July 2, 2019

Via Electronic Mail: NPDES.Generalpermits@epa.gov

U.S. Environmental Protection Agency
Remediation General Permit NOI Processing
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, Massachusetts 02109-3912

RE: EPA Remediation General Permit Notice of Intent
Vineyard Haven Xtramart
19,25 Beach Road
Tisbury, Massachusetts
MassDEP RTN 4-13294
CEA File No. 5750-05

To Whom It May Concern:

On behalf of the Drake Petroleum Company, Inc. (Drake), Corporate Environmental Advisors (CEA) respectfully submits this EPA Remediation General Permit (RGP) Notice of Intent (NOI) submittal for the above-referenced location (the "Site" or "subject property"). The RGP NOI submittal is provided as **Attachment A**. The attached Site Locus (**Figure 1**) depicts the subject property with respect to surrounding topography. The Site, identified as Map 9, Block B, Lot 13 and Lot 14 by the Town of Tisbury Assessor's Office, consists of approximately 0.73 acres (31,799 square feet) of land that includes a USTs, dispensers and four (4) single story buildings constructed on a concrete slab foundation. The subject property is located in a mixed residential/commercial area of Tisbury, Massachusetts. Soil and/or groundwater beneath the subject property has been impacted by historic gasoline underground storage tanks (USTs) located on the property.

Excavation of potential petroleum-impacted soil is proposed in a portion of the property above the current USTs and in the vicinity of the UST piping and dispensers. It is anticipated that proposed excavation and temporary dewatering and groundwater treatment activities will be initiated at the Site in 2019. The Site was assigned Massachusetts Department of Environmental Protection (MassDEP) Release Tracking Number (RTN) 4-13294 in 1994 in accordance with the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000; a Class A-2 Response Action Outcome (RAO) Statement was submitted to the MADEP for RTN 4-13294 on February 6, 2014.

This Notice of Intent is being submitted in order to obtain a permit for the short term (temporary) discharge of treated groundwater to surface water. Based on available information groundwater has been measured at the Site at depths ranging from approximately two (2) feet to six (6) feet below grade. Therefore, it is anticipated that dewatering activities and corresponding treatment of such using a temporary groundwater treatment system will be necessary to depress the groundwater table at the Site during UST Top upgrade subsurface excavation activities. The attached Site Layout (**Figure 2**) depicts pertinent Site features. The attached MassDEP Bureau of Waste Site Cleanup (BWSC) Phase 1 Site Assessment Map provided as **Figure 3** depicts surface water features and sensitive receptors located within an approximate 500 foot radius and half-mile radius of the site.

GROUNDWATER TREATMENT SYSTEM DESIGN

The proposed groundwater treatment system to be located on-site shall consist of an electric submersible pump which will pump groundwater from a temporary dewatering sump or well set within the excavation area to a 21,000-gallon fractionation (frac) tank for settling and temporary storage. Recovered groundwater shall be pumped from the frac tank using a submersible pump through bag filters to remove particulates and then through two (2) 1,000-pound capacity or greater liquid phase granular activated carbon adsorption (LGACA) vessels plumbed in series. The treated groundwater will pass through a flow meter and flow totalizer prior to being discharged to a storm drain catch basin located in Lagoon Pond Road at the intersection of Beach Road. Information provided by the Town of Tisbury Engineering Department indicates that this storm drain is connected to the underground drainage system within the Lagoon Pond Road layout where it flows easterly under across Beach Road and beneath Beach Street Extension, where it discharges into Vineyard Haven Harbor at the the end of Beach Street Extension. A process and instrumentation diagram (P&ID) of the proposed groundwater treatment system is provided as **Figure 4**. The proposed treated water discharge location and drainage outfall location is shown on **Figure 2**.

The average flow rate of the treated water discharge from the system to the storm drain system is expected to be less than 50 gallons per minute (gpm). The pumping capacity of the groundwater treatment system is 100 gpm based upon the capacity of the submersible pumps. The groundwater treatment system shall be inspected, monitored and sampled by a Grade II Wastewater Treatment Plant Operator as required in accordance with the RGP. Groundwater samples shall be collected from the influent and effluent (treated water) at the onset of discharge for analysis by a Massachusetts-certified laboratory for contaminants of concern and any additional monitoring parameters required by the RGP. In addition, groundwater samples shall also be collected from the midpoint (between LGAC units) for analysis by a Massachusetts-certified laboratory to further monitor the groundwater treatment system for potential break through of the liquid phase carbon.

GROUNDWATER PRE-CHARACTERIZATION ANALYSIS

Groundwater samples were collected on April 8, 2019 from on-site UST pad well T-2 and nearby groundwater monitoring well HTE-9 to evaluate concentrations of petroleum-related petroleum compounds in groundwater. Groundwater samples were submitted to SGS North America, Inc. (SGS), located in Dayton, New Jersey, under chain-of-custody protocol and analyzed for RGP parameters including ammonia, chloride, total suspended solids (TSS), total metals, cyanide, volatile organic compounds (VOCs), semi-VOCs (SVOCs)/ polycyclic aromatic hydrocarbons (PAHs), and total petroleum hydrocarbons (TPH) via the corresponding EPA methodologies. Refer to the laboratory analytical reports included in **Attachment B** for details of the RGP parameters, EPA methodologies and groundwater analytical results.

The composite groundwater analytical results for untreated/ unfiltered groundwater samples collected from the UST pad well T-2 and groundwater monitoring well HTE-9 on April 8, 2019 for RGP parameters are summarized in the enclosed RGP NOI data summary section (Pages 18 to 20 in the NOI, **Attachment A**). The RGP effluent limitations were obtained from the RGP Table 2 Chemical-Specific Effluent Limitations for Category I – Petroleum Related Site Remediation, found at (https://www3.epa.gov/region1/npdes/rgp.html).

Referring to the NOI data summary included in **Attachment A**, the analytical results for the untreated/unfiltered groundwater sample (RW-RGP) detected TSS, copper, iron, lead, nickel, zinc and select group I and group II PAHs concentrations above the corresponding EPA RGP technology-based effluent limitation (TBEL) and/or water quality-based effluent limitation (WQBEL) available for this report. These exceedances of RGP effluent limitations in the untreated groundwater sample may be attributable to silt in the unfiltered groundwater sample and not representative of actual groundwater (soluble) concentrations. However, it is anticipated that the proposed groundwater treatment system will reduce concentrations of TSS and PAHs below available RGP effluent limitations in treated groundwater prior to discharge. Based on available information, TSS and total group I/group II PAHs should be subject to monitoring requirements. No known sources of cadmium, copper, lead, nickel, zinc or iron have existed on-site; these minerals may be naturally occurring in native soils or are related to historic uses of the area.

RECEIVING WATERS INFORMATION

The receiving water for the treated groundwater discharge is Vineyard Haven Harbor located approximately 425 northeast of the site and approximately 500 feet east of the discharge catch basin. No 7Q10 is available for discharge to saltwater and according to Appendix V of the USEPA NOI all saltwater receiving waters have a dilution factor of 1:1. This was confirmed by the MassDEP on April 16, 2019.

RECEIVING WATER CLASSIFICATION

According to 314 CMR 4.06, Vineyard Haven Harbor, where the proposed drainage system outfall is located is designated as Class SA surface water. The Vineyard Haven Harbor is not an Outstanding Resource Water, Territorial Sea or Ocean Sancturary according to information provided by the MADEP via the MassGIS Database.

THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITAT

According to the Massachusetts Geographic Information Systems (MassGIS), online MassDEP Bureau of Waste Site Cleanup (BWSC) Phase 1 Site Assessment Map (http://maps.massgis.state.ma.us/images/dep/mcp/mcp.htm) and Natural Heritage Endangered Species Program (NHESP) online maps, no Priority Habitat of Rare Species or Estimated Habitats of Rare Wildlife are located within the work area; however, Estimated Habitats of Rare Wildlife and Priority Habitat of Rare Species are located within 500 feet of the proposed groundwater discharge location. The MassGIS maps do not depict any Areas of Critical Environmental Concern on the Site or within one-half mile of the Site or discharge location. Copies of the MassDEP Phase I Site Assessment Map (**Figure 3**) is attached and the NHESP map is provided as **Attachment C**.

As part of the Endangered Species Act eligibility determination CEA contacted the United States Department of the Interior, Fish and Wildlife Services (FWS) and requested a list of threatened and endangered species that may occur in the proposed project location and/or that may be affected by the proposed project. The FWS provided the requested list which indicates Northern Long-eared Bat as a threatened species and Roseate Tern as an endangered species identified within the work area or at the proposed groundwater discharge location. Therefore, the proposed project discharge meets FWS Criterion B. A copy of the FWS report is included in **Attachment D**.

A review of the December 28, 2016 EPA Consultation with NMFS was conducted by CEA to identify if any storm drain system discharging at the outfall location in Vineyard Haven Harbor as depicted on **Figure 2**. Shortnose Sturgeon have been identified as being present in Cape Cod Bay waters at an "adult" life cycle stage. North Atlantic Right Whales have been identified as being present in Cape Cod Bay waters as "Feeding and nursery grounds, where nursing females feed and suckle" which would represent both "adult" and "calf" stages of the life cycle. Fin Whales have been identified as having important feeding grounds located in the Great South Channel which includes the 50 meter isobaths past Cape Cod; however, no specific details of Fin Whales located within Cape Cod Bay or at which life cycle stage they would be in was determined in the EPA Consultation with NMFS. Loggerhead turtles in the "juvenile" life stage are documented as reaching areas as far north as Cape Cod Bay, although they are primarily located further south, and adult loggerhead turtles typically reach New York waters as the

northern limits of migration and prefer deeper oceanic shelves which do not exist within Cape Cod Bay. Leatherback turtles are identified as being present in Cape Cod Bay during the "adult" life cycle stage. Green turtles are identified as migrating as far north as Massachusetts waters in their "large juvenile" and "adult" life cycle stages in "foraging and/or developmental habitats"; however, the EPA Consultation with NMFS does not specify if Cape Cod Bay is a "foraging and/or developmental habitat". The EPA Consultation with NMFS states the EPA has determined that remediation activity discharges are not likely to adversely affect critical habitat for any threatened and/or endangered ESA species.

REVIEW OF NATIONAL REGISTER OF HISTORIC PLACES

A listing of all Historic Places within the Town of Tisbury (Vineyard Haven) was obtained from the Massachusetts Cultural Resources Information System (MACRIS) online database at http://mhc-macris.net/ on April 24, 2019. A copy of the MACRIS historic places report is provided as **Attachment E**. The database indicates that numerous historic places are located in the Town of Tisbury. Several historic places are located in the general vicinity of the Site; however, the project does not involve the demolition or rehabilitation of any of the historic places identified in the database. Also, historic properties are not affected by the discharge or identified in the path of the discharges regulated by this permit, and are not identified where installation or construction of treatment systems or best management practices to control such discharges are planned.

If you have any questions or require additional information, please do not hesitate to contact either of the undersigned via telephone at (508) 835-8822.

Sincerely,

Adam Guaraldi
Senior Project Geologist

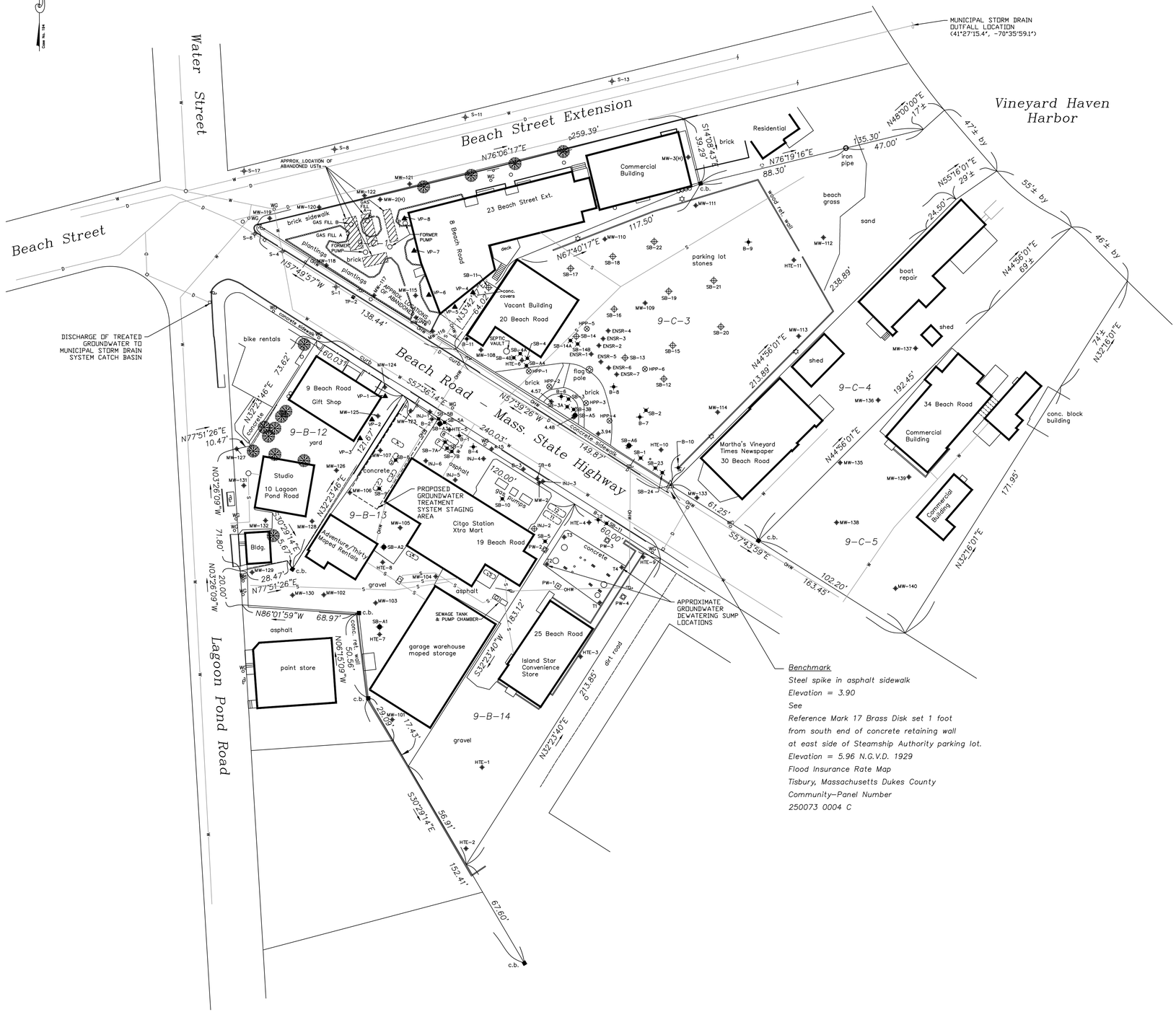
Scott VanderSea
Scott E. VanderSea, LSP, LEP
Principal Hydrogeologist

cc: Ms. Shelley Puleo (via email: puleo.shelley@epa.gov)
Ms. Cathy Vakalopoulos (via email: Catherine.Vakalopoulos@state.ma.us)
Ms. Shauna Little (via email: little.shauna@epa.gov)
Mr. Xiaodan Ruan (via email: xiaodan.ruan@state.ma.us)

FIGURES

Name: VINEYARD HAVEN
Date: 2/8/2005
Scale: 1 inch equals 666 feet

Location: 041° 27' 12.0" N 070° 36' 05.0" W
Caption: Vineyard Haven Xtra Mart
9 Beach Road
Tisbury, MA



Legend

- ..... denotes monitoring well with cover elevation
- ..... denotes spot elevation
- 9-C-3 ..... denotes Tisbury Assessor Parcel.
- c.b. ..... denotes concrete bound
- ..... denotes manhole cover
- ..... denotes water gate
- ..... denotes utility pole
- ..... denotes light pole
- ..... denotes electric
- ..... denotes tree
- ..... denotes sign
- ..... denotes fence
- VP-8 ..... denotes soil vapor monitoring point
- W ..... denotes water line
- S ..... denotes sewer line
- D ..... denotes drain line
- ..... denotes catch basin
- ..... denotes approximate soil boring location
- OHW ..... denotes overhead wires
- ..... denotes approximate soil boring location
- ..... denotes approximate soil boring location
- ..... denotes approximate soil boring location
- ..... denotes approximate test pit location

NOTE: UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT FIELD VERIFIED. ALL UNDERGROUND UTILITY LOCATIONS ARE TO BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCING ALL EXCAVATION ACTIVITIES.

Plan References

1. *Tisbury Case File No. 194*
2. *Book 256, Page 286.*
3. *Land Court 18014A.*
4. *Plan Book 9, Page 80.*

Note

All soil boring and test pit locations are approximate as shown on site plan by Corporate Environmental Advisors, Inc. SITE LAYOUT dated 1/11/07.

Site Survey
in
Tisbury, Masschusetts
Vicinity of 19 Beach Road
prepared for
Corporate Environmental Advisors, inc.
Scale: 1"=30' May 30, 2007

Sourati Engineering Group

P.O. Box 4458
107 Beach Road, Suite 202
Vineyard Haven, MA 02568
Phone (508) 693-9933 Fax (508) 693-4933

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

CEA CORPORATE ENVIRONMENTAL ADVISORS, INC.
Consultants – Engineers – Scientists
21 EAST MAIN STREET WESTBOROUGH, MA 01581

SCALE: AS SHOWN		DR. BY: K. HAZEL/LKH
DATE: 4/18/19	APP. BY: SEV	JOB NO.: 5750-05

SITE REMEDIATION LAYOUT

DRAKE PETROLEUM COMPANY, INC.
19 BEACH ROAD TISBURY, MA

FIGURE-2

MassDEP - Bureau of Waste Site Cleanup

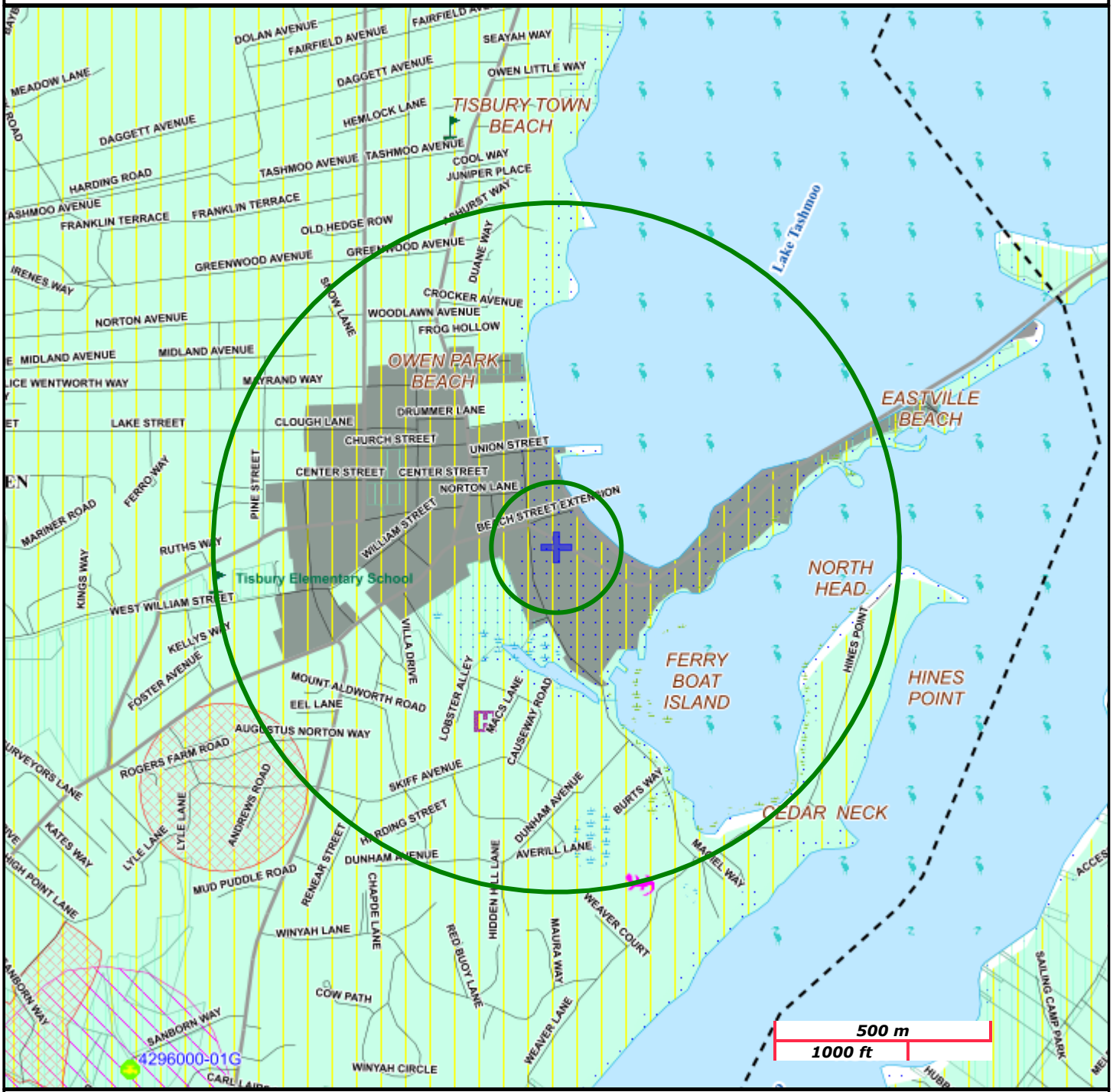
Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:
VINEYARD HAVEN XTRAMART
19 BEACH RD TISBURY, MA
4-000013294

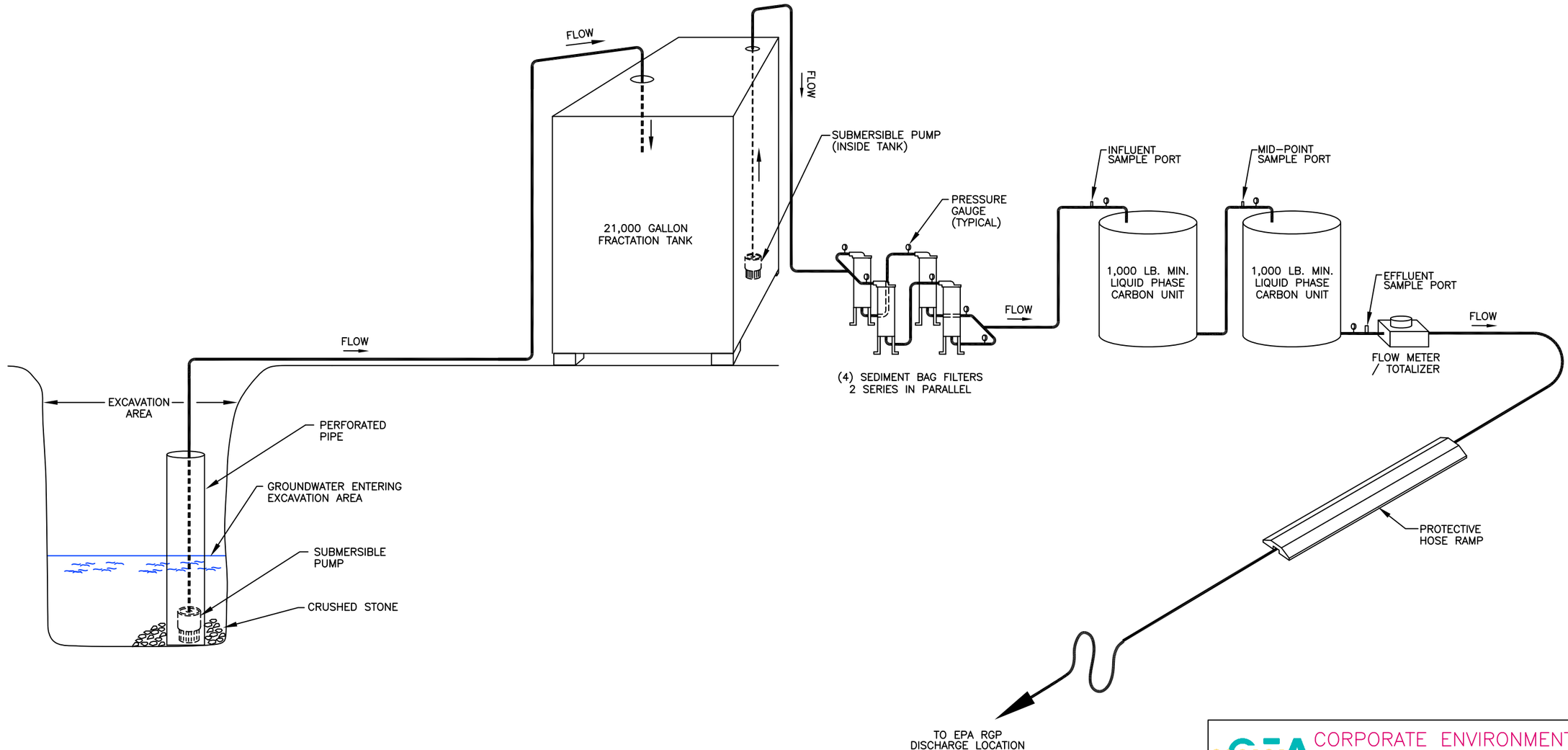
NAD83 UTM Meters:
4590330mN , 366327mE (Zone: 19)
April 25, 2019

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.



CORPORATE ENVIRONMENTAL ADVISORS
Consultants – Engineers – Scientists
21 EAST MAIN STREET WESTBOROUGH, MA 01581

SCALE: NOT TO SCALE		DR. BY: K. HAZEL/LKH
DATE: 4/18/19	APP. BY: SEV	JOB NO.: 5750-05

EXCAVATION DEWATERING
PROCESS & INSTRUMENTATION DIAGRAM

DRAKE PETROLEUM COMPANY, INC.
19 BEACH ROAD TISBURY, MA

FIGURE-4

ATTACHMENT A

EPA Remediation General Permit (RGP)
Notice of Intent (NOI) Submittal

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:
Vineyard Haven Xtramart</td><td colspan="3">Site address: 19, 25 Beach Rd
Street:</td></tr>
<tr><td>City: Tisbury</td><td>State: MA</td><td>Zip: 02568</td></tr>
<tr><td rowspan="4">2. Site owner
Drake Petroleum Company, Inc.

Owner is (check one): ☐ Federal ☐ State/Tribal ☐ Private
■ Other; if so, specify: Commercial</td><td colspan="3">Contact Person: Jason Frigon</td></tr>
<tr><td colspan="2">Telephone: 978-339-3545</td><td>Email: jfrigon@globalp.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 800 South St
Suite 500</td></tr>
<tr><td>City: Waltham</td><td>State: MA</td><td>Zip: 02454</td></tr>
<tr><td rowspan="4">3. Site operator, if different than owner
Corporate Environmental Advisors (CEA)</td><td colspan="3">Contact Person: Adam Guaraldi</td></tr>
<tr><td colspan="2">Telephone: 508-809-0311</td><td>Email: aguaraldi@cea-inc.com</td></tr>
<tr><td colspan="3">Mailing address:
Street: 21 East Main Street, Suite 201</td></tr>
<tr><td>City: Westborough</td><td>State: MA</td><td>Zip: 01581</td></tr>
<tr><td>4. NPDES permit number assigned by EPA:

NPDES permit is (check all that apply: ■ RGP ☐ DGP ☐ CGP
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:</td><td colspan="3">5. Other regulatory program(s) that apply to the site (check all that apply):
■ MA Chapter 21e; list RTN(s):
MassDEP RTN: 4-13294
☐ NH Groundwater Management Permit or Groundwater Release Detection Permit:
☐ CERCLA
☐ UIC Program
☐ POTW Pretreatment
☐ CWA Section 404</td></tr>
</table>

B. Receiving water information:

1. Name of receiving water(s):	Waterbody identification of receiving water(s):	Classification of receiving water(s):
Vineyard Haven Harbor	MA97-09	Vineyard Haven Harbor is a Class SA surface water

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

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

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

3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. For more information, contact the appropriate State as noted in Part 4.6 of the RGP. Impairment cause and Pollutants include but are not limited to: Shellfish Harvesting Due to Fecal Coliform. TMDL Count 0 according to 2014 Integrated List and Map.

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: Saltwater Receiving Water
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.	DF= 1:1 (All Saltwater per Appendix V)

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: On 4-16-2019 Xiaodan Ruan of MassDEP confirmed the 7Q10 and dilution factor.

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 See attached laboratory analytical report and receiving water summary table for surface water sample SW-1 collected on 4/8/2019.

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: Historic releases of petroleum from the underground storage tank (UST) system at the fueling station.	
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): Proposed discharge to a catch basin that drains through the municipal stormwater system and discharges to Vineyard Haven Sound surface water located east of the site. See attached figure for approximate outfall location.	Outfall location(s): (Latitude, Longitude) Approximate outfall location Latitude: 41 degrees, 27 minutes, 15.29 seconds North; Longitude: 70 degrees, 35 minutes, 58.53 seconds West.
Discharges enter the receiving water(s) via (check any that apply): ☐ Direct discharge to the receiving water ■ Indirect discharge, if so, specify: Discharge is proposed to a storm drain catch basin that connects to the municipal storm drain system and discharges to Vineyard Haven Harbor surface w ☐ A private storm sewer system ■ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ■ Yes ☐ No On 4-3-2019, Mr. Ken Maciel of the Tisbury DPW Engineering Dept. confirmed the storm drainage system outfall location and discharge to the Vineyard Haven Harbor. Notification to DPW will be provided prior to discharge to the storm drain system. Has the operator has received permission from the owner to use such system for discharges? (check one): ■ Yes ☐ No, if so, explain, with an estimated timeframe for obtaining permission: Has the operator attached a summary of any additional requirements the owner of this system has specified? (check one): ☐ Yes ■ No	
Provide the expected start and end dates of discharge(s) (month/year): Proposed for May 1, 2019 through December 31, 2019. 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 See influent groundwater analytical results for the sample GW-RGP in the attached laboratory report</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>

See influent groundwater analytical results for sample "GW-RGP" in the attached laboratory report

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	SM4500	0.2 mg/l	0.45 mg/l		Report mg/L	---
Chloride		✓	1	300	2,000 ug/l	302,000 ug/l		Report µg/l	---
Total Residual Chlorine	✓		1	SM4500	0.1 mg/l	<0.10 mg/l		0.2 mg/L	7.5 ug/l
Total Suspended Solids		✓	1	SM2540D	4 mg/L	425 mg/L		30 mg/L	30 mg/l
Antimony	✓		1	200.8	4 ug/L	<4 ug/L		206 µg/L	206 ug/l
Arsenic		✓	1	200.8	2 ug/L	12.6 ug/L		104 µg/L	104 ug/l
Cadmium	✓		1	200.8	1 ug/L	<1 ug/L		10.2 µg/L	10.2 ug/l
Chromium III		✓	1	6010/7196	0.018 ug/l	0.039 ug/l		323 µg/L	323 ug/L
Chromium VI	✓		1	7196A	0.010 ug/l	<0.010 ug/l		323 µg/L	323 ug/L
Copper		✓	1	200.8	8 ug/l	8.12 ug/l		242 µg/L	3.7 ug/l
Iron		✓	1	200.7	400 ug/l	39,400 ug/l		5,000 µg/L	5,000 ug/l
Lead		✓	1	200.8	1 ug/l	82.2 ug/l		160 µg/L	8.5 ug/l
Mercury	✓		1	245.1	0.2 ug/l	<0.2 ug/l		0.739 µg/L	0.739 ug/l
Nickel		✓	1	200.8	8 ug/l	18.5 ug/l		1,450 µg/L	8.3 ug/l
Selenium	✓		1	200.8	2 ug/l	<2 ug/l		235.8 µg/L	235.8 ug/l
Silver	✓		1	200.8	4 ug/l	<4 ug/l		35.1 µg/L	35.1 ug/l
Zinc		✓	1	200.8	80 ug/l	449 ug/l		420 µg/L	86 ug/l
Cyanide	✓		1	335.4	0.010 mg/l	<0.010 mg/l		178 mg/L	178 ug/l
B. Non-Halogenated VOCs									
Total BTEX		✓	1	624	5 ug/l	<5 ug/l		100 µg/L	---
Benzene		✓						5.0 µg/L	---
1,4 Dioxane	✓			624	500 ug/l	<500 ug/l		200 µg/L	---
Acetone	✓							7.97 mg/L	---
Phenol	✓		1	625.1	5 ug/l	<5 ug/l		1,080 µg/L	1,080 ug/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	1 ug/l	<1 ug/l		4.4 µg/L	4.4 ug/l
1,2 Dichlorobenzene	✓		1	624	1 ug/l	<1 ug/l		600 µg/L	---
1,3 Dichlorobenzene	✓		1	624	1 ug/l	<1ug/l		320 µg/L	---
1,4 Dichlorobenzene	✓		1	624	1 ug/l	<1 ug/l		5.0 µg/L	---
Total dichlorobenzene	✓		1	624	3 ug/l	<3 ug/l		763 µg/L in NH	---
1,1 Dichloroethane	✓		1	624	1 ug/l	<1 ug/l		70 µg/L	---
1,2 Dichloroethane	✓		1	624	1 ug/l	<1 ug/l		5.0 µg/L	---
1,1 Dichloroethylene	✓		1	624	1 ug/l	<1 ug/l		3.2 µg/L	---
Ethylene Dibromide	✓		1	504.1	0.02 ug/l	<0.02 ug/l		0.05 µg/L	---
Methylene Chloride	✓		1	624	2 ug/l	<2 ug/l		4.6 µg/L	---
1,1,1 Trichloroethane	✓		1	624	1 ug/l	<1 ug/l		200 µg/L	---
1,1,2 Trichloroethane	✓		1	624	1 ug/l	<1 ug/l		5.0 µg/L	---
Trichloroethylene	✓		1	624	1 ug/l	<1 ug/l		5.0 µg/L	---
Tetrachloroethylene	✓		1	624	1 ug/l	<1 ug/l		5.0 µg/L	5.0 ug/l
cis-1,2 Dichloroethylene	✓		1	624	1 ug/l	<1 ug/l		70 µg/L	---
Vinyl Chloride	✓		1	624	1 ug/l	<1 ug/l		2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates	✓		1	625	7 ug/l	<7 ug/l		190 µg/L	N/A for MA
Diethylhexyl phthalate	✓		1	625	2 ug/l	<2 ug/l		101 µg/L	101 ug/l
Total Group I PAHs		✓	1	625	0.7 ug/l	0.335 ug/l		1.0 µg/L	---
Benzo(a)anthracene		✓	1	625	0.1 ug/l	0.12 ug/l		As Total PAHs	0.0038 ug/l
Benzo(a)pyrene		✓	1	625	0.1 ug/l	0.0551 ug/l			0.0038 ug/l
Benzo(b)fluoranthene		✓	1	625	0.1 ug/l	0.0559 ug/l			0.0038 ug/l
Benzo(k)fluoranthene		✓	1	625	0.1 ug/l	0.0319 ug/l			0.0038 ug/l
Chrysene		✓	1	625	0.1 ug/l	0.0366 ug/l			0.0038 ug/l
Dibenzo(a,h)anthracene		✓	1	625	0.1 ug/l	<0.01 ug/l			1.0 ug/l
Indeno(1,2,3-cd)pyrene		✓	1	625	0.1 ug/l	0.0355 ug/l			0.0038 ug/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	0.9 ug/l	3.9682 ug/l		100 µg/L	---
Naphthalene		✓	1	625	0.1 ug/l	3.46 ug/l		20 µg/L	---
E. Halogenated SVOCs									
Total PCBs	✓		1	608	0.25 ug/l	<0.25 ug/l		0.000064 µg/L	---
Pentachlorophenol	✓		1	625	5 ug/l	<5 ug/l		1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons		✓	1	1664A	5 mg/l	<5 mg/l		5.0 mg/L	---
Ethanol	✓		1	524.2	0.1 mg/l	<0.1 mg/l		Report mg/L	---
Methyl-tert-Butyl Ether		✓	1	524.2	1 ug/l	4.5 ug/l		70 µg/L	70 ug/l
tert-Butyl Alcohol	✓		1	524.2	10 ug/l	<10 ug/l		120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	✓		1	524.2	2 ug/l	<2 ug/l		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:									
Hardness		✓	1	SM2340	4 mg/l	230 mg/l			
field measured pH		✓	1	Field	7.9 SU				
field measured Temperature		✓	1	Field	11 deg. 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:

See below written description of the proposed treatment system.

2. Provide a written description of all treatment system(s) or processes that will be applied to the effluent prior to discharge.

An electric submersible pump will pump groundwater from a temporary excavation dewatering sump to a 21,000 gallon fractionation (frac) tank. Recovered groundwater shall pass through bag filters to remove particulates and two 2,000-pound minimum liquid phase granular activated carbon (LGAC) units plumbed in series. The treated groundwater shall be discharged into a storm drain catch basin located approximately 125 ft from the site. The storm drain discharges to the Vineyard Haven Harbor saltwater surface water located approximately 450 ft to the east.

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: The proposed treatment system will also include liquid phase granular activated carbon (LGAC) units and a flow meter/ totalizer.

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: Liquid phase granular activated carbon (LGAC) design flow rate of 75 gallons per minute (gpm) & maximum rate 100 gpm. Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	
Provide the proposed maximum effluent flow in gpm.	100
Provide the average effluent flow in gpm.	50
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	

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

F. Chemical and additive information

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

☐ Algaecides/biocides ☐ Antifoams ☐ Coagulants ☐ Corrosion/scale inhibitors ☐ Disinfectants ☐ Flocculants ☐ Neutralizing agents ☐ Oxidants ☐ Oxygen ☐ scavengers ☐ pH conditioners ☐ Bioremedial agents, including microbes ☐ Chlorine or chemicals containing chlorine ☐ Other; if so, specify:
Not applicable

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

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

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

G. Endangered Species Act eligibility determination

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

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

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

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

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

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

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

H. National Historic Preservation Act eligibility determination

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

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

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

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

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

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

I. Supplemental information

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

Please see attached figures, data tables, laboratory analytical reports and supporting documentation for supplemental information.

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

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

According to EPA a copy of a Best Management Practices Plan (BMPP) only needs to be onsite and not included in the NOI submittal to EPA.

J. Certification requirement

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

BMPP certification statement: A Best Management Practices Plan (BMPP) has been prepared and a copy will be maintained on-site.

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 ☐
The Tisbury DPW was informed of proposed discharge to storm drain system on 4-3-2019.

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.
No Additional Conditions Expressed by Tisbury DPW
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: 5/3/2019

Print Name and Title: Jason Frigon, Environmental Manager

ATTACHMENT B

Laboratory Analytical Report

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Drake Petroleum Company, Inc.

CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

5750-05 10017

SGS Job Number: JC85988

Sampling Date: 04/08/19

Report to:

Drake Petroleum Company, Inc.
221 Quinebaug Road PO Box 866
North Grosvenordale, CT 06255
SVanderSea@CEA-INC.com; aguaraldi@cea-inc.com

ATTN: Scott VanderSea

Total number of pages in report: **68**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Brian McGuire
General Manager

Client Service contact: Victoria Pushkova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

May 01, 2019

Mr. Scott VanderSea
Drake Petroleum Company, Inc.
221 Quinebaug Road PO Box 866
North Grosvenordale, CT 06255

Re: SGS North America – Dayton, NJ Jobs # JC85988 – Reissues

Dear Mr. VanderSea,

The final reports for SGS jobs number JC85988 have been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, additional Metal element and General Chemistry data has been reported for sample JC85988-2R, -2T to meet Client requirement. The attached revised report incorporates these revisions.

Please contact me at 732-329-0200 if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS North America Inc.

CONTINUOUS SERVICE IMPROVEMENT!

Our goal is to continuously improve our service to you. Please share your ideas about how we can serve you better at EHS.US.CustomerCare@sgs.com. Your feedback is appreciated!

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SGS North America Inc.

Sample Summary

Drake Petroleum Company, Inc.

Job No: JC85988

CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA
Project No: 5750-05 10017

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC85988-1	04/08/19	10:45	MH	04/08/19	AQ	Ground Water	RW-RGP
JC85988-2	04/08/19	11:15	MH	04/08/19	AQ	Surface Water	SW-1
JC85988-2R	04/08/19	11:15	MH	04/08/19	AQ	Surface Water	SW-1
JC85988-2T	04/08/19	11:15	MH	04/08/19	AQ	Surface Water	SW-1

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Drake Petroleum Company, Inc. **Job No** JC85988

Site: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA **Report Date** 5/1/2019 12:03:12 PM

On 04/08/2019, 2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.7 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC85988 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** V2E6724

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

MS Semi-volatiles By Method EPA 625 BY SIM

Matrix: AQ **Batch ID:** OP19695A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC85988-1 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank. Sample reextracted outside the holding time for confirmation due to method blank contamination.
- JC85988-1: Sample reextracted outside the holding time for confirmation due to method blank contamination.

Matrix: AQ **Batch ID:** OP19808A

- The data for EPA 625 BY SIM meets quality control requirements.
- JC85988-1: Sample extracted outside the holding time. Confirmation run.
- JC85988-1 for 2-Fluorobiphenyl: Outside of in house control limits.

MS Semi-volatiles By Method EPA 625.1

Matrix: AQ **Batch ID:** OP19695

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP19695-BSD for Diethyl phthalate: Outside of in house control limits.

GC Volatiles By Method EPA 504.1

Matrix: AQ **Batch ID:** OP19705

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

GC/LC Semi-volatiles By Method EPA 608.3

Matrix: AQ **Batch ID:** OP19706

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Metals Analysis By Method EPA 200.8

Matrix: AQ	Batch ID: MP14085

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ	Batch ID: MP14584

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JC85988-2R for Arsenic: Elevated detection limit due to dilution required for matrix interference.
- JC85988-2R for Silver: Elevated detection limit due to dilution required for matrix interference.
- JC85988-2R for Selenium: Elevated detection limit due to dilution required for matrix interference.
- JC85988-2R for Lead: Elevated detection limit due to dilution required for matrix interference.
- JC85988-2R for Cadmium: Elevated detection limit due to dilution required for matrix interference.
- JC85988-2R for Antimony: Elevated detection limit due to dilution required for matrix interference.
- JC85988-2R for Zinc: Elevated detection limit due to dilution required for matrix interference.
- JC85988-2R for Iron: Elevated detection limit due to dilution required for matrix interference.
- JC85988-2R for Copper: Elevated detection limit due to dilution required for matrix interference.
- JC85988-2R for Chromium: Elevated detection limit due to dilution required for matrix interference.

Metals Analysis By Method EPA 245.1

Matrix: AQ	Batch ID: MP14149

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ	Batch ID: MP14647

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

General Chemistry By Method EPA 1664A

Matrix: AQ	Batch ID: GP20573

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ	Batch ID: GP20624

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

General Chemistry By Method EPA 335.4/LACHAT

Matrix: AQ	Batch ID: GP20587

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

General Chemistry By Method SM2340 C-11

Matrix: AQ **Batch ID:** GN94164

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

General Chemistry By Method SM2520 B-11

Matrix: AQ **Batch ID:** GN94575

- The data for SM2520 B-11 meets quality control requirements.

General Chemistry By Method SM2540 D-11

Matrix: AQ **Batch ID:** GN94079

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

General Chemistry By Method SM4500CL F-11

Matrix: AQ **Batch ID:** GN93905

- All method blanks for this batch meet method specific criteria.
- JC85988-1 for Total Residual Chlorine: Field analysis required. Received out of hold time and analyzed by request.

General Chemistry By Method SM4500H+ B-11

Matrix: AQ **Batch ID:** R177534

- The data for SM4500H+ B-11 meets quality control requirements.
- JC85988-2 for pH: Sample received out of holding time for pH analysis.

General Chemistry By Method SM4500NH3 H-11LACHAT

Matrix: AQ **Batch ID:** GP20553

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

General Chemistry By Method SW846 6010/7196A M

Matrix: AQ **Batch ID:** R177535

- The data for SW846 6010/7196A M meets quality control requirements.
- JC85988-1 for Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent)

General Chemistry By Method SW846 7196A

Matrix: AQ **Batch ID:** GN93851

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Field Data By Method FIELD

Matrix: AQ **Batch ID:** R177843

- The data for FIELD meets quality control requirements.

Field Data By Method SM2550 B-10

Matrix:	AQ	Batch ID:	R177534

- The data for SM2550 B-10 meets quality control requirements.

Matrix:	AQ	Batch ID:	R177843

- The data for SM2550 B-10 meets quality control requirements.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JC85988
Account: Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA
Collected: 04/08/19

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC85988-1	**RW-RGP**					
Methyl Tert Butyl Ether		4.5	1.0	0.51	ug/l	SW846 8260C
Acenaphthene [a]		0.0429 J	0.10	0.013	ug/l	EPA 625 BY SIM
Acenaphthylene [a]		0.0180 J	0.10	0.012	ug/l	EPA 625 BY SIM
Anthracene [a]		0.0350 J	0.10	0.013	ug/l	EPA 625 BY SIM
Benzo(a)anthracene [a]		0.120 B	0.10	0.019	ug/l	EPA 625 BY SIM
Benzo(a)pyrene [a]		0.0551 JB	0.10	0.030	ug/l	EPA 625 BY SIM
Benzo(b)fluoranthene [a]		0.0559 JB	0.10	0.021	ug/l	EPA 625 BY SIM
Benzo(g,h,i)perylene [a]		0.0471 JB	0.10	0.026	ug/l	EPA 625 BY SIM
Benzo(k)fluoranthene [a]		0.0319 JB	0.10	0.019	ug/l	EPA 625 BY SIM
Chrysene [a]		0.0366 JB	0.10	0.015	ug/l	EPA 625 BY SIM
Fluoranthene [a]		0.137 B	0.10	0.011	ug/l	EPA 625 BY SIM
Fluorene [a]		0.0659 J	0.10	0.027	ug/l	EPA 625 BY SIM
Indeno(1,2,3-cd)pyrene [a]		0.0355 JB	0.10	0.031	ug/l	EPA 625 BY SIM
Naphthalene [a]		3.46	0.10	0.013	ug/l	EPA 625 BY SIM
Phenanthrene [a]		0.0403 JB	0.10	0.016	ug/l	EPA 625 BY SIM
Pyrene [a]		0.122 B	0.10	0.013	ug/l	EPA 625 BY SIM
Antimony		2.0 B	4.0	1.8	ug/l	EPA 200.8
Arsenic		12.6	2.0	0.51	ug/l	EPA 200.8
Cadmium		0.35 B	1.0	0.20	ug/l	EPA 200.8
Chromium		38.9	8.0	0.66	ug/l	EPA 200.8
Copper		81.2	8.0	4.2	ug/l	EPA 200.8
Iron		39400	400	98	ug/l	EPA 200.8
Lead		82.2	1.0	0.29	ug/l	EPA 200.8
Mercury		0.11 B	0.20	0.092	ug/l	EPA 245.1
Nickel		18.5	8.0	2.5	ug/l	EPA 200.8
Zinc		449	80	29	ug/l	EPA 200.8
Chloride		302	2.0		mg/l	EPA 300/SW846 9056A
Chromium, Trivalent [b]		0.039	0.018		mg/l	SW846 6010/7196A M
Hardness, Total as CaCO3		230	4.0		mg/l	SM2340 C-11
Nitrogen, Ammonia		0.45	0.20		mg/l	SM4500NH3 H-11LACHAT
Solids, Total Suspended		425	4.0		mg/l	SM2540 D-11
JC85988-2	**SW-1**					
Hardness, Total as CaCO3		4830	20		mg/l	SM2340 C-11
pH [c]		7.99			su	SM4500H+ B-11
Temperature (Field)		8			Deg. C	SM2550 B-10
JC85988-2R	**SW-1**					
Iron [d]		762 B	1300	310	ug/l	EPA 200.8
Lead [d]		2.9	2.5	0.71	ug/l	EPA 200.8

Summary of Hits

Job Number: JC85988
Account: Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA
Collected: 04/08/19

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC85988-2T	**SW-1**					
Specific Conductivity		46.4	7.5		umhos/cm	SM2510 B-11/SW 9050A
Pressure, Atmospheric		29.7			mmHg	FIELD
Temperature (Field)		8			Deg. C	SM2550 B-10

(a) Sample reextracted outside the holding time for confirmation due to method blank contamination.
(b) Calculated as: (Chromium) - (Chromium, Hexavalent)
(c) Sample received out of holding time for pH analysis.
(d) Elevated detection limit due to dilution required for matrix interference.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	RW-RGP		
Lab Sample ID:	JC85988-1	**Date Sampled:**	04/08/19
Matrix:	AQ - Ground Water	**Date Received:**	04/08/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E151813.D	1	04/12/19 15:19	RS	n/a	n/a	V2E6724
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	100	89	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.5	1.0	0.51	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.47	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		80-120%
17060-07-0	1,2-Dichloroethane-D4	109%		81-124%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-RGP		
Lab Sample ID:	JC85988-1	**Date Sampled:**	04/08/19
Matrix:	AQ - Ground Water	**Date Received:**	04/08/19
Method:	EPA 625.1 EPA 625	**Percent Solids:**	n/a
Project:	CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F183827.D	1	04/12/19 19:46	YC	04/12/19 05:30	OP19695	EF7897
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	5.0	1.4	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		10-110%
4165-62-2	Phenol-d5	32%		10-110%
118-79-6	2,4,6-Tribromophenol	84%		35-147%
4165-60-0	Nitrobenzene-d5	94%		32-132%
321-60-8	2-Fluorobiphenyl	76%		40-117%
1718-51-0	Terphenyl-d14	106%		33-126%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-RGP		
Lab Sample ID:	JC85988-1	**Date Sampled:**	04/08/19
Matrix:	AQ - Ground Water	**Date Received:**	04/08/19
Method:	EPA 625 BY SIM EPA 625	**Percent Solids:**	n/a
Project:	CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4M83204.D	1	04/12/19 21:32	CC	04/12/19 05:30	OP19695A	E4M3877
Run #2 [b]	4M83328.D	1	04/18/19 16:54	CC	04/18/19 06:00	OP19808A	E4M3883

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	990 ml	1.0 ml

BN PAH Special LIst by SIM

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.0429	0.10	0.013	ug/l	J
208-96-8	Acenaphthylene	0.0180	0.10	0.012	ug/l	J
120-12-7	Anthracene	0.0350	0.10	0.013	ug/l	J
56-55-3	Benzo(a)anthracene	0.120	0.10	0.019	ug/l	B
50-32-8	Benzo(a)pyrene	0.0551	0.10	0.030	ug/l	JB
205-99-2	Benzo(b)fluoranthene	0.0559	0.10	0.021	ug/l	JB
191-24-2	Benzo(g,h,i)perylene	0.0471	0.10	0.026	ug/l	JB
207-08-9	Benzo(k)fluoranthene	0.0319	0.10	0.019	ug/l	JB
218-01-9	Chrysene	0.0366	0.10	0.015	ug/l	JB
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.035	ug/l	
206-44-0	Fluoranthene	0.137	0.10	0.011	ug/l	B
86-73-7	Fluorene	0.0659	0.10	0.027	ug/l	J
193-39-5	Indeno(1,2,3-cd)pyrene	0.0355	0.10	0.031	ug/l	JB
91-20-3	Naphthalene	3.46	0.10	0.013	ug/l	
85-01-8	Phenanthrene	0.0403	0.10	0.016	ug/l	JB
129-00-0	Pyrene	0.122	0.10	0.013	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	97%	94%	21-146%
321-60-8	2-Fluorobiphenyl	86%	157% [c]	12-135%
1718-51-0	Terphenyl-d14	86%	67%	10-145%

(a) Sample reextracted outside the holding time for confirmation due to method blank contamination.
(b) Sample extracted outside the holding time. Confirmation run.
(c) Outside of in house control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-RGP		
Lab Sample ID:	JC85988-1	**Date Sampled:**	04/08/19
Matrix:	AQ - Ground Water	**Date Received:**	04/08/19
Method:	EPA 504.1 EPA 504	**Percent Solids:**	n/a
Project:	CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G32045.D	1	04/15/19 16:52	VDT	04/15/19 12:00	OP19705	G7G1131
Run #2							

	Initial Volume	Final Volume
Run #1	35 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.0062	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3017-95-6	2-Bromo-1-chloropropane	110%		70-130%
3017-95-6	2-Bromo-1-chloropropane	108%		70-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-RGP		
Lab Sample ID:	JC85988-1	**Date Sampled:**	04/08/19
Matrix:	AQ - Ground Water	**Date Received:**	04/08/19
Method:	EPA 608.3 EPA 608	**Percent Solids:**	n/a
Project:	CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G87517.D	1	04/12/19 18:03	SK	04/12/19 08:00	OP19706	G5G2105
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.098	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.21	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.11	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.063	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.21	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.076	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	68%		10-159%
877-09-8	Tetrachloro-m-xylene	72%		10-159%
2051-24-3	Decachlorobiphenyl	76%		10-135%
2051-24-3	Decachlorobiphenyl	81%		10-135%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RW-RGP
Lab Sample ID: JC85988-1
Matrix: AQ - Ground Water
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Date Sampled: 04/08/19
Date Received: 04/08/19
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony	2.0 B	4.0	1.8	ug/l	1	04/11/19	04/12/19	ZC	EPA 200.8 [2]	EPA 200.8 [3]
Arsenic	12.6	2.0	0.51	ug/l	1	04/11/19	04/12/19	ZC	EPA 200.8 [2]	EPA 200.8 [3]
Cadmium	0.35 B	1.0	0.20	ug/l	1	04/11/19	04/12/19	ZC	EPA 200.8 [2]	EPA 200.8 [3]
Chromium	38.9	8.0	0.66	ug/l	1	04/11/19	04/12/19	ZC	EPA 200.8 [2]	EPA 200.8 [3]
Copper	81.2	8.0	4.2	ug/l	1	04/11/19	04/12/19	ZC	EPA 200.8 [2]	EPA 200.8 [3]
Iron	39400	400	98	ug/l	4	04/11/19	04/12/19	ZC	EPA 200.8 [2]	EPA 200.8 [3]
Lead	82.2	1.0	0.29	ug/l	1	04/11/19	04/12/19	ZC	EPA 200.8 [2]	EPA 200.8 [3]
Mercury	0.11 B	0.20	0.092	ug/l	1	04/12/19	04/12/19	EAL	EPA 245.1 [1]	EPA 245.1 [4]
Nickel	18.5	8.0	2.5	ug/l	1	04/11/19	04/12/19	ZC	EPA 200.8 [2]	EPA 200.8 [3]
Selenium	1.3 U	2.0	1.3	ug/l	1	04/11/19	04/12/19	ZC	EPA 200.8 [2]	EPA 200.8 [3]
Silver	0.13 U	4.0	0.13	ug/l	1	04/11/19	04/12/19	ZC	EPA 200.8 [2]	EPA 200.8 [3]
Zinc	449	80	29	ug/l	4	04/11/19	04/12/19	ZC	EPA 200.8 [2]	EPA 200.8 [3]

(1) Instrument QC Batch: MA46493
(2) Instrument QC Batch: MA46497
(3) Prep QC Batch: MP14085
(4) Prep QC Batch: MP14149

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	RW-RGP		
Lab Sample ID:	JC85988-1	**Date Sampled:**	04/08/19
Matrix:	AQ - Ground Water	**Date Received:**	04/08/19
		Percent Solids:	n/a
Project:	CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	302	2.0	mg/l	1	04/16/19 08:09	NV	EPA 300/SW846 9056A
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	04/09/19 09:44	RI	SW846 7196A
Chromium, Trivalent [a]	0.039	0.018	mg/l	1	04/12/19 14:14	ZC	SW846 6010/7196A M
Cyanide	< 0.010	0.010	mg/l	1	04/13/19 11:39	BM	EPA 335.4/LACHAT
HEM Petroleum Hydrocarbons	< 5.0	5.0	mg/l	1	04/12/19 21:45	TM	EPA 1664A
Hardness, Total as CaCO3	230	4.0	mg/l	1	04/16/19	MP	SM2340 C-11
Nitrogen, Ammonia	0.45	0.20	mg/l	1	04/11/19 16:34	KI	SM4500NH3 H-11LACHAT
Solids, Total Suspended	425	4.0	mg/l	1	04/13/19 10:14	RC	SM2540 D-11
Total Residual Chlorine [b]	< 0.10	0.10	mg/l	1	04/09/19 23:57	MO	SM4500CL F-11

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)
(b) Field analysis required. Received out of hold time and analyzed by request.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SW-1		
Lab Sample ID:	JC85988-2	**Date Sampled:**	04/08/19
Matrix:	AQ - Surface Water	**Date Received:**	04/08/19
		Percent Solids:	n/a
Project:	CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Hardness, Total as CaCO3	4830	20	mg/l	1	04/16/19	MP	SM2340 C-11
Nitrogen, Ammonia	< 0.20	0.20	mg/l	1	04/11/19 16:36	KI	SM4500NH3 H-11LACHAT
pH [a]	7.99		su	1	04/10/19 11:06	JK	SM4500H+ B-11

Field Parameters

Temperature (Field)	8		Deg. C	1	04/13/19 11:15	JK	SM2550 B-10

(a) Sample received out of holding time for pH analysis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: SW-1
Lab Sample ID: JC85988-2R
Matrix: AQ - Surface Water
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Date Sampled: 04/08/19
Date Received: 04/08/19
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony [a]	4.4 U	10	4.4	ug/l	5	04/26/19	04/29/19	SN	EPA 200.8 [2]	EPA 200.8 [3]
Arsenic [a]	6.4 U	25	6.4	ug/l	25	04/26/19	04/29/19	SN	EPA 200.8 [2]	EPA 200.8 [3]
Cadmium [a]	0.50 U	2.5	0.50	ug/l	5	04/26/19	04/29/19	SN	EPA 200.8 [2]	EPA 200.8 [3]
Chromium [a]	8.2 U	100	8.2	ug/l	25	04/26/19	04/29/19	SN	EPA 200.8 [2]	EPA 200.8 [3]
Copper [a]	53 U	100	53	ug/l	25	04/26/19	04/29/19	SN	EPA 200.8 [2]	EPA 200.8 [3]
Iron [a]	762 B	1300	310	ug/l	25	04/26/19	04/29/19	SN	EPA 200.8 [2]	EPA 200.8 [3]
Lead [a]	2.9	2.5	0.71	ug/l	5	04/26/19	04/29/19	SN	EPA 200.8 [2]	EPA 200.8 [3]
Mercury	0.092 U	0.20	0.092	ug/l	1	04/29/19	04/29/19	LL	EPA 245.1 [1]	EPA 245.1 [4]
Selenium [a]	3.2 U	5.0	3.2	ug/l	5	04/26/19	04/29/19	SN	EPA 200.8 [2]	EPA 200.8 [3]
Silver [a]	0.34 U	10	0.34	ug/l	5	04/26/19	04/29/19	SN	EPA 200.8 [2]	EPA 200.8 [3]
Zinc [a]	92 U	250	92	ug/l	25	04/26/19	04/29/19	SN	EPA 200.8 [2]	EPA 200.8 [3]

(1) Instrument QC Batch: MA46603
(2) Instrument QC Batch: MA46613
(3) Prep QC Batch: MP14584
(4) Prep QC Batch: MP14647

(a) Elevated detection limit due to dilution required for matrix interference.

RL = Reporting Limit
MDL = Method Detection Limit
U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	SW-1		
Lab Sample ID:	JC85988-2T	**Date Sampled:**	04/08/19
Matrix:	AQ - Surface Water	**Date Received:**	04/08/19
		Percent Solids:	n/a
Project:	CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Salinity	< 0.10	0.10	ppt	1	04/27/19	MET	SM2520 B-11
Specific Conductivity	46.4	7.5	umhos/cm	1	04/26/19 17:00	KI	SM2510 B-11/SW 9050A

Field Parameters

Pressure, Atmospheric	29.7		mmHg	1	04/08/19 11:15	AS	FIELD
Temperature (Field)	8		Deg. C	1	04/08/19 11:15	AS	SM2550 B-10

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody
- MCP Form
- Sample Tracking Chronicle
- QC Evaluation: MA MCP Limits

Parameter Certification Exceptions

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Acenaphthene	83-32-9	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Acenaphthylene	208-96-8	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Anthracene	120-12-7	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Benzo(a)anthracene	56-55-3	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Benzo(a)pyrene	50-32-8	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Benzo(b)fluoranthene	205-99-2	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Benzo(g,h,i)perylene	191-24-2	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Benzo(k)fluoranthene	207-08-9	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Chrysene	218-01-9	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Dibenzo(a,h)anthracene	53-70-3	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Fluoranthene	206-44-0	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Fluorene	86-73-7	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Indeno(1,2,3-cd)pyrene	193-39-5	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Naphthalene	91-20-3	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Phenanthrene	85-01-8	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Pyrene	129-00-0	**EPA 625 BY SIM**	AQ	SGS is not certified for this parameter.[a]
Chromium, Trivalent		**SW846 6010/7196A M**	AQ	SGS is not certified for this parameter.[a]

(a) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

SGS ACCUTEST

GW SW

CHAIN OF CUSTODY

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2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # 4401 7491 6507 | Bottle Order Control #
Accutest Quote # | Accutest Job # JC85988

Client / Reporting Information

Company Name: Drake Petroleum Co., Inc. Attn: Mr. Jason Frigon
Street Address: 800 South Street, Suite 500, P.O. Box 549290
City: Waltham, MA 02454
Project Contact: Jason Frigon, jfrigon@globalp.com
Phone #: 978-339-3545
Sampler(s) Name(s): MARK HAGG | Phone #

Project Information

Project Name: Vineyard Haven ~~Xtramart~~ (AELLC # 10017)
Street: 19,25 Beach Rd
City: Tisbury | State: MA
Project #: CEA # 5750-05
Client Purchase Order #: AELLC# 10017
Project Manager: Scott VanderSea, 508-835-8822

Billing Information (if different from Report to)

Company Name
Street Address
City | State | Zip
Attention:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Ice	EPA RGP Parameters - See Attached List	pH, Temperature & Ammonia	Total Recoverable Metals Detected in GW RGP sample	Hardness	LAB USE ONLY
1	RW-RGP		4/8/19	1045	MH	GW	22										X			X	
2	SW-1		4/8/19	1115	MH	SW	4											X	*X	X	

659

4/8 SGS ACCUTEST MARLBOR

Matrix Codes

DW - ~~Drinking~~ Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge | SED- Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank | EB-Equipment Blank | RB-Rinse Blank | TB-Trip Blank

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [X] Standard Drake Petroleum/ Global
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

INITIAL ASESSMENT 3 Bv
LABEL VERIFICATION

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [X] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] MCP CAM
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [X] EDD Format
- [X] MCP CAM

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

****RGP *Must* Meet Lowest Value for freshwater/saltwater limit for each applicable analyte as shown on USEPA RGP Appendix VII, attached

email results to svandersea@cea-inc.com & aguaraldi@cea-inc.com

*Analyze surface water sample SW-1 for the total metals detected in groundwater sample GW-RGP.

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		4/8/19 15:50			4/9/19 8:30	
2					4/9/19 0745	
3						
4						
5						

Custody Seal # D70800 D70803 | Intact | Not Intact | Preserved where applicable | On Ice | Cooler Temp. 2.7°C

5.2 5

SGS Sample Receipt Summary

Job Number: JC85988 **Client:** _____ **Project:** _____

Date / Time Received: 4/8/2019 6:30:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 2: (2.7);

Cooler Temps (Corrected) °C: Cooler 2: (1.7);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 206717 pH 12+: 208717 Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

Job Change Order: JC85988

Requested Date:	4/24/2019	**Received Date:**	4/8/2019
Account Name:	Drake Petroleum Company, Inc.	**Due Date:**	4/15/2019
Project Description:	CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA	**Deliverable:**	MAMCP
C/O Initiated By:	VLP **PM:** VP	**TAT (Days):**	7

==========

Sample #: JC85988-2

Dept:

TAT: 7

SW-1

Change:
Please run AGMS, ASMS, CDMS, CRMS, CUMS, FEMS, HG, NIMS, PBMS, SBMS, SEMS, ZNMS - EPA 200.8

==========

Above Changes Per: Adam Guaraldi **Date/Time:** 4/24/2019 4:30:59 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JC85988

Requested Date:	4/25/2019	**Received Date:**	4/8/2019
Account Name:	Drake Petroleum Company, Inc.	**Due Date:**	4/15/2019
Project Description:	CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA	**Deliverable:**	MAMCP
C/O Initiated By:	VLP **PM:** VP	**TAT (Days):**	7

==========

Sample #: JC85988-2

Dept:

TAT: 7

SW-1

Change:
Please analyse for XSLNTY. Please use the folowing value for the field data:
TEMPF-8 degrees C, PRESSF -29.7 "Hg

==========

Above Changes Per: Adam Guaraldi **Date/Time:** 4/25/2019 8:58:36 AM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup	WSC-CAM	Exhibit VII A
	July 1, 2010	Revision No. 1
	Final	

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	SGS North America Inc. - Dayton	Project #:	JC85988
Project Location:	CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA	MADEP RTN	None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
JC85988-1,JC85988-2,JC85988-2R,JC85988-2T

Test method: Refer to case narrative.

Matrices: Groundwater/Surface Water (X) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other ( )

CAM Protocol (check all that apply below):

8260 VOC (X) CAM IIA	7470/7471 Hg ( ) CAM III B	MassDEP VPH ( ) CAM IV A	8081 Pesticides ( ) CAM V B	7196 Hex Cr (X) CAM VI B	Mass DEP 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 (X) CAM III A	6020 Metals ( ) CAM III D	8082 PCB ( ) CAM V 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	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☐ Yes ☐ Yes	☐ No ☐ 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 is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	☑ Yes	☐ No [1]

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability 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 [1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes	☑ No [1]

[1] ***All Negative responses must be addressed in an attached Environmental Laboratory case narrative.***

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.

Signature:  **Position:** **General Manager**

Printed Name: **Brian McGuire** **Date:** **01-May-19**

Internal Sample Tracking Chronicle

Drake Petroleum Company, Inc.

Job No: JC85988

CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA
Project No: 5750-05 10017

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC85988-1 RW-RGP	Collected: 08-APR-19 10:45 By: MH		Received: 08-APR-19 By: DG			
JC85988-1	SW846 7196A	09-APR-19 09:44	RI			XCR
JC85988-1	SM4500CL F-11	09-APR-19 23:57	MO			TRC
JC85988-1	SM4500NH3 H-11LACHAT	11-APR-19 16:34	KI	11-APR-19	KI	AMN
JC85988-1	EPA 245.1	12-APR-19 11:46	EAL	12-APR-19	EAL	HG
JC85988-1	EPA 200.8	12-APR-19 14:14	ZC	11-APR-19	TG	AGMS, ASMS, CDMS, CUMS, NIMS, PBMS, SBMS, SEMS
JC85988-1	SW846 6010/7196A M	12-APR-19 14:14	ZC			CR3
JC85988-1	SW846 8260C	12-APR-19 15:19	RS			V8260SL
JC85988-1	EPA 608.3	12-APR-19 18:03	SK	12-APR-19	VP	P608PCB
JC85988-1	EPA 200.8	12-APR-19 18:05	ZC	11-APR-19	TG	FEMS, ZNMS
JC85988-1	EPA 625.1	12-APR-19 19:46	YC	12-APR-19	VP	AB625SL
JC85988-1	EPA 625 BY SIM	12-APR-19 21:32	CC	12-APR-19	MT	B625SIMSL
JC85988-1	EPA 1664A	12-APR-19 21:45	TM	12-APR-19	TM	PHC1664
JC85988-1	SM2540 D-11	13-APR-19 10:14	RC			TSS
JC85988-1	EPA 335.4/LACHAT	13-APR-19 11:39	BM	12-APR-19	BM	CN
JC85988-1	EPA 504.1	15-APR-19 16:52	VDT	15-APR-19	AF	V504EDB
JC85988-1	SM2340 C-11	16-APR-19	MP			HRD
JC85988-1	EPA 300/SW846 9056A	16-APR-19 08:09	NV	15-APR-19	NV	CHL
JC85988-1	EPA 625 BY SIM	18-APR-19 16:54	CC	18-APR-19	MT	B625SIMPAH
JC85988-2 SW-1	Collected: 08-APR-19 11:15 By: MH		Received: 08-APR-19 By: DG			
JC85988-2	SM4500H+ B-11	10-APR-19 11:06	JK			PH
JC85988-2	SM4500NH3 H-11LACHAT	11-APR-19 16:36	KI	11-APR-19	KI	AMN
JC85988-2	SM2550 B-10	13-APR-19 11:15	JK			TEMPF
JC85988-2	SM2340 C-11	16-APR-19	MP			HRD
JC85988-2R SW-1	Collected: 08-APR-19 11:15 By: MH		Received: 08-APR-19 By: DG			
JC85988-2R	EPA 245.1	29-APR-19 14:29	LL	29-APR-19	EAL	HG
JC85988-2R	EPA 200.8	29-APR-19 15:52	SN	26-APR-19	BP	ASMS, CRMS, CUMS, FEMS, ZNMS
JC85988-2R	EPA 200.8	29-APR-19 16:35	SN	26-APR-19	BP	AGMS, CDMS, PBMS, SBMS, SEMS

Internal Sample Tracking Chronicle

Drake Petroleum Company, Inc.

Job No: JC85988

CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA
Project No: 5750-05 10017

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC85988-2T	Collected: 08-APR-19 11:15 By: MH		Received: 08-APR-19 By: DG			
SW-1						
JC85988-2T	FIELD	08-APR-19 11:15	AS			PRESSF
JC85988-2T	SM2550 B-10	08-APR-19 11:15	AS			TEMPF
JC85988-2T	SM2510 B-11/SW 9050A	16-APR-19 17:00	KI			SCON
JC85988-2T	SM2520 B-11	27-APR-19	MET			SLNTY

QC Evaluation: MA MCP Limits

Job Number: JC85988
Account: Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA
Collected: 04/08/19

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
V2E6724	SW846 8260C						
V2E6724-BS	64-17-5	Ethanol	BSP	REC	103	%	70-130
V2E6724-BS	56-23-5	Carbon tetrachloride	BSP	REC	105	%	70-130
V2E6724-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	100	%	70-130
V2E6724-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	98	%	70-130
V2E6724-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	99	%	70-130
V2E6724-BS	75-34-3	1,1-Dichloroethane	BSP	REC	103	%	70-130
V2E6724-BS	107-06-2	1,2-Dichloroethane	BSP	REC	97	%	70-130
V2E6724-BS	75-35-4	1,1-Dichloroethene	BSP	REC	106	%	70-130
V2E6724-BS	156-59-2	cis-1,2-Dichloroethene	BSP	REC	100	%	70-130
V2E6724-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	103	%	70-130
V2E6724-BS	75-09-2	Methylene chloride	BSP	REC	100	%	70-130
V2E6724-BS	75-65-0	Tert Butyl Alcohol	BSP	REC	98	%	70-130
V2E6724-BS	994-05-8	tert-Amyl Methyl Ether	BSP	REC	101	%	70-130
V2E6724-BS	127-18-4	Tetrachloroethene	BSP	REC	103	%	70-130
V2E6724-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	106	%	70-130
V2E6724-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	102	%	70-130
V2E6724-BS	79-01-6	Trichloroethene	BSP	REC	102	%	70-130
V2E6724-BS	75-01-4	Vinyl chloride	BSP	REC	106	%	70-130
V2E6724-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	102	%	70-130
V2E6724-BS	2037-26-5	Toluene-D8	BSP	SURR	100	%	70-130
V2E6724-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	98	%	70-130
V2E6724-BSD	64-17-5	Ethanol	BSD	REC	108	%	70-130
V2E6724-BSD	56-23-5	Carbon tetrachloride	BSD	REC	107	%	70-130
V2E6724-BSD	56-23-5	Carbon tetrachloride	BSD	RPD	2	%	20
V2E6724-BSD	95-50-1	1,2-Dichlorobenzene	BSD	REC	104	%	70-130
V2E6724-BSD	95-50-1	1,2-Dichlorobenzene	BSD	RPD	3	%	20
V2E6724-BSD	541-73-1	1,3-Dichlorobenzene	BSD	REC	102	%	70-130
V2E6724-BSD	541-73-1	1,3-Dichlorobenzene	BSD	RPD	4	%	20
V2E6724-BSD	106-46-7	1,4-Dichlorobenzene	BSD	REC	102	%	70-130
V2E6724-BSD	106-46-7	1,4-Dichlorobenzene	BSD	RPD	4	%	20
V2E6724-BSD	75-34-3	1,1-Dichloroethane	BSD	REC	105	%	70-130
V2E6724-BSD	75-34-3	1,1-Dichloroethane	BSD	RPD	2	%	20
V2E6724-BSD	107-06-2	1,2-Dichloroethane	BSD	REC	97	%	70-130
V2E6724-BSD	107-06-2	1,2-Dichloroethane	BSD	RPD	0	%	20
V2E6724-BSD	75-35-4	1,1-Dichloroethene	BSD	REC	107	%	70-130
V2E6724-BSD	75-35-4	1,1-Dichloroethene	BSD	RPD	1	%	20
V2E6724-BSD	156-59-2	cis-1,2-Dichloroethene	BSD	REC	103	%	70-130
V2E6724-BSD	156-59-2	cis-1,2-Dichloroethene	BSD	RPD	2	%	20
V2E6724-BSD	1634-04-4	Methyl Tert Butyl Ether	BSD	REC	102	%	70-130
V2E6724-BSD	1634-04-4	Methyl Tert Butyl Ether	BSD	RPD	1	%	20
V2E6724-BSD	75-09-2	Methylene chloride	BSD	REC	101	%	70-130
V2E6724-BSD	75-09-2	Methylene chloride	BSD	RPD	1	%	20

* Sample used for QC is not from job JC85988

QC Evaluation: MA MCP Limits

Job Number: JC85988
Account: Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA
Collected: 04/08/19

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
V2E6724-BSD	75-65-0	Tert Butyl Alcohol	BSD	REC	100	%	70-130
V2E6724-BSD	75-65-0	Tert Butyl Alcohol	BSD	RPD	2	%	20
V2E6724-BSD	994-05-8	tert-Amyl Methyl Ether	BSD	REC	101	%	70-130
V2E6724-BSD	994-05-8	tert-Amyl Methyl Ether	BSD	RPD	1	%	20
V2E6724-BSD	127-18-4	Tetrachloroethene	BSD	REC	107	%	70-130
V2E6724-BSD	127-18-4	Tetrachloroethene	BSD	RPD	3	%	20
V2E6724-BSD	71-55-6	1,1,1-Trichloroethane	BSD	REC	107	%	70-130
V2E6724-BSD	71-55-6	1,1,1-Trichloroethane	BSD	RPD	1	%	20
V2E6724-BSD	79-00-5	1,1,2-Trichloroethane	BSD	REC	102	%	70-130
V2E6724-BSD	79-00-5	1,1,2-Trichloroethane	BSD	RPD	0	%	20
V2E6724-BSD	79-01-6	Trichloroethene	BSD	REC	106	%	70-130
V2E6724-BSD	79-01-6	Trichloroethene	BSD	RPD	4	%	20
V2E6724-BSD	75-01-4	Vinyl chloride	BSD	REC	108	%	70-130
V2E6724-BSD	75-01-4	Vinyl chloride	BSD	RPD	2	%	20
V2E6724-BSD	1868-53-7	Dibromofluoromethane	BSD	SURR	101	%	70-130
V2E6724-BSD	2037-26-5	Toluene-D8	BSD	SURR	100	%	70-130
V2E6724-BSD	460-00-4	4-Bromofluorobenzene	BSD	SURR	100	%	70-130
V2E6724-MB	1868-53-7	Dibromofluoromethane	MB	SURR	104	%	70-130
V2E6724-MB	2037-26-5	Toluene-D8	MB	SURR	100	%	70-130
V2E6724-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	101	%	70-130
JC85988-1	1868-53-7	Dibromofluoromethane	SAMP	SURR	104	%	70-130
JC85988-1	2037-26-5	Toluene-D8	SAMP	SURR	101	%	70-130
JC85988-1	460-00-4	4-Bromofluorobenzene	SAMP	SURR	101	%	70-130

* Sample used for QC is not from job JC85988

MS Volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E6724-MB	2E151808.D	1	04/12/19	RS	n/a	n/a	V2E6724

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC85988-1

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	100	89	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
75-65-0	Tert Butyl Alcohol	ND	10	5.8	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.47	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	104%	80-120%
17060-07-0	1,2-Dichloroethane-D4	106%	81-124%
2037-26-5	Toluene-D8	100%	80-120%
460-00-4	4-Bromofluorobenzene	101%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E6724-BS	2E151805.D	1	04/12/19	RS	n/a	n/a	V2E6724
V2E6724-BSD	2E151806.D	1	04/12/19	RS	n/a	n/a	V2E6724

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC85988-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
64-17-5	Ethanol	5000	5160	103	5390	108	4	54-155/20
56-23-5	Carbon tetrachloride	50	52.3	105	53.5	107	2	75-135/20
95-50-1	1,2-Dichlorobenzene	50	50.2	100	51.8	104	3	84-119/20
541-73-1	1,3-Dichlorobenzene	50	49.0	98	51.0	102	4	81-117/20
106-46-7	1,4-Dichlorobenzene	50	49.3	99	51.2	102	4	82-117/20
75-34-3	1,1-Dichloroethane	50	51.7	103	52.6	105	2	79-120/20
107-06-2	1,2-Dichloroethane	50	48.5	97	48.7	97	0	78-126/20
75-35-4	1,1-Dichloroethene	50	52.9	106	53.5	107	1	69-126/20
156-59-2	cis-1,2-Dichloroethene	50	50.1	100	51.3	103	2	80-120/20
1634-04-4	Methyl Tert Butyl Ether	50	51.3	103	51.0	102	1	80-119/20
75-09-2	Methylene chloride	50	49.8	100	50.3	101	1	77-120/20
75-65-0	Tert Butyl Alcohol	250	245	98	251	100	2	78-126/20
994-05-8	tert-Amyl Methyl Ether	50	50.7	101	50.4	101	1	81-124/20
127-18-4	Tetrachloroethene	50	51.5	103	53.3	107	3	70-131/20
71-55-6	1,1,1-Trichloroethane	50	52.8	106	53.5	107	1	81-128/20
79-00-5	1,1,2-Trichloroethane	50	50.9	102	50.8	102	0	83-118/20
79-01-6	Trichloroethene	50	51.1	102	53.0	106	4	80-120/20
75-01-4	Vinyl chloride	50	52.8	106	54.1	108	2	51-135/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	102%	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	101%	99%	81-124%
2037-26-5	Toluene-D8	100%	100%	80-120%
460-00-4	4-Bromofluorobenzene	98%	100%	80-120%

* = Outside of Control Limits.

Internal Standard Area Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Check Std:	V2E6724-CC6722	**Injection Date:**	04/12/19
Lab File ID:	2E151803.D	**Injection Time:**	08:00
Instrument ID:	GCMS2E	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	123245	7.36	304098	9.59	429112	10.50	366018	13.64	188365	15.93
Upper Limit [a]	246490	7.86	608196	10.09	858224	11.00	732036	14.14	376730	16.43
Lower Limit [b]	61623	6.86	152049	9.09	214556	10.00	183009	13.14	94183	15.43

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2E6724-BS	122018	7.36	330442	9.59	460085	10.50	384064	13.64	201299	15.94
V2E6724-BSD	122648	7.36	333006	9.59	460318	10.50	389540	13.64	196952	15.93
V2E6724-MB	128920	7.36	301872	9.59	420566	10.50	353628	13.64	178815	15.94
ZZZZZZ	138087	7.36	330131	9.59	455827	10.50	381259	13.64	192504	15.93
ZZZZZZ	128385	7.36	314008	9.59	436375	10.50	371756	13.64	185721	15.94
JC86173-3	126009	7.36	311761	9.59	433980	10.50	367954	13.64	182548	15.93
JC86173-4	131633	7.36	329845	9.59	452019	10.50	340991	13.64	194382	15.93
JC85988-1	104138	7.36	300808	9.59	420231	10.50	354835	13.64	179377	15.93
JC86173-3MS	101215	7.36	298718	9.59	417980	10.50	352393	13.64	181099	15.93
JC86173-4DUP	123277	7.36	322021	9.59	444636	10.50	382225	13.64	189299	15.94
ZZZZZZ	121270	7.36	308667	9.59	429680	10.50	366391	13.64	184593	15.94
ZZZZZZ	100393	7.36	302351	9.59	423226	10.50	361037	13.64	179913	15.94
ZZZZZZ	105578	7.36	325149	9.59	455110	10.50	390688	13.64	195933	15.93
ZZZZZZ	118552	7.36	320923	9.59	443626	10.50	379420	13.64	189508	15.94
ZZZZZZ	114892	7.36	312679	9.59	434622	10.50	375176	13.64	186972	15.94
ZZZZZZ	114350	7.36	319408	9.59	444286	10.50	375517	13.64	188022	15.94

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC85988-1	2E151813.D	104	109	101	101
V2E6724-BS	2E151805.D	102	101	100	98
V2E6724-BSD	2E151806.D	101	99	100	100
V2E6724-MB	2E151808.D	104	106	100	101

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	81-124%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19695-MB1	F183821.D	1	04/12/19	YC	04/12/19	OP19695	EF7897

The QC reported here applies to the following samples: **Method:** EPA 625.1

JC85988-1

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	5.0	1.4	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	48%	10-110%
4165-62-2	Phenol-d5	33%	10-110%
118-79-6	2,4,6-Tribromophenol	94%	35-147%
4165-60-0	Nitrobenzene-d5	100%	32-132%
321-60-8	2-Fluorobiphenyl	86%	40-117%
1718-51-0	Terphenyl-d14	119%	33-126%

Method Blank Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19695-MB1	F183880.D	1	04/15/19	AR	04/12/19	OP19695	EF7899

The QC reported here applies to the following samples: **Method:** EPA 625.1

JC85988-1

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	5.0	1.4	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	48%	10-110%
4165-62-2	Phenol-d5	30%	10-110%
118-79-6	2,4,6-Tribromophenol	90%	35-147%
4165-60-0	Nitrobenzene-d5	103%	32-132%
321-60-8	2-Fluorobiphenyl	86%	40-117%
1718-51-0	Terphenyl-d14	112%	33-126%

Method Blank Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19695A-MB1	4M83201.D	1	04/12/19	CC	04/12/19	OP19695A	E4M3877

The QC reported here applies to the following samples: **Method:** EPA 625 BY SIM

JC85988-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.013	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.012	ug/l	
120-12-7	Anthracene	ND	0.10	0.013	ug/l	
56-55-3	Benzo(a)anthracene	0.111	0.10	0.019	ug/l	
50-32-8	Benzo(a)pyrene	0.0316	0.10	0.030	ug/l	J
205-99-2	Benzo(b)fluoranthene	0.0512	0.10	0.021	ug/l	J
191-24-2	Benzo(g,h,i)perylene	0.0523	0.10	0.026	ug/l	J
207-08-9	Benzo(k)fluoranthene	0.0752	0.10	0.019	ug/l	J
218-01-9	Chrysene	0.0457	0.10	0.015	ug/l	J
53-70-3	Dibenzo(a,h)anthracene	0.0678	0.10	0.035	ug/l	J
206-44-0	Fluoranthene	0.0161	0.10	0.011	ug/l	J
86-73-7	Fluorene	ND	0.10	0.027	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	0.0617	0.10	0.031	ug/l	J
91-20-3	Naphthalene	ND	0.10	0.013	ug/l	
85-01-8	Phenanthrene	0.0164	0.10	0.016	ug/l	J
129-00-0	Pyrene	0.0168	0.10	0.013	ug/l	J

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	109%	21-146%
321-60-8	2-Fluorobiphenyl	95%	12-135%
1718-51-0	Terphenyl-d14	104%	10-145%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19695-BS1	F183822.D	1	04/12/19	YC	04/12/19	OP19695	EF7897
OP19695-BSD	F183823.D	1	04/12/19	YC	04/12/19	OP19695	EF7897

The QC reported here applies to the following samples: **Method:** EPA 625.1

JC85988-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
87-86-5	Pentachlorophenol	50	53.4	107	47.1	94	13	25-128/25
85-68-7	Butyl benzyl phthalate	50	52.1	104	44.8	90	15	50-122/23
84-74-2	Di-n-butyl phthalate	50	38.4	77	42.2	84	9	55-118/25
117-84-0	Di-n-octyl phthalate	50	47.9	96	40.9	82	16	49-124/26
84-66-2	Diethyl phthalate	50	46.5	93	36.3	73	25* [a]	54-113/23
131-11-3	Dimethyl phthalate	50	45.9	92	44.9	90	2	56-110/23
117-81-7	bis(2-Ethylhexyl)phthalate	50	52.2	104	43.9	88	17	50-120/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	51%	50%	10-110%
4165-62-2	Phenol-d5	37%	33%	10-110%
118-79-6	2,4,6-Tribromophenol	95%	82%	35-147%
4165-60-0	Nitrobenzene-d5	102%	94%	32-132%
321-60-8	2-Fluorobiphenyl	114%	89%	40-117%
1718-51-0	Terphenyl-d14	118%	108%	33-126%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19695A-BS12	4M83202.D	1	04/12/19	CC	04/12/19	OP19695A	E4M3877
OP19695A-BSD12	4M83203.D	1	04/12/19	CC	04/12/19	OP19695A	E4M3877

The QC reported here applies to the following samples: **Method:** EPA 625 BY SIM

JC85988-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	1	0.752	75	0.736	74	2	48-138/30
208-96-8	Acenaphthylene	1	0.781	78	0.762	76	2	38-118/30
120-12-7	Anthracene	1	0.796	80	0.756	76	5	52-137/30
56-55-3	Benzo(a)anthracene	1	0.785	79	0.742	74	6	45-138/30
50-32-8	Benzo(a)pyrene	1	0.672	67	0.637	64	5	40-122/30
205-99-2	Benzo(b)fluoranthene	1	0.665	67	0.663	66	0	42-132/30
191-24-2	Benzo(g,h,i)perylene	1	0.748	75	0.721	72	4	26-124/30
207-08-9	Benzo(k)fluoranthene	1	0.993	99	0.924	92	7	38-130/30
218-01-9	Chrysene	1	0.839	84	0.811	81	3	52-134/30
53-70-3	Dibenzo(a,h)anthracene	1	0.758	76	0.725	73	4	22-128/30
206-44-0	Fluoranthene	1	0.872	87	0.833	83	5	55-126/30
86-73-7	Fluorene	1	0.869	87	0.835	84	4	52-134/30
193-39-5	Indeno(1,2,3-cd)pyrene	1	0.736	74	0.697	70	5	27-121/30
91-20-3	Naphthalene	1	0.819	82	0.798	80	3	35-126/30
85-01-8	Phenanthrene	1	0.827	83	0.777	78	6	52-130/30
129-00-0	Pyrene	1	0.878	88	0.867	87	1	53-132/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
4165-60-0	Nitrobenzene-d5	111%	110%	21-146%
321-60-8	2-Fluorobiphenyl	97%	96%	12-135%
1718-51-0	Terphenyl-d14	105%	103%	10-145%

* = Outside of Control Limits.

Internal Standard Area Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Check Std:	E4M3877-CC3868	**Injection Date:**	04/12/19
Lab File ID:	4M83177.D	**Injection Time:**	15:09
Instrument ID:	GCMS4M	**Method:**	EPA 625 BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	41366	7.19	42959	8.66	69178	10.79	47840	13.52
Upper Limit [a]	82732	7.69	85918	9.16	138356	11.29	95680	14.02
Lower Limit [b]	20683	6.69	21480	8.16	34589	10.29	23920	13.02

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP19702A-MB1	38762	7.19	40922	8.66	65340	10.80	44437	13.52
OP19702A-BS12	37715	7.19	40147	8.66	62680	10.80	41112	13.52
OP19702A-BSD12	38421	7.19	40404	8.66	62607	10.79	41690	13.52
OP19679A-MB1	39799	7.19	41945	8.66	65069	10.79	42453	13.51
OP19695A-MB1	36763	7.19	39021	8.66	60670	10.79	42000	13.51
OP19695A-BS12	38507	7.19	40097	8.66	62222	10.79	41278	13.51
OP19695A-BSD12	40334	7.19	42672	8.66	66241	10.79	43504	13.51
JC85988-1 [c]	40505	7.19	43378	8.66	67871	10.79	46222	13.51
ZZZZZZ	42396	7.19	44897	8.66	69428	10.79	46537	13.51
ZZZZZZ	38779	7.19	41016	8.65	63214	10.79	42775	13.51
ZZZZZZ	38601	7.19	41142	8.65	64519	10.79	44485	13.51
ZZZZZZ	37892	7.19	39634	8.66	62073	10.79	42299	13.51
ZZZZZZ	41918	7.19	44507	8.66	68447	10.79	45589	13.51
ZZZZZZ	39486	7.19	41184	8.66	65205	10.79	43414	13.51
ZZZZZZ	39621	7.19	40845	8.66	63841	10.79	43494	13.51
ZZZZZZ	38554	7.19	39379	8.66	61985	10.79	42607	13.51
ZZZZZZ	37389	7.19	38331	8.66	60608	10.79	41709	13.51
ZZZZZZ	40381	7.19	41226	8.66	65594	10.79	43837	13.51
ZZZZZZ	35770	7.19	38534	8.66	63537	10.79	43166	13.51
ZZZZZZ	38044	7.19	40138	8.65	64392	10.79	44486	13.51
ZZZZZZ	36393	7.19	38206	8.65	61390	10.79	41942	13.51
ZZZZZZ	37732	7.19	39344	8.65	63279	10.79	43473	13.50

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Sample reextracted outside the holding time for confirmation due to method blank contamination.

Internal Standard Area Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Check Std:	E4M3883-CC3868	**Injection Date:**	04/18/19
Lab File ID:	4M83321.D	**Injection Time:**	14:14
Instrument ID:	GCMS4M	**Method:**	EPA 625 BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	55004	7.16	60728	8.63	97670	10.77	65086	13.48
Upper Limit [a]	110008	7.66	121456	9.13	195340	11.27	130172	13.98
Lower Limit [b]	27502	6.66	30364	8.13	48835	10.27	32543	12.98

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP19808A-MB1 [c]	45541	7.16	51362	8.63	82671	10.77	59934	13.49
OP19808A-BS12 [c]	46404	7.16	50583	8.63	80671	10.77	56694	13.49
OP19808A-BSD12	46249	7.16	51979	8.63	83384	10.77	58799	13.49
JC85988-1 [d]	47431	7.16	52570	8.63	85758	10.77	61107	13.49
ZZZZZZ	46120	7.16	51040	8.63	83161	10.77	59039	13.49
ZZZZZZ	46806	7.16	51481	8.63	84515	10.77	61896	13.49

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) corr surr out
(d) Sample extracted outside the holding time. Confirmation run.

Internal Standard Area Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Check Std:	EF7897-CC7873	**Injection Date:**	04/12/19
Lab File ID:	F183811.D	**Injection Time:**	12:40
Instrument ID:	GCMSF	**Method:**	EPA 625.1

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	42821	4.53	138643	5.45	71909	6.82	125523	8.61	111024	13.76	105743	16.78
Upper Limit [a]	85642	5.03	277286	5.95	143818	7.32	251046	9.11	222048	14.26	211486	17.28
Lower Limit [b]	21411	4.03	69322	4.95	35955	6.32	62762	8.11	55512	13.26	52872	16.28

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP19695-MB1	33385	4.53	132473	5.45	38494	6.82	64197	8.61	49016*	13.75	53068	16.76
OP19695-BS1	26788	4.53	141148	5.45	55854	6.82	92244	8.61	68177	13.75	56049	16.77
OP19695-BSD	39385	4.53	144460	5.45	67805	6.82	107175	8.61	79679	13.75	61752	16.77
OP19695-BS13	38827	4.53	146967	5.45	74112	6.82	126778	8.61	92404	13.75	92943	16.77
OP19695-BS14 [c]	21333*	4.53	79348	5.45	41510	6.82	72848	8.60	67490	13.75	62998	16.76
OP19695-BS15	22953	4.53	99650	5.45	53402	6.82	94947	8.61	55751	13.75	59659	16.77
JC85988-1	40860	4.53	141960	5.45	77241	6.82	123252	8.60	89652	13.75	95188	16.77
ZZZZZZ	25820	4.53	98899	5.45	51391	6.82	106652	8.61	86926	13.75	60026	16.76
ZZZZZZ	36438	4.53	135873	5.45	71112	6.82	118159	8.60	88240	13.75	91889	16.77
ZZZZZZ	38006	4.53	147822	5.45	74836	6.82	127085	8.60	94277	13.75	101419	16.76
ZZZZZZ	31175	4.53	87720	5.45	53336	6.82	89212	8.60	71409	13.75	58860	16.77
ZZZZZZ	28278	4.53	100955	5.45	53593	6.82	91783	8.61	89149	13.75	96610	16.76
ZZZZZZ	27916	4.54	103981	5.51	69094	6.84	119606	8.63	56122	13.80	62455	16.86

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) rr int 1# low

Internal Standard Area Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Check Std:	EF7899-CC7873	**Injection Date:**	04/15/19
Lab File ID:	F183869.D	**Injection Time:**	09:35
Instrument ID:	GCMSF	**Method:**	EPA 625.1

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	38103	4.53	132790	5.45	69102	6.82	130264	8.61	121137	13.77	113122	16.80
Upper Limit [a]	76206	5.03	265580	5.95	138204	7.32	260528	9.11	242274	14.27	226244	17.30
Lower Limit [b]	19052	4.03	66395	4.95	34551	6.32	65132	8.11	60569	13.27	56561	16.30

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP19737-MB1	39874	4.53	142239	5.45	71990	6.82	123479	8.61	80754	13.76	85319	16.78
OP19658-MB1	30766	4.53	116036	5.44	61759	6.81	108092	8.61	77197	13.75	92831	16.78
OP19658-BS13	35979	4.53	114757	5.44	60238	6.81	100875	8.60	82546	13.76	96051	16.78
OP19658-BS14	36449	4.53	130058	5.44	56915	6.81	90267	8.61	68622	13.75	79674	16.78
OP19658-BS15	31949	4.53	116764	5.45	60894	6.81	98852	8.61	78021	13.75	82703	16.78
OP19695-MB1	30217	4.53	111116	5.44	56571	6.82	99637	8.60	89861	13.75	93490	16.78
OP19695-BS14	34057	4.53	139661	5.45	62058	6.81	96579	8.60	78451	13.75	85132	16.78
ZZZZZZ	34872	4.53	110007	5.44	54959	6.81	94958	8.60	73592	13.75	79860	16.78
ZZZZZZ	27684	4.53	103158	5.45	53634	6.81	89872	8.60	73118	13.75	80003	16.78
ZZZZZZ	31599	4.53	122148	5.45	57682	6.81	106243	8.60	82294	13.75	83104	16.78
ZZZZZZ	33738	4.53	118612	5.45	85963	6.82	102620	8.61	80679	13.76	89051	16.79
ZZZZZZ	31739	4.53	126634	5.45	67569	6.82	118206	8.61	70534	13.77	86200	16.82
ZZZZZZ	33894	4.53	120791	5.46	70958	6.82	102873	8.61	85384	13.78	97730	16.81
ZZZZZZ	35561	4.53	105024	5.45	51811	6.82	98083	8.61	74546	13.77	79147	16.80
ZZZZZZ	37607	4.53	130956	5.46	61991	6.84	100880	8.65	90488	13.79	99888	16.80

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Method: EPA 625.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JC85988-1	F183827.D	47	32	84	94	76	106
OP19695-BS1	F183822.D	51	37	95	102	114	118
OP19695-BSD	F183823.D	50	33	82	94	89	108
OP19695-MB1	F183821.D	48	33	94	100	86	119
OP19695-MB1	F183880.D	48	30	90	103	86	112

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-110%
S2 = Phenol-d5	10-110%
S3 = 2,4,6-Tribromophenol	35-147%
S4 = Nitrobenzene-d5	32-132%
S5 = 2-Fluorobiphenyl	40-117%
S6 = Terphenyl-d14	33-126%

Surrogate Recovery Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Method: EPA 625 BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JC85988-1	4M83204.D	97	86	86
JC85988-1	4M83328.D	94	157* [a]	67
OP19695A-BS12	4M83202.D	111	97	105
OP19695A-BSD12	4M83203.D	110	96	103
OP19695A-MB1	4M83201.D	109	95	104

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	21-146%
S2 = 2-Fluorobiphenyl	12-135%
S3 = Terphenyl-d14	10-145%

(a) Outside of in house control limits.

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19705-MB1	7G32041.D	1	04/15/19	VDT	04/15/19	OP19705	G7G1131

The QC reported here applies to the following samples: **Method:** EPA 504.1

JC85988-1

CAS No.	Compound	Result	RL	MDL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.020	0.0061	ug/l	

CAS No.	Surrogate Recoveries		Limits
3017-95-6	2-Bromo-1-chloropropane	112%	70-130%
3017-95-6	2-Bromo-1-chloropropane	103%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19705-BS1	7G32042.D	1	04/15/19	VDT	04/15/19	OP19705	G7G1131
OP19705-BSD	7G32043.D	1	04/15/19	VDT	04/15/19	OP19705	G7G1131

The QC reported here applies to the following samples: **Method:** EPA 504.1

JC85988-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
106-93-4	1,2-Dibromoethane	0.5	0.57	114	0.60	120	5	70-130/24

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
3017-95-6	2-Bromo-1-chloropropane	117%	115%	70-130%
3017-95-6	2-Bromo-1-chloropropane	107%	107%	70-130%

* = Outside of Control Limits.

Surrogate Recovery Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Method: EPA 504.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
JC85988-1	7G32045.D	110	108
OP19705-BS1	7G32042.D	117	107
OP19705-BSD	7G32043.D	115	107
OP19705-MB1	7G32041.D	112	103

Surrogate Compounds	Recovery Limits
S1 = 2-Bromo-1-chloropropane	70-130%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

8.3.1

8

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19706-MB1	5G87514.D	1	04/12/19	SK	04/12/19	OP19706	G5G2105

The QC reported here applies to the following samples: **Method:** EPA 608.3

JC85988-1

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.25	0.098	ug/l	
11104-28-2	Aroclor 1221	ND	0.25	0.21	ug/l	
11141-16-5	Aroclor 1232	ND	0.25	0.13	ug/l	
53469-21-9	Aroclor 1242	ND	0.25	0.11	ug/l	
12672-29-6	Aroclor 1248	ND	0.25	0.063	ug/l	
11097-69-1	Aroclor 1254	ND	0.25	0.21	ug/l	
11096-82-5	Aroclor 1260	ND	0.25	0.076	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	81%	10-159%
877-09-8	Tetrachloro-m-xylene	88%	10-159%
2051-24-3	Decachlorobiphenyl	88%	10-135%
2051-24-3	Decachlorobiphenyl	93%	10-135%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19706-BS1	5G87515.D	1	04/12/19	SK	04/12/19	OP19706	G5G2105
OP19706-BSD	5G87516.D	1	04/12/19	SK	04/12/19	OP19706	G5G2105

The QC reported here applies to the following samples: **Method:** EPA 608.3

JC85988-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	2	1.5	75	1.8	90	18	50-140/34
11104-28-2	Aroclor 1221		ND		ND		nc	60-140/30
11141-16-5	Aroclor 1232		ND		ND		nc	60-140/30
53469-21-9	Aroclor 1242		ND		ND		nc	60-140/30
12672-29-6	Aroclor 1248		ND		ND		nc	70-130/30
11097-69-1	Aroclor 1254		ND		ND		nc	60-140/30
11096-82-5	Aroclor 1260	2	1.5	75	1.9	95	24	50-140/38

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	68%	80%	10-159%
877-09-8	Tetrachloro-m-xylene	74%	87%	10-159%
2051-24-3	Decachlorobiphenyl	74%	90%	10-135%
2051-24-3	Decachlorobiphenyl	78%	95%	10-135%

* = Outside of Control Limits.

Surrogate Recovery Summary

Job Number: JC85988
Account: DRAKEPET Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

Method: EPA 608.3 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JC85988-1	5G87517.D	68	72	76	81
OP19706-BS1	5G87515.D	68	74	74	78
OP19706-BSD	5G87516.D	80	87	90	95
OP19706-MB1	5G87514.D	81	88	88	93

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	10-159%
S2 = Decachlorobiphenyl	10-135%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC85988
Account: DRAKEPET - Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

QC Batch ID: MP14085
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 04/11/19

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.28	12		
Antimony	2.0	.094	.88	-0.023	<2.0
Arsenic	1.0	.013	.25	0.0096	<1.0
Barium	1.0	.008	.36		
Beryllium	0.50	.004	.065		
Boron	50	.65	18		
Cadmium	0.50	.004	.099	-0.0025	<0.50
Calcium	250	6.1	35		
Chromium	4.0	.014	.33	0.038	<4.0
Cobalt	0.50	.002	.06		
Copper	4.0	.021	2.1	0.077	<4.0
Iron	50	.43	12	2.4	<50
Lead	0.50	.009	.14	0.018	<0.50
Magnesium	250	.15	43		
Manganese	1.0	.007	.38		
Molybdenum	1.0	.015	.18		
Nickel	4.0	.017	1.3	0.048	<4.0
Potassium	250	.71	43		
Selenium	1.0	.072	.65	-0.013	<1.0
Silver	2.0	.004	.067	0.0015	<2.0
Sodium	250	1	50		
Strontium	5.0	.003	.65		
Thallium	0.50	.004	.085		
Tin	5.0	.071	.62		
Titanium	1.0	.035	.63		
Vanadium	4.0	.009	.48		
Zinc	10	.029	3.7	1.8	<10

Associated samples MP14085: JC85988-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC85988
Account: DRAKEPET - Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

QC Batch ID: MP14085
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date:			04/11/19					04/11/19	
Metal	BSP Result	Spikelot MPX200.8B% Rec		QC Limits	BSD Result	Spikelot MPX200.8B% Rec		BSD RPD	QC Limit
Aluminum									
Antimony	79.5	80	99.4	85-115	78.2	80	97.8	1.6	20
Arsenic	74.9	80	93.6	85-115	73.9	80	92.4	1.3	20
Barium									
Beryllium									
Boron									
Cadmium	77.2	80	96.5	85-115	76.5	80	95.6	0.9	20
Calcium									
Chromium	78.9	80	98.6	85-115	76.7	80	95.9	2.8	20
Cobalt									
Copper	77.4	80	96.8	85-115	75.8	80	94.8	2.1	20
Iron	2010	2000	100.5	85-115	1970	2000	98.5	2.0	20
Lead	78.4	80	98.0	85-115	78.3	80	97.9	0.1	20
Magnesium									
Manganese									
Molybdenum									
Nickel	77.2	80	96.5	85-115	75.8	80	94.8	1.8	20
Potassium									
Selenium	197	200	98.5	85-115	195	200	97.5	1.0	20
Silver	77.4	80	96.8	85-115	78.3	80	97.9	1.2	20
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	76.3	80	95.4	85-115	74.7	80	93.4	2.1	20

Associated samples MP14085: JC85988-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC85988
Account: DRAKEPET - Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

QC Batch ID: MP14149
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/12/19

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.035	.092	0.094	<0.20

Associated samples MP14149: JC85988-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC85988
Account: DRAKEPET - Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

QC Batch ID: MP14149
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/12/19 04/12/19

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits	BSD Result	Spikelot HGPW3	% Rec	BSD RPD	QC Limit
Mercury	2.2	2	110.0	85-115	2.1	2	105.0	4.7	

Associated samples MP14149: JC85988-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC85988
Account: DRAKEPET - Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

QC Batch ID: MP14584
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date: 04/26/19

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.27	12		
Antimony	2.0	.061	.88	-0.030	<2.0
Arsenic	1.0	.008	.25	0.0095	<1.0
Barium	1.0	.01	.36		
Beryllium	0.50	.005	.065		
Boron	50	.67	18		
Cadmium	0.50	.002	.099	-0.000017	<0.50
Calcium	250	1.8	35		
Chromium	4.0	.018	.33	0.032	<4.0
Cobalt	0.50	.002	.06		
Copper	4.0	.006	2.1	0.084	<4.0
Iron	50	.16	12	0.47	<50
Lead	0.50	.004	.14	0.0036	<0.50
Magnesium	250	.14	43		
Manganese	1.0	.005	.38		
Molybdenum	1.0	.01	.18		
Nickel	4.0	.008	1.3	0.034	<4.0
Potassium	250	1	43		
Selenium	1.0	.4	.65	-0.0083	<1.0
Silver	2.0	.002	.067	0.00061	<2.0
Sodium	250	.28	50		
Strontium	5.0	.003	.65		
Thallium	0.50	.002	.085		
Tin	5.0	.035	.62		
Titanium	1.0	.02	.63		
Vanadium	4.0	.023	.48		
Zinc	10	.023	3.7	1.4	<10

Associated samples MP14584: JC85988-2R

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC85988
Account: DRAKEPET - Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

QC Batch ID: MP14584
Matrix Type: AQUEOUS

Methods: EPA 200.8
Units: ug/l

Prep Date:			04/26/19					04/26/19	
Metal	BSP Result	Spikelot MPX200.8B% Rec		QC Limits	BSD Result	Spikelot MPX200.8B% Rec		BSD RPD	QC Limit
Aluminum									
Antimony	74.6	80	93.3	85-115	75.5	80	94.4	1.2	20
Arsenic	74.5	80	93.1	85-115	74.0	80	92.5	0.7	20
Barium	anr								
Beryllium									
Boron									
Cadmium	77.2	80	96.5	85-115	75.3	80	94.1	2.5	20
Calcium									
Chromium	75.9	80	94.9	85-115	75.0	80	93.8	1.2	20
Cobalt									
Copper	73.9	80	92.4	85-115	72.8	80	91.0	1.5	20
Iron	2140	2000	107.0	85-115	2120	2000	106.0	0.9	20
Lead	76.7	80	95.9	85-115	75.6	80	94.5	1.4	20
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	74.9	80	93.6	85-115	73.8	80	92.3	1.5	20
Potassium									
Selenium	214	200	107.0	85-115	215	200	107.5	0.5	20
Silver	77.4	80	96.8	85-115	77.2	80	96.5	0.3	20
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	75.6	80	94.5	85-115	75.6	80	94.5	0.0	20

Associated samples MP14584: JC85988-2R

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC85988
Account: DRAKEPET - Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

QC Batch ID: MP14647
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/29/19

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.048	.092	0.060	<0.20

Associated samples MP14647: JC85988-2R

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC85988
Account: DRAKEPET - Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

QC Batch ID: MP14647
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/29/19 04/29/19

Metal	BSD Result	Spikelot HGPW3	% Rec	BSD RPD	QC Limit	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	2.3	2	115.0	19.0		1.9	2	95.0	85-115

Associated samples MP14647: JC85988-2R

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JC85988
Account: DRAKEPET - Drake Petroleum Company, Inc.
Project: CEAMAW: 19, 25 Beach Road, Vinyard Haven, MA

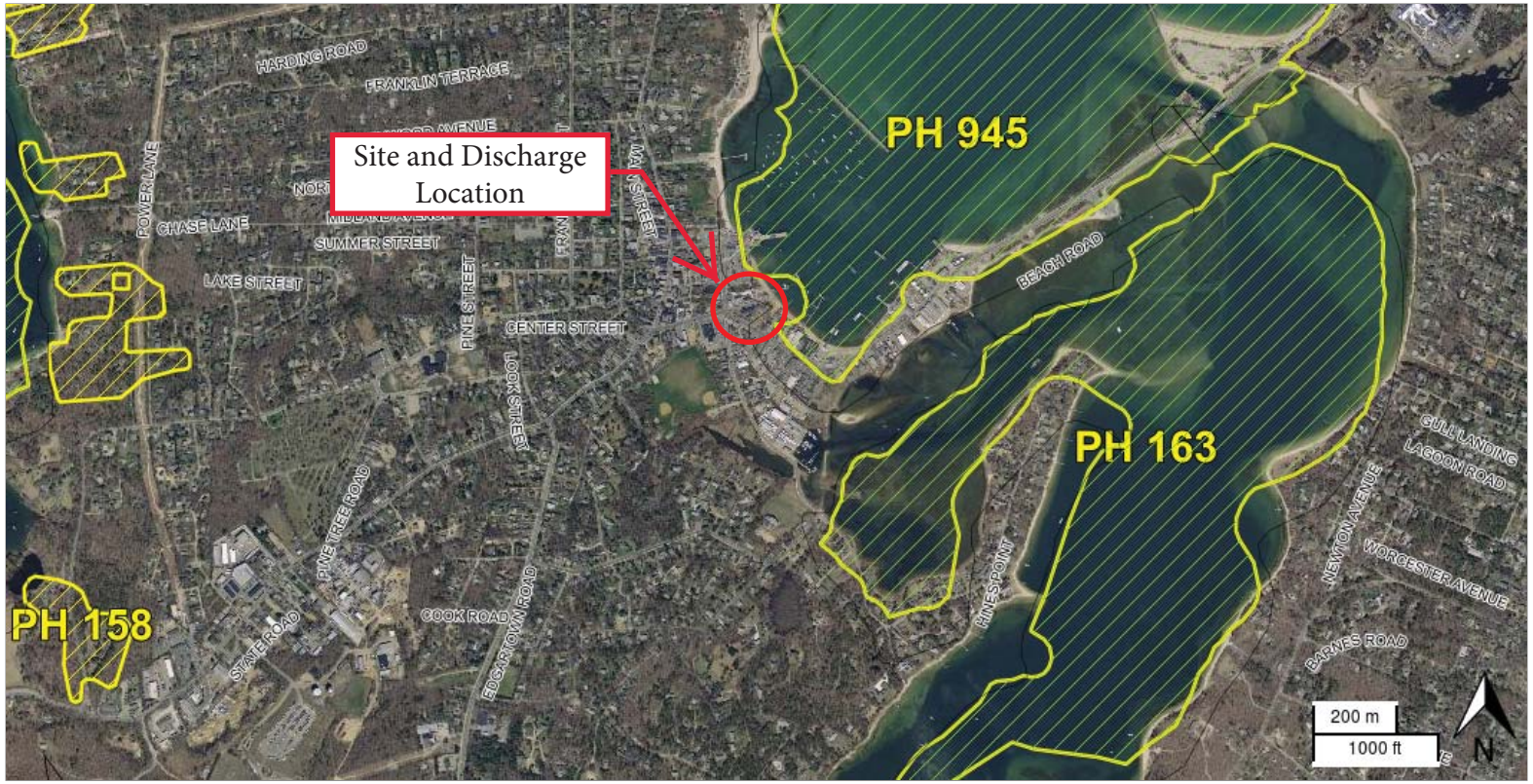
Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP20624/GN94125	2.0	0.0	mg/l	80	72.9	91.1	90-110%
Chromium, Hexavalent	GN93851	0.010	0.0	mg/l	0.150	0.15	100.0	90-110%
Cyanide	GP20587/GN94092	0.010	0.0	mg/l	0.0833	0.0868	104.2	90-110%
HEM Petroleum Hydrocarbons	GP20573/GN94076	5.0	0.0	mg/l	20.05	14.2	70.8	64-132%
Hardness, Total as CaCO3	GN94164			mg/l	160	164	102.5	80-120%
Hardness, Total as CaCO3	GN94164			mg/l	80	82.0	102.5	80-120%
Hardness, Total as CaCO3	GN94164			mg/l	160	164	102.5	80-120%
Hardness, Total as CaCO3	GN94164	4.0	0.0	mg/l	80	82.0	102.5	80-120%
Nitrogen, Ammonia	GP20553/GN93992	0.20	0.0	mg/l	1	0.981	98.1	80-120%
Solids, Total Suspended	GN94079	4.0	0.0	mg/l				
Specific Conductivity	GN94597			umhos/cm	1412	1420	100.6	99-101%
Sulfate	GP20624/GN94125	2.0	0.0	mg/l	80	72.6	90.8	90-110%
Total Residual Chlorine	GN93905	0.10	0.0	mg/l	1.0	0.96	96.0	90-110%

Associated Samples:
Batch GN93851: JC85988-1
Batch GN93905: JC85988-1
Batch GN94079: JC85988-1
Batch GN94164: JC85988-1, JC85988-2
Batch GN94597: JC85988-2T
Batch GP20553: JC85988-1, JC85988-2
Batch GP20573: JC85988-1
Batch GP20587: JC85988-1
Batch GP20624: JC85988-1
(*) Outside of QC limits

ATTACHMENT C

NHESP Map

Vineyard Haven Xtramart



MassDOT Roads Street Names

Major MassDOT Routes
- Interstate Highways
- US Roads
- State

Massachusetts Towns

NHESP Estimated Habitats of Rare Wildlife

NHESP Priority Habitats of Rare Species

Orthos 2013-2014
2013-2014 Color Orthos (USGS)

ATTACHMENT D

United States Department of the Interior, Fish and Wildlife Services (FWS) Threatened or Endangered Species or Critical Habitat Letter

United States Department of the Interior

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

In Reply Refer To:
Consultation Code: 05E1NE00-2019-SLI-1522
Event Code: 05E1NE00-2019-E-03683
Project Name: Vineyard Haven Xtramart

April 24, 2019

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

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

Project Summary

Consultation Code: 05E1NE00-2019-SLI-1522

Event Code: 05E1NE00-2019-E-03683

Project Name: Vineyard Haven Xtramart

Project Type: DREDGE / EXCAVATION

Project Description: Discharge of treated groundwater to municipal storm drain catch basin located at intersection of Lagoon Pond Road and Beach Rd in Tisbury, MA. The municipal storm drain system discharges to Vineyard Haven Harbor at an outfall located at the end of Beach Street Extension, approximately 425 feet from the site and approximately 500 feet from the municipal storm drain catch basin where discharge from the treatment system will enter the municipal storm drain system.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/41.45374876467977N70.6006019476954W

Counties: Dukes, MA

Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

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

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

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

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

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Roseate Tern *Sterna dougallii dougallii* Population: northeast U.S. nesting pop. No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2083	Endangered

Critical habitats

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

ATTACHMENT E

MACRIS Historic Places Report

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Tisbury; Place: Vineyard Haven; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year
TIS.A	William Street Historic District		Tisbury	
TIS.E	Tashmoo Springs Pumping Station		Tisbury	
TIS.F	Martha's Vineyard American Revolution Battlefield		Tisbury	
TIS.116	Martha's Vineyard Co-Op Grocery Store	Beach Rd	Tisbury	
TIS.907	Beach Road Bridge	Beach Rd	Tisbury	1935
TIS.56	Ritter House (Jirah Luce House)	Beach St	Tisbury	1796
TIS.91	Daggett, Capt. Seth House	Beach St	Tisbury	1801
TIS.98	Crowell, Hebron - West, Dr. Thomas House	Causeway Rd	Tisbury	1743
TIS.902	Tisbury World War I Monument	Causeway Rd	Tisbury	1925
TIS.92	Luce, Capt. Barnard House	Center St	Tisbury	1840
TIS.20	Harding, Capt. Edward Lincoln House	8 Center St	Tisbury	1837
TIS.30	Harding, Capt. Ephraim House	14 Center St	Tisbury	c 1838
TIS.34	Capawock Hall - Methodist Church	10 Church St	Tisbury	1833
TIS.15	West, David Porter House	14 Church St	Tisbury	r 1850
TIS.170	Prouty, Caleb House	15 Cromwell Ln	Tisbury	c 1838
TIS.801	Proprietors' Burying Ground	Franklin St	Tisbury	c 1770
TIS.142	Marine Hospital	Howard Ave	Tisbury	c 1895
TIS.93	Presbury, John House	Lagoon Pond	Tisbury	1719
TIS.136	Vineyard Haven Marine Hospital	Lagoon Pond Rd	Tisbury	1895
TIS.141	Vineyard Haven Marine Hospital Addition	Lagoon Pond Rd	Tisbury	1938
TIS.77	Smith, Capt. Lorenzo House	Main St	Tisbury	r 1830
TIS.78	Baxter, Malachi House	Main St	Tisbury	1777
TIS.80	Dexter, Rodolphus W. House	Main St	Tisbury	r 1844
TIS.81	Daggett, Samuel - Dias, Capt. Joseph House	Main St	Tisbury	1733
TIS.82	Newcomb House	Main St	Tisbury	c 1801
TIS.83	Newcomb, Capt. Alexander House	Main St	Tisbury	1801

Inv. No.	Property Name	Street	Town	Year
TIS.84	Chase, Thomas House	Main St	Tisbury	1712
TIS.85	Harding, William House	Main St	Tisbury	c 1805
TIS.86	Martha's Vineyard National Bank	Main St	Tisbury	1905
TIS.115		Main St	Tisbury	r 1870
TIS.117		Main St	Tisbury	c 1880
TIS.118	Bradley, Catherine M. House	Main St	Tisbury	c 1880
TIS.139	Cromwell, Peter House	Main St	Tisbury	c 1844
TIS.905	Owen, William Barry Park	Main St	Tisbury	c 1922
TIS.79	Manter, Ellis H. House	102 Main St	Tisbury	c 1845
TIS.35	Mayhew, Nathan School House	110 Main St	Tisbury	1828
TIS.24	Mayhew, Nathan House	114 Main St	Tisbury	1840
TIS.23	Childs, Calvin House	116 Main St	Tisbury	1914
TIS.19	Crowell, Edmund House	118 Main St	Tisbury	1805
TIS.18	Luce, Tristam House	122 Main St	Tisbury	1815
TIS.16	Crowell, Arnold House	124 Main St	Tisbury	c 1842
TIS.2	Crowell, Capt. Joseph House	126 Main St	Tisbury	r 1843
TIS.119	Chase, Timothy House	130 Main St	Tisbury	1720
TIS.900	Tisbury Civil War Memorial	Pine Tree Rd	Tisbury	1907
TIS.901	Bethel Monument	Pine Tree Rd	Tisbury	r 1910
TIS.103		South Main St	Tisbury	c 1880
TIS.104	Butler, Dr. Winthrop House	South Main St	Tisbury	c 1850
TIS.106		South Main St	Tisbury	c 1880
TIS.124	Revel, Hannah House	South Main St	Tisbury	c 1870
TIS.125	Dexter, Col. Joseph House	South Main St	Tisbury	r 1775
TIS.126	Dexter, Capt. Joseph Jr. House	South Main St	Tisbury	c 1809
TIS.137	Chase, Zephaniah - Luce, Matthew House	South Main St	Tisbury	c 1788
TIS.140	Martha's Vineyard Cooperative Bank	South Main St	Tisbury	c 1800
TIS.123		31 South Main St	Tisbury	c 1880
TIS.41	Merry, Timothy House	5 Spring St	Tisbury	c 1795
TIS.38	Luce, Jane Smith House	11 Spring St	Tisbury	r 1846
TIS.40	First Baptist Church	17 Spring St	Tisbury	1883
TIS.39	First Baptist Church Parsonage	19 Spring St	Tisbury	1883
TIS.32	Tisbury Town Hall - Association Hall	21 Spring St	Tisbury	1844
TIS.37	Howland, John W. House	29 Spring St	Tisbury	1864
TIS.48	Luce, Timothy House	30 Spring St	Tisbury	r 1854
TIS.55	Kidder, Eugenia Norton House	34 Spring St	Tisbury	c 1900
TIS.36	Howland, John W. House	36 Spring St	Tisbury	r 1849
TIS.87	Luce, Jonathan Cooper Shop and Sail Loft	Union St	Tisbury	c 1834

Inv. No.	Property Name	Street	Town	Year
TIS.88	Seamen's Friends Society of Boston	Union St	Tisbury	1893
TIS.89	Daggett, Capt. Samuel House	Union St	Tisbury	1785
TIS.802	Crossways Cemetery	Villa Dr	Tisbury	1719
TIS.90	Rotch, William J. Old Steam Mill	Water St	Tisbury	1881
TIS.96	Tashmoo Springs Pumping Station	325 West Spring St	Tisbury	1887
TIS.97	Tashmoo Springs Pumping Station Garage	325 West Spring St	Tisbury	1919
TIS.169	Tashmoo Springs Pumping Station Shed	325 West Spring St	Tisbury	1932
TIS.915	Tashmoo Springs Pumping Station Intake Tank	325 West Spring St	Tisbury	1924
TIS.916	Tashmoo Springs Pumping Station Valve Cover	325 West Spring St	Tisbury	1924
TIS.917	Tashmoo Springs Pumping Station Intake Structure	325 West Spring St	Tisbury	1938
TIS.918	Tashmoo Springs Pumping Station Dike	325 West Spring St	Tisbury	1938
TIS.919	Tashmoo Springs Pumping Station Reservoir	325 West Spring St	Tisbury	1938
TIS.920	Tashmoo Springs Pumping Station Entrance Pillars	325 West Spring St	Tisbury	c 1887
TIS.921	Tashmoo Springs Pumping Station Access Road	325 West Spring St	Tisbury	c 1887
TIS.922	Tashmoo Springs Pumping Station Storage Unit	325 West Spring St	Tisbury	r 1980
TIS.923	Tashmoo Springs Pumping Station Coal Bunker	325 West Spring St	Tisbury	r 1920
TIS.11	Brown, Benjamin F. House	24 William St	Tisbury	c 1842
TIS.10	Norton, Shubael House	26 William St	Tisbury	1837
TIS.46	Simmons, Abbe R. House	27 William St	Tisbury	c 1881
TIS.28	Peakes, James D. House	31 William St	Tisbury	c 1844
TIS.27	Luce, Jesse House	35 William St	Tisbury	c 1846
TIS.43	Harding, Capt. Charles D. House	39 William St	Tisbury	c 1838
TIS.9	Luce, Capt. Richard House	40 William St	Tisbury	1833
TIS.42	Tuckerman, Thomas House	45 William St	Tisbury	c 1837
TIS.14	Swain, John House	49 William St	Tisbury	c 1838
TIS.8	Bradley, Thomas House	52 William St	Tisbury	1835
TIS.12	Crowell, Capt. William House	53 William St	Tisbury	1839
TIS.7	Luce, Matthew House	66 William St	Tisbury	1840
TIS.6	Dexter, Capt. Elisha House	70 William St	Tisbury	c 1842
TIS.29	Barrows, Thomas House	73 William St	Tisbury	1839
TIS.5	Skiff, Nathan House	74 William St	Tisbury	1849
TIS.44	Daggett, Capt. William Jr. House	76 William St	Tisbury	c 1846
TIS.17	Carey, Mary C. House	79 William St	Tisbury	1840
TIS.45	Daggett, Alonzo House	84 William St	Tisbury	r 1845
TIS.3	Daggett, William III House	88 William St	Tisbury	c 1858
TIS.33	Christ United Methodist Church	89 William St	Tisbury	1924

Inv. No.	Property Name	Street	Town	Year
TIS.25	Downs, William C. House	97 William St	Tisbury	r 1850
TIS.47	Down, Charles House	98 William St	Tisbury	1842
TIS.31	Manter, Henry House	101 William St	Tisbury	r 1850
TIS.26	Robinson, William House	103 William St	Tisbury	1909
TIS.1	Daggett, Freeman House	104 William St	Tisbury	1841
TIS.22	Hursell, Richard L. House	107 William St	Tisbury	r 1854
TIS.49	Cromwell, Capt. B. C. House	108 William St	Tisbury	1873
TIS.21	Daggett, Leander House	109 William St	Tisbury	c 1840
TIS.50	Robinson, John B. House	112 William St	Tisbury	r 1856
TIS.51	Tilton, Calvin House	116 William St	Tisbury	r 1855
TIS.52	Harding, Capt. George G. House	118 William St	Tisbury	c 1866
TIS.13	Crowell, John House	123 William St	Tisbury	c 1886
TIS.53	Robinson, Col. Augustus G. House	124 William St	Tisbury	1882
TIS.54	Grace Episcopal Church and Parish House	128 William St	Tisbury	1882