	r 1915
DEN.357	Chase, Job Ship Chandler Shop	5 Depot St	Dennis	1842
DEN.358	Small, Augusta P. House	6 Depot St	Dennis	1910
DEN.359	Small, Augusta P. House	25 Depot St	Dennis	1915
DEN.340	Chase, Freeman House	28 Depot St	Dennis	1836
DEN.360	Thompson, Capt. Martin E. House	114 Depot St	Dennis	c 1880
DEN.309	Nazarene Church	143 Depot St	Dennis	1968
DEN.371	Rogers, Darius Bakery - Dennis Port Bakery	173 Depot St	Dennis	c 1882
DEN.361	Capron, Alonzo Shingle Shed - Capron Lumber Yard	174 Depot St	Dennis	1883
DEN.362	Rogers, Foster Wheelwright Shop	178 Depot St	Dennis	r 1868
DEN.372	Wixon, Joshua House	181 Depot St	Dennis	r 1820
DEN.334	Wixon, Freeman R. House	282 Depot St	Dennis	c 1873
DEN.335	Kelley, Adelbert House	287 Depot St	Dennis	c 1873
DEN.336	Chase, Capt. Freeman Davis House	298 Depot St	Dennis	c 1870
DEN.337	Whittemore, Nathan C. House	304 Depot St	Dennis	c 1870
DEN.338	Chase, Elias W. House	310 Depot St	Dennis	c 1870
DEN.339	Kelley, Capt. Stephen C. House	360 Depot St	Dennis	1858
DEN.351	Kelley, Ahira House and Grocery Store	113 Division St	Dennis	c 1870
DEN.342	Chase, Capt. Henry Harrison House	225 Division St	Dennis	c 1870
DEN.341	Ellis, Capt. Luther Lincoln House	263 Division St	Dennis	r 1850
DEN.349	Wixon, Capt. Nehemiah House	1 Gages Ln	Dennis	1823
DEN.324		Hall St	Dennis	c 1840
DEN.348	Wixon, Capt. Remark House	387 Lower County Rd	Dennis	c 1845
DEN.315	Wixon, Capt. John House	397 Lower County Rd	Dennis	1838
DEN.350	Wixon, Capt. Heman House	444 Lower County Rd	Dennis	1814
DEN.381	Terry, Ezekiel House	103 Main St	Dennis	c 1855
DEN.382	Terry, Maria Gustie - Cahoon, Wilson C. House	143 Main St	Dennis	c 1875
DEN.380	Joy, John House	195 Main St	Dennis	1760
DEN.367	Kelley, Valentine House	280 Main St	Dennis	c 1835
DEN.368	Baker, Silvester Jr. House	319 Main St	Dennis	c 1850
DEN.343	Kelly, Capt. Cyrus Hall House	12 North St	Dennis	r 1870
DEN.369	Howes, Loring E. House	397 Rt 28	Dennis	1860
DEN.370	Edward, Capt. Jonathan Phillips House	411 Rt 28	Dennis	1883
DEN.239		466 Rt 28	Dennis	c 1850
DEN.240	Nickerson, Browning K. House	528 Rt 28	Dennis	c 1875
DEN.346	Small, Thomas F. House	645 Rt 28	Dennis	r 1870
DEN.363	Wixon, Capt. Ira House	109 Sea St	Dennis	1865
DEN.364	Sternberg, Dr. Joseph E. House	110 Sea St	Dennis	1913
DEN.365	Rogers, Elisha House	115 Sea St	Dennis	1876
DEN.366	Wixon, Remark E. House	119 Sea St	Dennis	1860
DEN.304	Church of Jesus Christ of Latter Day Saints	185 Sea St	Dennis	1877
DEN.373	Robbins, Elisha Farren House	254 Sea St	Dennis	1873
DEN.326	Wixon, Heman House	17 Summer St	Dennis	1814
DEN.810	Wixon Family Burying Ground	62 Summer St	Dennis	r 1765
DEN.344	Chapman, Fred Hardware Store	17 Telegraph Rd	Dennis	r 1870
DEN.319	Kelley, Joseph House	43 Telegraph Rd	Dennis	1776
DEN.333	Kelley, Nehemiah House	48 Telegraph Rd	Dennis	c 1805
DEN.320		126 Telegraph Rd	Dennis	c 1880
DEN.196		132 Upper County Rd	Dennis	c 1750
DEN.197	Kelley, Samuel House	153 Upper County Rd	Dennis	1811
DEN.198	Kelley, David House	158 Upper County Rd	Dennis	1777
DEN.199	Our Lady of the Assumption Roman Catholic Church	187 Upper County Rd	Dennis	c 1950
DEN.200		202 Upper County Rd	Dennis	c 1800
DEN.201		222 Upper County Rd	Dennis	c 1870
DEN.202	Dennis Schoolhouse	246 Upper County Rd	Dennis	1802