UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

CERTIFIED MAIL RETURN RECEIPT REQUESTED

SEP 10 2014

Matthew Young
Senior Project Manager
Cumberland Farms, Inc.
100 Crossing Boulevard
Framingham, MA 01702

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Cumberland Farms Inc., site located at 115 Orange Street, Nantucket County; Authorization # MAG910639

Dear Mr. Young:

Based on the review of a Notice of Intent (NOI) submitted by Michael C. Bricher from Environmental Compliance Services, Inc., on behalf of Cumberland Farms Inc., for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, the Owner's representative and the named Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants which you are required to monitor. Also indicated on the checklist are the effluent limits, test methods and minimum levels (MLs) for each pollutant. Please note that the checklist does not represent the complete requirements of the RGP. Operators must comply with all of the applicable requirements of this permit, including influent and effluent monitoring, narrative water quality standards, record keeping, and reporting requirements, found in Parts I and II, and Appendices I – VIII of the RGP. See EPA's website for the complete RGP and other information at: http://www.epa.gov/region1/npdes/mass.html#dgp.

Please note the enclosed checklist includes parameters marked "Believed Present" by your consultant. The checklist also includes metals and polycyclic aromatic hydrocarbons parameters selected on your behalf by this office because the pollutant information provided in the NOI and the laboratory data was incomplete and this office was not able to confirm the presence or absence of the pollutant contamination at the site.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on a dilution factor range (DFR). With the absence of dilution to the receiving wetland, EPA determined that the DFR for each parameter is in the one and five (1-5) range. (See the RGP Appendix IV for Massachusetts facilities) Therefore, the limits for antimony of 5.6 ug/L, arsenic of 36 ug/l, cadmium of 8.9 ug/L, trivalent chromium of 100 ug/L, copper of 3.7 ug/L, lead of 8.5 ug/L, nickel of 8.2 ug/L, selenium of 71 ug/L, silver of 2.2 ug/L, zinc of 85 ug/L and iron of 1,000 ug/L, are required to achieve permit compliance at your site.

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on November 30, 2014. You are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

Thank you in advance for your cooperation in this matter. Please contact Victor Alvarez at 617-918-1572 or Alvarez.Victor@epa.gov, if you have any questions.

Sincerely,

Thelma Murphy

Thelma Murphy, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Peter Seller, Framingham PWD
Michael C. Bricher, E C S, Inc.

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**MAG910639**
Authorization Issued:	September, 2014
Facility/Site Name:	Cumberland Farms, Inc.
Facility/Site Address:	115 Orange Street, Nantucket, MA 02554
	Email address of owner: myoung@cumberlandgulf.com
Legal Name of Operator:	Cumberland Farms, Inc.
Operator contact name, title, and Address:	Matthew Young, Senior Project Manager
	Email: Same as the Owners
Estimated date of the site's Clean Up completion:	November 30, 2014
Category and Sub-Category:	Category I- Petroleum Related Site Remediation. Subcategory C. Petroleum sites with Additional Contamination
RGP Termination Date:	September 10, 2015
Receiving Water:	Wetlands

Monitoring & Limits are applicable if checked. All samples are to be collected as grab samples

	Parameter	**Effluent Limit/Method#/ML** (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
√	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing ** Me#160.2/ML5ug/L
	2. Total Residual Chlorine (TRC) [1]	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
√	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
	4. Cyanide (CN) [2, 3]	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L
	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
√	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
√	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) [4]	100 ug/L/ Me#8260C/ ML 2ug/L
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l/Me#8260C/ML 10ug/L
	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	13. tert-Amyl Methyl Ether (TAME)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	14. Naphthalene [5]	20 ug/L /Me#8260C/ML 2ug/L
	15. Carbon Tetrachloride	4.4 ug/L /Me#8260C/ ML 5ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/L /Me#8260C/ ML 5ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/L /Me#8260C/ ML 5ug/L
	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/L /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/L - NH only /Me#8260C/ ML 5ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/L /Me#8260C/ ML 5ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/L/Me#8260C/ ML 5ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/L/Me#8260C/ ML 5ug/L
	23. Methylene Chloride	4.6 ug/L/Me#8260C/ ML 5ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/L/Me#8260C/ ML 5ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/L/Me#8260C/ ML 5ug/L
	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	27. Trichloroethene (TCE)	5.0 ug/L /Me#8260C/ ML 5ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/L /Me#8260C/ ML 5ug/L
√	29. Acetone	Monitor Only(ug/L)/Me#8260C/ML 50ug/L
	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50ug/L
	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
	33. Total Phthalates (Phthalate esters) [6]	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
√	a. Benzo(a) Anthracene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	b. Benzo(a) Pyrene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	c. Benzo(b)Fluoranthene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	d. Benzo(k)Fluoranthene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	e. Chrysene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	f. Dibenzo(a,h)anthracene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
√	g. Indeno(1,2,3-cd) Pyrene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
√	h. Acenaphthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	i. Acenaphthylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	j. Anthracene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	l. Fluoranthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	m. Fluorene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	n. Naphthalene [5]	20 ug/l / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	o. Phenanthrene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
√	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) [8, 9]	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
√	38. Chloride	Monitor only/Me# 300.0/ ML 100 ug/L

	Metal Parameters	Total Recoverable MA/Metal Limit H [10] = 50 mg/l CaCO3, Units = ug/l [(11/12)]		Minimum level=ML	
			Saltwater Limits		
√	39. Antimony	5.6		ML	10
√	40. Arsenic **		36	ML	20
√	41. Cadmium **		8.9	ML	10
√	42. Chromium III (trivalent) **		100	ML	15
	43. Chromium VI (hexavalent) **		50.3	ML	10
√	44. Copper **		3.7	ML	15
√	45. Lead **		8.5	ML	20
√	46. Mercury **		1.1	ML	02
√	47. Nickel **		8.2	ML	20
√	48. Selenium **		71	ML	20
√	49. Silver		2.2	ML	10
√	50. Zinc **		85.6	ML	15
√	51. Iron	1,000		ML	20

	Other Parameters	Limit
√	52. Instantaneous Flow	Site specific in CFS
√	53. Total Flow	Site specific in CFS
	54. pH Range for Class A & Class B Waters in MA	6.5-8.3; 1/Month/Grab[13]
√	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab[13]
	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab[13]
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab[14]
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab[14]
	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab[14]
	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab[14]
	61. Maximum Change in Temperature in MA – Any Class B water body - Cold water and Lakes/Ponds	3°F; 1/Month/Grab[14]
	62. Maximum Change in Temperature in MA – Any Class SA water body - Coastal	1.5°F; 1/Month/Grab[14]
	63. Maximum Change in Temperature in MA – Any Class SB water body - July to September	1.5°F; 1/Month/Grab[14]
	64. Maximum Change in Temperature in MA –Any Class SB water body - October to June	4°F; 1/Month/Grab[14]

Footnotes:

[1] Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).
[2] Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.
[3] Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).
[4] BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.
[5] Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.
[6] The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[7] Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
[8] In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Aroclor analyses."Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[9]Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).
[10] Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.
[11] For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using DF x 1,000ug/L (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit =1,000 x 2 =2,000 ug/L., etc. not to exceed the DF=5.
[12] Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).
[13] pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.
[14] Temperature sampling per Method 170.1

WHERE BUSINESS AND THE ENVIRONMENT CONVERGE

997 Millbury Street, Unit G, Worcester, MA 01607 tel 508.756.0151 fax 508.757.7063 www.ecsconsult.com

August 13, 2014
Project No. 03-221855

Mr. Victor Alvarez
U.S. Environmental Protection Agency
EPA-Region 1
5 Post Office Square
Mail Code OEP06-4
Boston, MA 02109-3912

RE: Notice of Intent for Remediation General Permit
Cumberland Farms Inc.
115 Orange Street
Nantucket, MA 02554

Dear Mr. Alvarez:

Environmental Compliance Services, Inc. (ECS) is pleased to provide supporting documentation for the Notice of Intent (NOI) for the Remediation General Permit (RGP) on behalf of Cumberland Farms, Inc. (CFI), for the above-referenced property. This NOI is being submitted in order to obtain a permit for the operation of a temporary groundwater recovery and treatment system (GWTS) at the Site. The GWTS is required to be operated at the Site in order to allow for the installation a new single-story Convenience Store building during site redevelopment. A Site Locus is provided as Figure 1, a Site Plan as Figure 2, and a Minor Site Plan depicting the dewatering discharge location is provided as Figure 2A. A Flow Schematic of the dewatering treatment plan is included as Figure 3. A copy of the NOI form is provided as Attachment I.

System Design

Groundwater treatment will occur prior to discharge to the storm water manhole located adjacent to the eastern property boundary. A plan detailing the location of the new single-story Convenience Store building is depicted on Figure 2, and the proposed storm water manhole discharge location is depicted on Figure 2A.

The groundwater treatment system located on the Site will be composed of the following:

Submersible pneumatic pumps that collect groundwater from the UST excavation area, then recovered groundwater will be pumped into a 20,000 gallon frac tank (to settle out solids) and then processed through particulate filters and two-1,000 lbs. liquid phase granular activated carbon (GAC) units for the treatment of recovered liquids. A line diagram of the groundwater treatment system is provided as Figure 3.

The proposed discharge location for treated groundwater is a catch basin located on the eastern boundary of the subject property along the shoulder of Orange Street. This storm water catch basin discharges into marsh wetlands (named The Creeks) located approximately 100 feet east of the Site. These marsh wetlands discharges into Nantucket Harbor located approximately 3,000 feet northeast of the Site property boundary. In this area of the Nantucket Harbor, the shore is a tidal flat extending to "The Creeks" wetland with an active stream through the middle of the wetland. The wetland had one time likely extended to the project site, prior to the filling taken place in the general area. Please refer to Figure 1 for a depiction of "The Creeks" located east of the property as well as Nantucket Harbor.

Average flow rate of discharge of treated groundwater from the system to the storm water line is expected to be approximately 50 gallons per minute (gpm). The design capacity of the groundwater treatment system is 75 gpm based upon data collected from comparable systems installed at other remedial sites operated/designed by ECS.

Influent Sample Analysis

Groundwater samples were collected from monitoring well MW-1 on June 18, 2014. These samples were submitted to Spectrum Analytical, Inc. of Agawam, Massachusetts under standard chain of custody protocol for analysis of total petroleum hydrocarbons (TPH) by USEPA Method 8100M, volatile organic compounds (VOCs) by USEPA Method 8260B, total metals (iron and lead) by USEPA Method 200.7, and total suspended solids by SM2540D. A copy of the laboratory report and chains of custody record are provided as Attachment II.

Appendix III of the 2010 RGP under NPDES sets the effluent limitations for treatment system discharges. Groundwater analytical results of the samples collected from MW-1 on June 18, 2014 were compared to the Appendix III effluent limitations (www.epa.gov/region1/npdes/rgp.html). These results indicate that the petroleum constituents (i.e., benzene, total benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tert butyl ether (MTBE), and naphthalene) were not detected in the sample at concentrations above the applicable Appendix III effluent limitations for Subcategory A-Petroleum Sites with additional contamination. Groundwater analytical results did reveal detectable concentrations of iron and total suspended solids above the NPDES RGP Criteria.

Receiving Waters Information

The receiving water for the treated groundwater discharge is Nantucket Harbor, located approximately 3,000 feet east of the Site. Due to the close location of the Site to Nantucket Harbor, the receiving waters are tidally influenced. Accordingly, a 7Q10 flow rate was not calculated for this project.

Receiving Water Classification

ECS consulted the Massachusetts Department of Environmental Protection (MassDEP) Division of Water Pollution Control (http://www.mass.gov/eea/docs/dep/water/laws/i-thru-z/tblfig.pdf) to determine the classification for the receiving waters. Nantucket Harbor is listed as Class SA surface water.

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

According to Massachusetts Geographic Information Systems (MassGIS) online maps for the Natural Heritage Endangered Species Program (NHESP) (2008), no Priority Habitat of Rare Species or Estimated Habitats of Rare Wildlife are located within the proposed at or immediately adjacent to the work zone area. The closest NHESP Estimated Habitats of Rare Wildlife in Wetland Areas Protected Open Spaces are located approximately 100 feet east of the Site. Given the fact there will be an on-site dewatering treatment system, the potential discharge will not have an adverse affect on the NHESP Estimated Habitats of Rare Wildlife. A copy of the MassGIS Resource Priority and NHESP Maps of the Site area is included in Attachment III.

Review of National Register of Historic Places

Listings of Historic Places within the Town of Nantucket in the vicinity of the Site were obtained from the Massachusetts Cultural Resources Information System (MACRIS) online database at http://mhc-macris.net/towns.aspx (accessed July 22, 2014). Copies of the MACRIS report are provided as Attachment IV. The database indicated that there are no historic places located in close proximity to the Site and proposed discharge area. This project does not involve the demolition or rehabilitation of historic properties.

Lastly, discharges in Massachusetts under the RGP are subject to MassDEP application form BRP WM 12 and a payment fee of $950.00. A copy of the MassDEP application form BRP WM 12 and payment check are included in Attachment V.

Should you have any questions or concerns regarding the contents of this letter or the NOI for the RGP, please do not hesitate to contact the undersigned at (508) 756-0151.

Sincerely,
ENVIRONMENTAL COMPLIANCE SERVICES, INC.

Michael C. Bricher, P.G., LSP
Senior Project Manager

cc: Matthew Young, Cumberland Farms, Inc., 100 Crossing Blvd, Framingham, MA 01702
Robert Kubit, MassDEP, Division of Watershed Management, 627 Main Street, Worcester, MA 01608
Kara Buzanoski, Director of Public Works, 188 Madaket Road, Nantucket, MA 02554

LIST OF ATTACHMENTS

Figures
Figure 1: Site Locus
Figure 2: Site Plan
Figure 2A: Minor Site Plan with Proposed Discharge Location
Figure 3: Flow Schematic

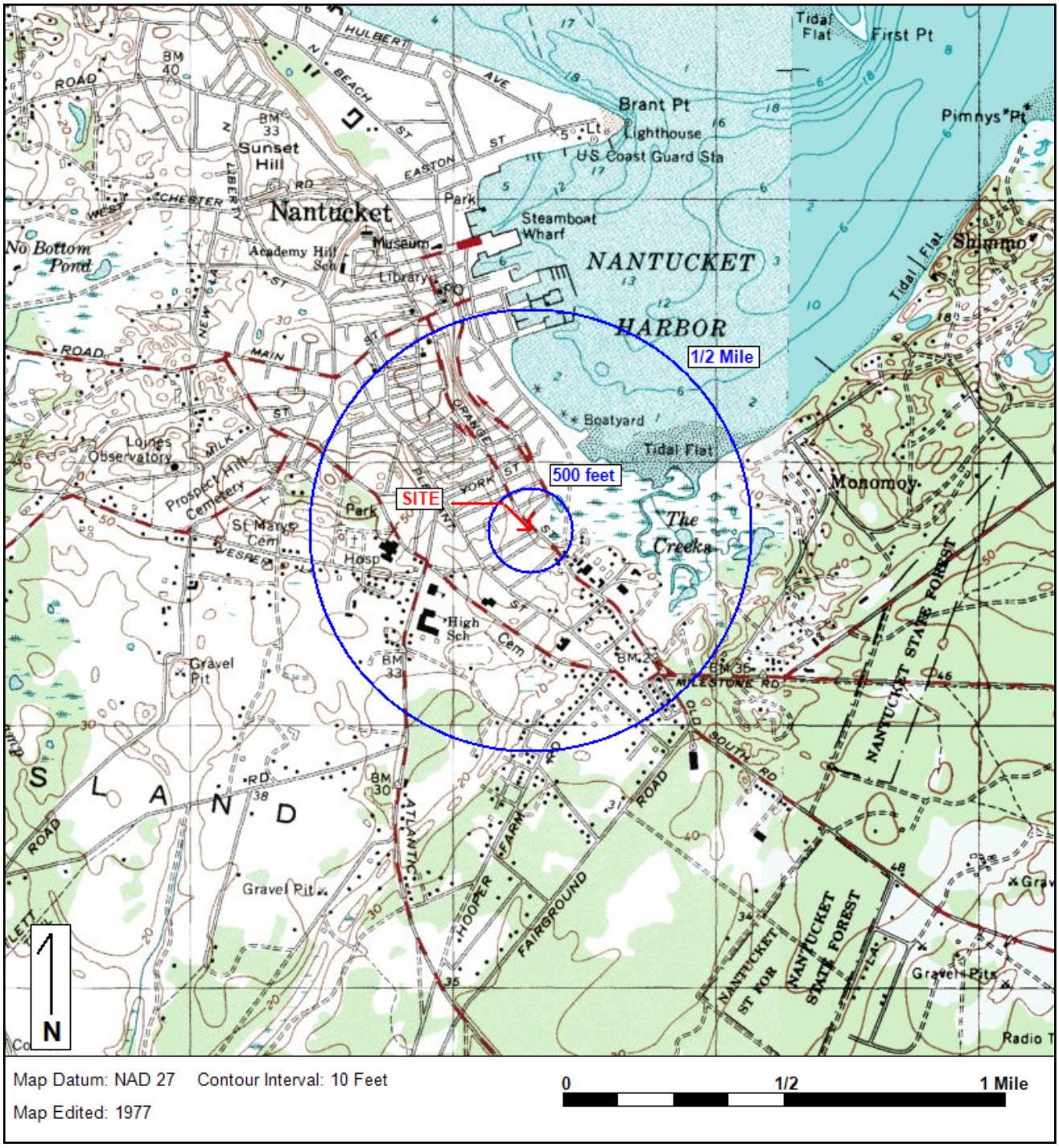
Attachment I: NOI for the RGP
Attachment II: Laboratory Analytical Reports and Chain of Custody Records
Attachment III: On-line MassGIS Resource Priority & NHESP Maps
Attachment IV: MACRIS Database Search Results
Attachment V: BRP WM 12 Transmittal Form and Copy of Fee Payment

FIGURES

Environmental Compliance Services, Inc.
997 Millbury Street, Unit G
Worcester, MA 01607
Phone 508-756-0151 Fax 508-757-7063
www.ecsconsult.com

MA-10105-Nantucket - 115 Orange Street
115 Orange Street
Nantucket, MA 02554

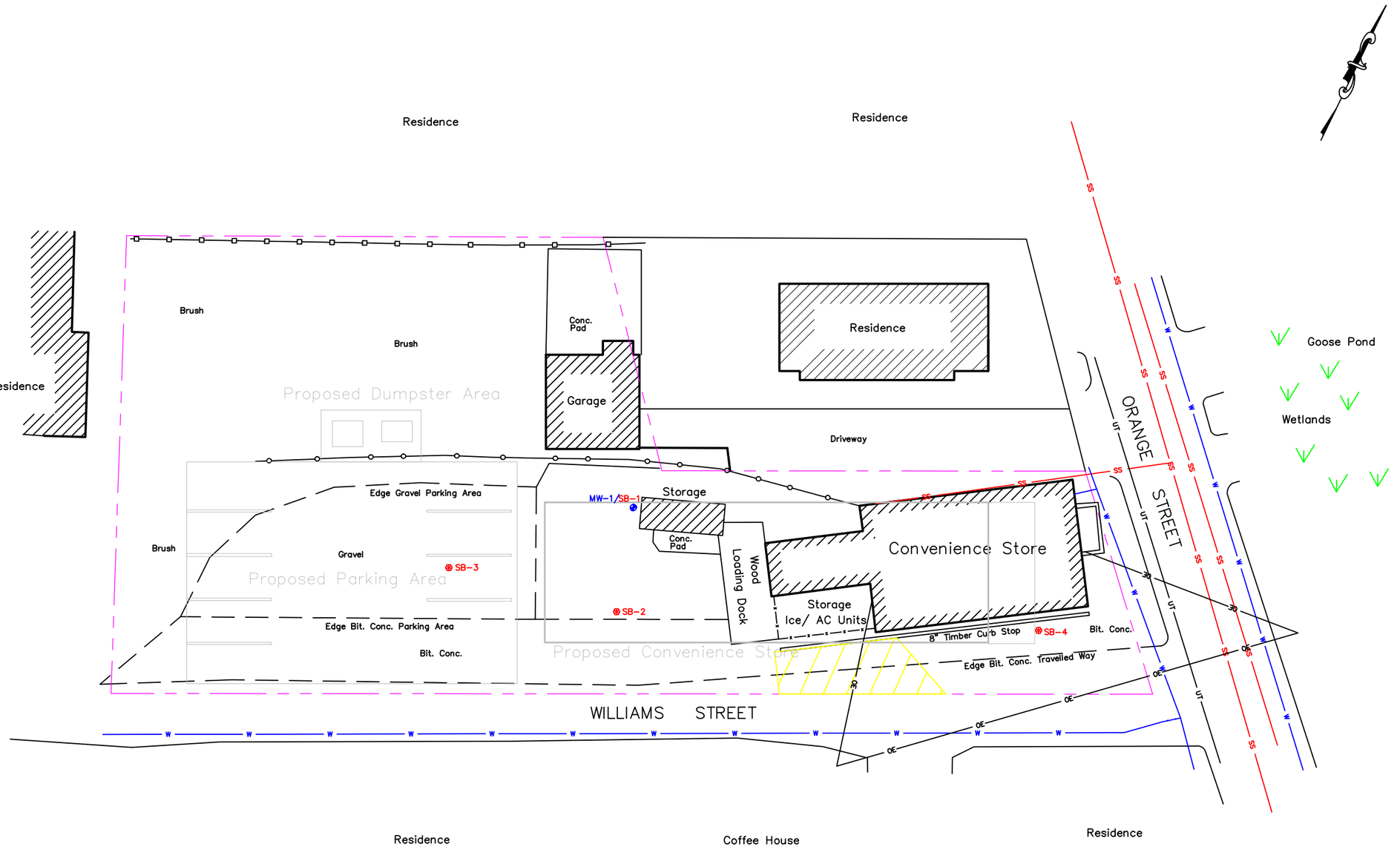
Figure 1: SITE LOCUS



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

Lat/Lon: 41 16' 33.34" NORTH, 70 5' 39.89" WEST - UTM Coordinates: 19 408342.3 EAST / 4569965.9 NORTH

Generated By: Carol Farrington



Legend

- Approximate Property Line
- SS — Sanitary Sewer Line
- SW — Storm Sewer Line
- W — Water Line
- NG — Natural Gas Line
- OE — Overhead Electric Line
- x — x — x — Chain Linked Fence
- Soil Boring
- Monitoring Well

General Notes:

Site plan prepared from Town of Nantucket Record Plans, and plans provided to ECS by Cumberland Farms, Inc.

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

ecs
997 Millbury St, Unit G, Worcester, MA 01607
Phone: 508-756-0151 Fax: 508-757-7063

PROJECT:
Cumberland Farms Inc.
115 Orange Street,
Nantucket, Massachusetts

TITLE:
Site Plan

CLIENT:
Cumberland Farms Inc.

GRAPHIC SCALE: 30 15 0 15 30

COMPUTER CADFILE :

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
MWS	MWS	MJL	MJL
SCALE:	DATE:	JOB NO.:	FIGURE NO.:
1"=30'	June 2014	03-221855	2

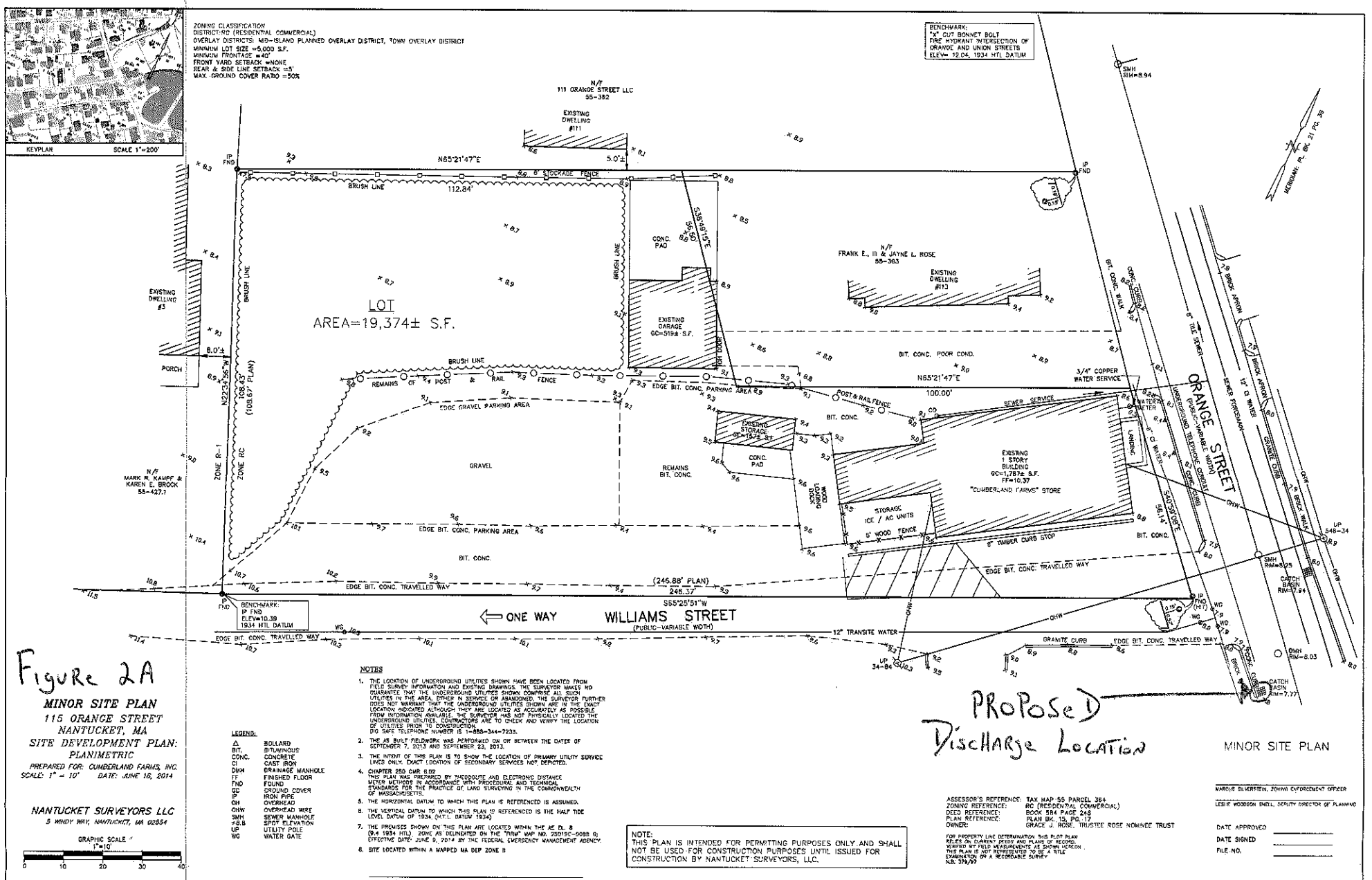


Figure 2A

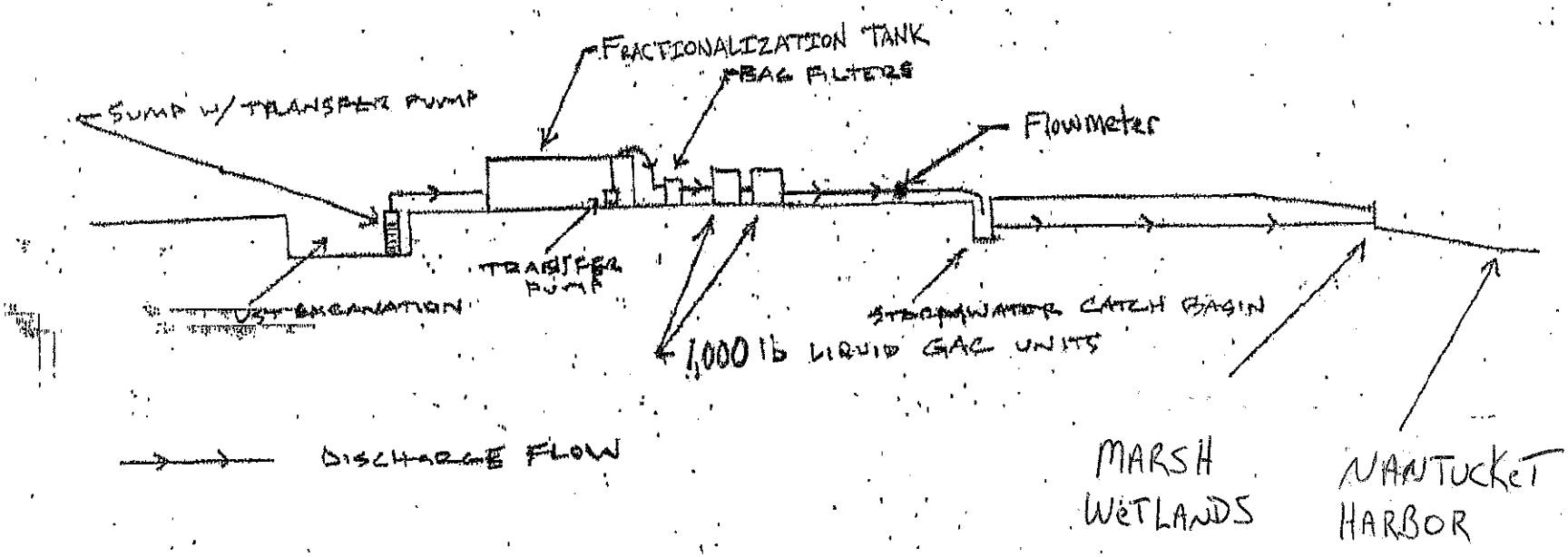
MINOR SITE PLAN
115 ORANGE STREET
NANTUCKET, MA
SITE DEVELOPMENT PLAN: PLANIMETRIC

PREPARED FOR: CUMBERLAND FARMS, INC.
SCALE: 1" = 10' DATE: JUNE 16, 2014

NANTUCKET SURVEYORS LLC
5 WINDY WAY, NANTUCKET, MA 02554

GRAPHIC SCALE
1"=10'
0 10 20 30 40

Flow Schematic - Figure 3



ATTACHMENT I

B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General facility/site information. Please provide the following information about the site:

a) Name of **facility/site**: Cumberland Farms Inc.		**Facility/site** mailing address:		
Location of **facility/site**: longitude: 70539.89 latitude: 411633.34	Facility SIC code(s): 7549	Street: 115 Orange		
b) Name of **facility/site owner:**		Town: Nantucket		
Email address of facility/site owner: myoung@cumberlandgulf.com		State: MA	Zip: 02554	County: Natucket
Telephone no. of facility/site **owner**: 508-270-4477				
Fax no. of facility/site **owner**: 781-459-0454		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):				
Street: 100 Crossing Boulevard				
Town: Framingham	State: MA	Zip: 01702	County: Middlesex	
c) Legal name of **operator**:	**Operator** telephone no: 508-270-4477			
Cumberland Farms, Inc.	**Operator** fax no.: 781-459-0454	**Operator** email: myoung@cumberlandgulf.co		
Operator contact name and title: Matthew Young, Senior Project Manager				
Address of **operator** (if different from owner):	Street:			
Town:	State:	Zip:	County:	

d) Check Y for "yes" or N for "no" for the following:
1. Has a prior NPDES permit exclusion been granted for the discharge? Y__ N__, if Y, number:
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge?
Y__ N__, if Y, date and tracking #:
3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y__ N__
4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y__ N__

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y__ N__
If Y, please list:
1. site identification # assigned by the state of NH or MA:
2. permit or license # assigned:
3. state agency contact information: name, location, and telephone number:

f) Is the site/facility covered by any other EPA permit, including:
1. Multi-Sector General Permit? Y__ N__,
if Y, number:
2. Final Dewatering General Permit? Y__ N__,
if Y, number:
3. EPA Construction General Permit? Y__ N__,
if Y, number:
4. Individual NPDES permit? Y__ N__,
if Y, number:
5. any other water quality related individual or general permit? Y__ N__, if Y, number:

g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y__ N__

h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.

Activity Category	**Activity Sub-Category**
I - Petroleum Related Site Remediation	A. Gasoline Only Sites ☐ B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) ☐ C. Petroleum Sites with Additional Contamination ☒
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites ☐ B. VOC Sites with Additional Contamination ☐ C. Primarily Heavy Metal Sites ☐
III - Contaminated Construction Dewatering	A. General Urban Fill Sites ☐ B. Known Contaminated Sites ☐

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites ☐ B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites ☐ C. Hydrostatic Testing of Pipelines and Tanks ☐ D. Long-Term Remediation of Contaminated Sumps and Dikes ☐ E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) ☐

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as necessary) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:

A new Convenience store is being developed at the Site and will require the installation of a new foundation system and utilities. Site dewatering will be necessary to perform these installation activities. The discharge will be associated with the dewatering activities.

b) Provide the following information about each discharge:

1) Number of discharge points: 1

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow 0.168 Is maximum flow a **design value**? Y ○ N ◉
Average flow (include units) 0.0117 cubic ft/s Is average flow a design value or estimate? Estimate

3) Latitude and longitude of each discharge within 100 feet:
pt.1: lat. 411633.34 long. 70539.89; pt.2: lat. ____ long. ____;
pt.3: lat. ____ long. ____; pt.4: lat. ____ long. ____;
pt.5: lat. ____ long. ____; pt.6: lat. ____ long. ____;
pt.7: lat. ____ long. ____; pt.8: lat. ____ long. ____; etc.

4) If hydrostatic testing, total volume of the discharge (gals):

5) Is the discharge intermittent ◉ or seasonal ○?
Is discharge ongoing? Y ○ N ◉

c) Expected dates of discharge (mm/dd/yy): start 9/1/2014 end 11/30/2014

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). Flow Schematic is attached.

3. Contaminant information.

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☒	1	Grab	SM2540D	20,000	220,000		220,000	
2. Total Residual Chlorine (TRC)		☒	☐								
3. Total Petroleum Hydrocarbons (TPH)		☐	☒	1	Grab	EPH	200	700		700	
4. Cyanide (CN)	57125	☒	☐								
5. Benzene (B)	71432	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
6. Toluene (T)	108883	☐	☒	1	Grab	8260	1.0	1.66		1.66	
7. Ethylbenzene (E)	100414	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	Grab	8260	1.0	<3.0		<3.0	
9. Total BTEX [2]	n/a	☒	☐	1	Grab	8260/	1.0	<6.0		<6.0	
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	1	Grab	8260	0.5	<0.5		<0.5	
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	Grab	8260	1.0	<1.0		1.79	
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	

***** Numbering system is provided to allow cross-referencing to Effluent Limits and Monitoring Requirements by Sub-Category included in Appendix III, as well as the Test Methods and Minimum Levels associated with each parameter provided in Appendix VI.

[2] BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

[3] EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
14. Naphthalene	91203	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
15. Carbon Tetrachloride	56235	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
18a. Total dichlorobenzene		☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
23. Methylene Chloride	75092	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
24. Tetrachloroethene (PCE)	127184	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
27. Trichloroethene (TCE)	79016	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☒	☐	1	Grab	8260	1.0	<1.0		<1.0	
29. Acetone	67641	☐	☒	1	Grab	8260	10	13.3		13.3	
30. 1,4 Dioxane	123911	☒	☐	1	Grab	8260	20	<20		<20	
31. Total Phenols	108952	☒	☐	0							
32. Pentachlorophenol (PCP)	87865	☒	☐	0							
33. Total Phthalates (Phthalate esters) [4]		☒	☐	0							
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	0							
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	0							
a. Benzo(a) Anthracene	56553	☒	☐	0							
b. Benzo(a) Pyrene	50328	☒	☐	0							
c. Benzo(b)Fluoranthene	205992	☒	☐	0							
d. Benzo(k)Fluoranthene	207089	☒	☐	0							
e. Chrysene	21801	☒	☐	0							
f. Dibenzo(a,h)anthracene	53703	☒	☐	0							
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	0							
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	0							

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐	0							
i. Acenaphthylene	208968	☒	☐	0							
j. Anthracene	120127	☒	☐	0							
k. Benzo(ghi) Perylene	191242	☒	☐	0							
l. Fluoranthene	206440	☒	☐	0							
m. Fluorene	86737	☒	☐	0							
n. Naphthalene	91203	☒	☐	0							
o. Phenanthrene	85018	☒	☐	0							
p. Pyrene	129000	☒	☐	0							
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	0							
38. Chloride	16887006	☒	☐	0							
39. Antimony	7440360	☒	☐	0							
40. Arsenic	7440382	☒	☐	0							
41. Cadmium	7440439	☒	☐	0							
42. Chromium III (trivalent)	16065831	☒	☐	0							
43. Chromium VI (hexavalent)	18540299	☒	☐	0							
44. Copper	7440508	☐	☐	0							
45. Lead	7439921	☐	☒	1	grab	6010C	7.5	53.7		53.7	
46. Mercury	7439976	☐	☐	0							
47. Nickel	7440020	☐	☐	0							
48. Selenium	7782492	☐	☐	0							
49. Silver	7440224	☐	☐	0							
50. Zinc	7440666	☐	☐	0							
51. Iron	7439896	☐	☒	1	grab	6010C	40	11,600		11,600	
Other (describe):		☐	☐								

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
		☐	☐								
		☐	☐								

b) For discharges where **metals** are believed present, please fill out the following (attach results of any calculations):

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y ◉ N ○	If yes, which metals? Iron
Step 2: For any metals which exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal: Iron DF: SA Metal: DF: Metal: DF: Metal: DF: Etc.	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y ◉ N ○ If Y, list which metals: Iron

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:

The water from the foundation excavation for the new convenice store building will be pumped into a frac tank for settling, then through two bag filter units in parallell, two 1,000 lbs liquid granular activated carbon vessels in series, and a flow meter prior to discharge to a storm drainage manhole on Orange Street. The storm drainaige system on Orange Street discharges to the wetlands located approximately 100 feet east of the Site. These wetlands discharge into the Nantucket Harbor, located approximately 1,500 feet northeast of the Site.

b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☒	Air stripper ☐	Oil/water separator ☐	Equalization tanks ☐	Bag filter ☒	GAC filter ☒
	Chlorination ☐	De-chlorination ☐	Other (please describe):			

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system:
Average flow rate of discharge 50 gpm Maximum flow rate of treatment system 75 gpm
Design flow rate of treatment system 75 gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

None

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct to receiving water ☐	Within facility (sewer) ☐	Storm drain ☒	Wetlands ☐	Other (describe):

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

The storm drain located adjacent to the Site on Orange Street is discharged to wetlands which subsequently discharges to the Nantucket Harbor

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:
1. For multiple discharges, number the discharges sequentially.
2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water
The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water SA

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water NA cfs
Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y ○ N ◉ If yes, for which pollutant(s)?

Is there a final TMDL? Y ○ N ◉ If yes, for which pollutant(s)?

6. ESA and NHPA Eligibility.

Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.

a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?

A (●) B ( ) C ( ) D ( ) E ( ) F ( )

b) If you selected Criterion D or F, has consultation with the federal services been completed? Y( ) N( ) Underway( )

c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Y( ) N( )

d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.

e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit?

1 ( ) 2 (●) 3 ( )

f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

7. Supplemental information.

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

Based on a review of the MassDEP Resource Priority Map and the MassGIS Priority Habitat and Estimated Habitat Natural Heritage and Endangered Species Program Map, no areas of priority or estimated habitats or rare species were identified at the Site/work zone area relative to the proposed discharge (see attached maps). Therefore, it was determined that Criterion A in Section 6 (a) was applicable.

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

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 gather and evaluate 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, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name:	Cumberland Farms Inc.
Operator signature:	
Printed Name &Title:	Matthew D. Young Senior Project Manager
Date:	8-17-14

ATTACHMENT II

Report Date:
01-Jul-14 15:21

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Environmental Compliance Services
997 Millbury Street, Unit G
Worcester, MA 01607
Attn: Matt Lyne

Project: CFI #2280 - 15 Orange St - Nantucket, MA
Project #: 03-221855

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB91546-01	MW-1	Ground Water	18-Jun-14 08:00	19-Jun-14 13:30

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

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 18 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, NJ-MA012, PA-68-04426 and FL-E87936).

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

MassDEP Analytical Protocol Certification Form

Laboratory Name: Spectrum Analytical, Inc.	**Project #:** 03-221855
Project Location: CFI #2280 - 15 Orange St - Nantucket, MA	**RTN:**
This form provides certifications for the following data set: SB91546-01	
Matrices: Ground Water	

CAM Protocol

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

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

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

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

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

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

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

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

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

Nicole Leja
Laboratory Director
Date: 7/1/2014

CASE NARRATIVE:

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

The samples were received 0.8 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

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

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

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

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

SW846 6010C

Laboratory Control Samples:

1414652 BS/BSD

Iron percent recoveries (110/121) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-1

Samples:

SB91546-01 *MW-1*

MRL raised to correlate to batch QC reporting limits.

Iron

SW846 8260C

Calibration:

1406003

Analyte quantified by quadratic equation type calibration.

1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
1,2-Dibromo-3-chloropropane
Bromodichloromethane
Bromoform
Carbon disulfide
Carbon tetrachloride
cis-1,3-Dichloropropene
Dibromochloromethane
Naphthalene
trans-1,3-Dichloropropene
trans-1,4-Dichloro-2-butene

SW846 8260C

Calibration:

1406003

This affected the following samples:

1414445-BLK1
1414445-BS1
1414445-BSD1
MW-1
S406074-ICV1
S407007-CCV1

Laboratory Control Samples:

1414445 BS/BSD

2,2-Dichloropropane percent recoveries (147/138) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-1

Bromoform percent recoveries (136/130) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-1

Tert-amyl methyl ether percent recoveries (69/67) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-1

Samples:

S407007-CCV1

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

2,2-Dichloropropane (48.0%)

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

Bromoform (36.0%)
Carbon disulfide (24.0%)
Dibromochloromethane (28.4%)
Naphthalene (-21.2%)
Tert-amyl methyl ether (-29.6%)

This affected the following samples:

1414445-BLK1
1414445-BS1
1414445-BSD1
MW-1

Sample Acceptance Check Form

Client:	Environmental Compliance Services - Worcester, MA
Project:	CFI #2280 - 15 Orange St - Nantucket, MA / 03-221855
Work Order:	SB91546
Sample(s) received on:	6/19/2014
Received by:	Isabel Melling

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

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

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1	03-221855	Ground Water	18-Jun-14 08:00	19-Jun-14
SB91546-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.70	1	SW846 8260C	23-Jun-14	23-Jun-14	GMA	1414445	
67-64-1	Acetone	13.3		µg/l	10.0	3.61	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	
71-43-2	Benzene	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.30	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	
74-83-9	Bromomethane	< 2.00		µg/l	2.00	0.46	1	"	"	"	"	"	
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	3.11	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.41	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.41	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.37	1	"	"	"	"	"	
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	0.75	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
75-00-3	Chloroethane	< 2.00		µg/l	2.00	0.71	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.47	1	"	"	"	"	"	
74-87-3	Chloromethane	< 2.00		µg/l	2.00	0.50	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.34	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	0.50	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.43	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.39	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.47	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.65	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.28	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.30	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.47	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.46	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.20	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.32	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.40	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.40	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.47	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.42	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.44	1	"	"	"	"	"	
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	2.02	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1	03-221855	Ground Water	18-Jun-14 08:00	19-Jun-14
SB91546-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.47	1	SW846 8260C	23-Jun-14	23-Jun-14	GMA	1414445	
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.49	1						
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.37	1						
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.47	1						
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.49	1						
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.54	1						
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.43	1						
100-42-5	Styrene	< 1.00		µg/l	1.00	0.36	1						
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.43	1						
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.50	1						
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.57	1						
108-88-3	Toluene	**1.66**		µg/l	1.00	0.28	1						
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1						
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.42	1						
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.56	1						
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.36	1						
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.32	1						
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.44	1						
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.78	1						
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.29	1						
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.33	1						
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.39	1						
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.97	1						
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	0.42	1						
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.36	1						
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	0.77	1						
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.48	1						
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.30	1						
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.43	1						
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.32	1						
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.89	1						
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	14.6	1						
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.97	1						
64-17-5	Ethanol	< 400		µg/l	400	80.8	1						
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*97*			*70-130 %*								
2037-26-5	*Toluene-d8*	*100*			*70-130 %*								
17060-07-0	*1,2-Dichloroethane-d4*	*99*			*70-130 %*								
1868-53-7	*Dibromofluoromethane*	*105*			*70-130 %*								
Extractable Petroleum Hydrocarbons													
Fingerprinting by GC													
Prepared by method SW846 3510C													

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

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-1 SB91546-01	03-221855	Ground Water	18-Jun-14 08:00	19-Jun-14

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Extractable Petroleum Hydrocarbons													
Fingerprinting by GC Prepared by method SW846 3510C													
8006-61-9	Gasoline	**Calculated as**		mg/l	0.2	0.1	1	SW846 8100Mod.	26-Jun-14	28-Jun-14	SEP	1414800	
68476-30-2	Fuel Oil #2	< 0.2		mg/l	0.2	0.1	1						
68476-31-3	Fuel Oil #4	< 0.2		mg/l	0.2	0.02	1						
68553-00-4	Fuel Oil #6	< 0.2		mg/l	0.2	0.2	1						
M09800000	Motor Oil	< 0.2		mg/l	0.2	0.2	1						
8032-32-4	Ligroin	< 0.2		mg/l	0.2	0.06	1						
J00100000	Aviation Fuel	< 0.2		mg/l	0.2	0.06	1						
	Hydraulic Oil	< 0.2		mg/l	0.2	0.02	1						
	Dielectric Fluid	< 0.2		mg/l	0.2	0.06	1						
	Unidentified	**0.7**		mg/l	0.2	0.06	1						
	Other Oil	**Calculated as**		mg/l	0.2	0.02	1						
	Total Petroleum Hydrocarbons	**0.7**		mg/l	0.2	0.02	1						
Surrogate recoveries:													
3386-33-2	*1-Chlorooctadecane*	*70*			*40-140 %*								
Total Metals by EPA 200/6000 Series Methods													
	Preservation	**Field Preserved**		N/A			1	EPA 200/6000 methods			BEL	1414353	
Total Metals by EPA 6000/7000 Series Methods													
7439-89-6	Iron	**11.6**	R06	mg/l	0.0400	0.0122	1	SW846 6010C	25-Jun-14	01-Jul-14	tbc	1414652	
7439-92-1	Lead	**0.0537**		mg/l	0.0075	0.0032	1			01-Jul-14			
General Chemistry Parameters													
	Total Suspended Solids	**220**	LIV	mg/l	20.0	8.6	1	SM2540D	24-Jun-14	25-Jun-14	CMB	1414574	X

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1414445 - SW846 5030 Water MS										
Blank (1414445-BLK1)					Prepared & Analyzed: 23-Jun-14					
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromochloromethane	< 1.00		µg/l	1.00						
Bromodichloromethane	< 0.50		µg/l	0.50						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1414445 - SW846 5030 Water MS										
Blank (1414445-BLK1)					Prepared & Analyzed: 23-Jun-14					
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
Surrogate: 4-Bromofluorobenzene	*48.5*		µg/l		*50.0*		*97*	*70-130*		
Surrogate: Toluene-d8	*50.3*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.6*		µg/l		*50.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*51.5*		µg/l		*50.0*		*103*	*70-130*		
LCS (1414445-BS1)					Prepared & Analyzed: 23-Jun-14					
1,1,2-Trichlorotrifluoroethane (Freon 113)	**20.6**		µg/l		20.0		103	70-130		
Acetone	**16.8**		µg/l		20.0		84	70-130		
Acrylonitrile	**17.6**		µg/l		20.0		88	70-130		
Benzene	**19.9**		µg/l		20.0		99	70-130		
Bromobenzene	**21.6**		µg/l		20.0		108	70-130		
Bromochloromethane	**21.4**		µg/l		20.0		107	70-130		
Bromodichloromethane	**22.8**		µg/l		20.0		114	70-130		
Bromoform	**27.2**	QM9	µg/l		20.0		136	70-130		
Bromomethane	**19.6**		µg/l		20.0		98	70-130		
2-Butanone (MEK)	**20.4**		µg/l		20.0		102	70-130		
n-Butylbenzene	**19.0**		µg/l		20.0		95	70-130		
sec-Butylbenzene	**21.8**		µg/l		20.0		109	70-130		
tert-Butylbenzene	**21.7**		µg/l		20.0		108	70-130		
Carbon disulfide	**23.9**		µg/l		20.0		119	70-130		
Carbon tetrachloride	**21.4**		µg/l		20.0		107	70-130		
Chlorobenzene	**20.9**		µg/l		20.0		105	70-130		
Chloroethane	**18.2**		µg/l		20.0		91	70-130		
Chloroform	**20.3**		µg/l		20.0		101	70-130		
Chloromethane	**16.5**		µg/l		20.0		82	70-130		
2-Chlorotoluene	**20.6**		µg/l		20.0		103	70-130		
4-Chlorotoluene	**20.5**		µg/l		20.0		102	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1414445 - SW846 5030 Water MS										
LCS (1414445-BS1)						Prepared & Analyzed: 23-Jun-14				
1,2-Dibromo-3-chloropropane	**22.1**		µg/l		20.0		111	70-130		
Dibromochloromethane	**24.6**		µg/l		20.0		123	70-130		
1,2-Dibromoethane (EDB)	**20.1**		µg/l		20.0		100	70-130		
Dibromomethane	**19.9**		µg/l		20.0		99	70-130		
1,2-Dichlorobenzene	**19.7**		µg/l		20.0		99	70-130		
1,3-Dichlorobenzene	**21.6**		µg/l		20.0		108	70-130		
1,4-Dichlorobenzene	**19.2**		µg/l		20.0		96	70-130		
Dichlorodifluoromethane (Freon12)	**16.1**		µg/l		20.0		81	70-130		
1,1-Dichloroethane	**20.2**		µg/l		20.0		101	70-130		
1,2-Dichloroethane	**17.8**		µg/l		20.0		89	70-130		
1,1-Dichloroethene	**20.0**		µg/l		20.0		100	70-130		
cis-1,2-Dichloroethene	**20.1**		µg/l		20.0		100	70-130		
trans-1,2-Dichloroethene	**19.8**		µg/l		20.0		99	70-130		
1,2-Dichloropropane	**19.7**		µg/l		20.0		98	70-130		
1,3-Dichloropropane	**19.5**		µg/l		20.0		97	70-130		
2,2-Dichloropropane	**29.4**	QC2	µg/l		20.0		147	70-130		
1,1-Dichloropropene	**20.2**		µg/l		20.0		101	70-130		
cis-1,3-Dichloropropene	**22.6**		µg/l		20.0		113	70-130		
trans-1,3-Dichloropropene	**22.5**		µg/l		20.0		112	70-130		
Ethylbenzene	**20.9**		µg/l		20.0		105	70-130		
Hexachlorobutadiene	**19.8**		µg/l		20.0		99	70-130		
2-Hexanone (MBK)	**18.0**		µg/l		20.0		90	70-130		
Isopropylbenzene	**21.6**		µg/l		20.0		108	70-130		
4-Isopropyltoluene	**19.9**		µg/l		20.0		100	70-130		
Methyl tert-butyl ether	**18.4**		µg/l		20.0		92	70-130		
4-Methyl-2-pentanone (MIBK)	**17.9**		µg/l		20.0		89	70-130		
Methylene chloride	**17.5**		µg/l		20.0		88	70-130		
Naphthalene	**16.3**		µg/l		20.0		81	70-130		
n-Propylbenzene	**21.0**		µg/l		20.0		105	70-130		
Styrene	**21.0**		µg/l		20.0		105	70-130		
1,1,1,2-Tetrachloroethane	**22.8**		µg/l		20.0		114	70-130		
1,1,2,2-Tetrachloroethane	**16.2**		µg/l		20.0		81	70-130		
Tetrachloroethene	**21.5**		µg/l		20.0		107	70-130		
Toluene	**20.2**		µg/l		20.0		101	70-130		
1,2,3-Trichlorobenzene	**19.7**		µg/l		20.0		98	70-130		
1,2,4-Trichlorobenzene	**19.0**		µg/l		20.0		95	70-130		
1,3,5-Trichlorobenzene	**18.9**		µg/l		20.0		94	70-130		
1,1,1-Trichloroethane	**23.2**		µg/l		20.0		116	70-130		
1,1,2-Trichloroethane	**19.9**		µg/l		20.0		100	70-130		
Trichloroethene	**22.3**		µg/l		20.0		112	70-130		
Trichlorofluoromethane (Freon 11)	**20.3**		µg/l		20.0		102	70-130		
1,2,3-Trichloropropane	**21.4**		µg/l		20.0		107	70-130		
1,2,4-Trimethylbenzene	**21.8**		µg/l		20.0		109	70-130		
1,3,5-Trimethylbenzene	**21.9**		µg/l		20.0		109	70-130		
Vinyl chloride	**18.6**		µg/l		20.0		93	70-130		
m,p-Xylene	**21.7**		µg/l		20.0		108	70-130		
o-Xylene	**22.5**		µg/l		20.0		113	70-130		
Tetrahydrofuran	**15.5**		µg/l		20.0		78	70-130		
Ethyl ether	**17.9**		µg/l		20.0		89	70-130		
Tert-amyl methyl ether	**13.8**	QC2	µg/l		20.0		69	70-130		
Ethyl tert-butyl ether	**16.3**		µg/l		20.0		82	70-130		
Di-isopropyl ether	**17.9**		µg/l		20.0		90	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1414445 - SW846 5030 Water MS										
LCS (1414445-BS1)						Prepared & Analyzed: 23-Jun-14				
Tert-Butanol / butyl alcohol	**196**		µg/l		200		98	70-130		
1,4-Dioxane	**193**		µg/l		200		97	70-130		
trans-1,4-Dichloro-2-butene	**16.1**		µg/l		20.0		81	70-130		
Ethanol	**395**		µg/l		400		99	70-130		
Surrogate: 4-Bromofluorobenzene	*52.4*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*49.9*		µg/l		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.2*		µg/l		*50.0*		*92*	*70-130*		
Surrogate: Dibromofluoromethane	*52.5*		µg/l		*50.0*		*105*	*70-130*		
LCS Dup (1414445-BSD1)						Prepared & Analyzed: 23-Jun-14				
1,1,2-Trichlorotrifluoroethane (Freon 113)	**19.7**		µg/l		20.0		98	70-130	5	20
Acetone	**16.6**		µg/l		20.0		83	70-130	1	20
Acrylonitrile	**17.8**		µg/l		20.0		89	70-130	1	20
Benzene	**19.2**		µg/l		20.0		96	70-130	3	20
Bromobenzene	**21.2**		µg/l		20.0		106	70-130	2	20
Bromochloromethane	**21.2**		µg/l		20.0		106	70-130	1	20
Bromodichloromethane	**22.2**		µg/l		20.0		111	70-130	3	20
Bromoform	**26.1**		µg/l		20.0		130	70-130	4	20
Bromomethane	**18.9**		µg/l		20.0		94	70-130	4	20
2-Butanone (MEK)	**20.8**		µg/l		20.0		104	70-130	2	20
n-Butylbenzene	**18.2**		µg/l		20.0		91	70-130	4	20
sec-Butylbenzene	**20.8**		µg/l		20.0		104	70-130	5	20
tert-Butylbenzene	**20.8**		µg/l		20.0		104	70-130	4	20
Carbon disulfide	**22.9**		µg/l		20.0		115	70-130	4	20
Carbon tetrachloride	**20.4**		µg/l		20.0		102	70-130	5	20
Chlorobenzene	**20.3**		µg/l		20.0		102	70-130	3	20
Chloroethane	**16.8**		µg/l		20.0		84	70-130	8	20
Chloroform	**20.0**		µg/l		20.0		100	70-130	1	20
Chloromethane	**15.9**		µg/l		20.0		80	70-130	4	20
2-Chlorotoluene	**19.8**		µg/l		20.0		99	70-130	4	20
4-Chlorotoluene	**19.6**		µg/l		20.0		98	70-130	4	20
1,2-Dibromo-3-chloropropane	**22.7**		µg/l		20.0		114	70-130	3	20
Dibromochloromethane	**24.1**		µg/l		20.0		121	70-130	2	20
1,2-Dibromoethane (EDB)	**19.9**		µg/l		20.0		100	70-130	0.9	20
Dibromomethane	**19.6**		µg/l		20.0		98	70-130	1	20
1,2-Dichlorobenzene	**19.6**		µg/l		20.0		98	70-130	0.8	20
1,3-Dichlorobenzene	**20.7**		µg/l		20.0		104	70-130	4	20
1,4-Dichlorobenzene	**18.8**		µg/l		20.0		94	70-130	2	20
Dichlorodifluoromethane (Freon12)	**15.4**		µg/l		20.0		77	70-130	5	20
1,1-Dichloroethane	**19.0**		µg/l		20.0		95	70-130	6	20
1,2-Dichloroethane	**17.6**		µg/l		20.0		88	70-130	0.9	20
1,1-Dichloroethene	**19.3**		µg/l		20.0		97	70-130	4	20
cis-1,2-Dichloroethene	**19.7**		µg/l		20.0		98	70-130	2	20
trans-1,2-Dichloroethene	**19.8**		µg/l		20.0		99	70-130	0.4	20
1,2-Dichloropropane	**19.5**		µg/l		20.0		97	70-130	1	20
1,3-Dichloropropane	**19.3**		µg/l		20.0		97	70-130	0.7	20
2,2-Dichloropropane	**27.6**	QC2	µg/l		20.0		138	70-130	6	20
1,1-Dichloropropene	**19.3**		µg/l		20.0		97	70-130	4	20
cis-1,3-Dichloropropene	**21.8**		µg/l		20.0		109	70-130	3	20
trans-1,3-Dichloropropene	**22.3**		µg/l		20.0		111	70-130	0.9	20
Ethylbenzene	**20.3**		µg/l		20.0		102	70-130	3	20
Hexachlorobutadiene	**19.2**		µg/l		20.0		96	70-130	3	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1414445 - SW846 5030 Water MS										
LCS Dup (1414445-BSD1)					Prepared & Analyzed: 23-Jun-14					
2-Hexanone (MBK)	**18.3**		µg/l		20.0		91	70-130	2	20
Isopropylbenzene	**20.7**		µg/l		20.0		103	70-130	4	20
4-Isopropyltoluene	**19.4**		µg/l		20.0		97	70-130	3	20
Methyl tert-butyl ether	**18.6**		µg/l		20.0		93	70-130	0.8	20
4-Methyl-2-pentanone (MIBK)	**18.2**		µg/l		20.0		91	70-130	2	20
Methylene chloride	**17.3**		µg/l		20.0		86	70-130	1	20
Naphthalene	**16.5**		µg/l		20.0		83	70-130	1	20
n-Propylbenzene	**20.2**		µg/l		20.0		101	70-130	4	20
Styrene	**20.0**		µg/l		20.0		100	70-130	5	20
1,1,1,2-Tetrachloroethane	**22.1**		µg/l		20.0		111	70-130	3	20
1,1,2,2-Tetrachloroethane	**15.8**		µg/l		20.0		79	70-130	3	20
Tetrachloroethene	**21.0**		µg/l		20.0		105	70-130	2	20
Toluene	**19.5**		µg/l		20.0		98	70-130	4	20
1,2,3-Trichlorobenzene	**19.9**		µg/l		20.0		99	70-130	0.8	20
1,2,4-Trichlorobenzene	**18.3**		µg/l		20.0		91	70-130	4	20
1,3,5-Trichlorobenzene	**18.7**		µg/l		20.0		93	70-130	1	20
1,1,1-Trichloroethane	**21.9**		µg/l		20.0		110	70-130	6	20
1,1,2-Trichloroethane	**19.8**		µg/l		20.0		99	70-130	0.5	20
Trichloroethene	**21.8**		µg/l		20.0		109	70-130	2	20
Trichlorofluoromethane (Freon 11)	**19.5**		µg/l		20.0		97	70-130	4	20
1,2,3-Trichloropropane	**21.1**		µg/l		20.0		105	70-130	2	20
1,2,4-Trimethylbenzene	**21.0**		µg/l		20.0		105	70-130	4	20
1,3,5-Trimethylbenzene	**20.8**		µg/l		20.0		104	70-130	5	20
Vinyl chloride	**17.8**		µg/l		20.0		89	70-130	4	20
m,p-Xylene	**20.6**		µg/l		20.0		103	70-130	5	20
o-Xylene	**21.0**		µg/l		20.0		105	70-130	7	20
Tetrahydrofuran	**17.2**		µg/l		20.0		86	70-130	10	20
Ethyl ether	**17.8**		µg/l		20.0		89	70-130	0.5	20
Tert-amyl methyl ether	**13.4**	QC2	µg/l		20.0		67	70-130	3	20
Ethyl tert-butyl ether	**16.4**		µg/l		20.0		82	70-130	0.6	20
Di-isopropyl ether	**17.6**		µg/l		20.0		88	70-130	2	20
Tert-Butanol / butyl alcohol	**203**		µg/l		200		102	70-130	4	20
1,4-Dioxane	**190**		µg/l		200		95	70-130	2	20
trans-1,4-Dichloro-2-butene	**16.4**		µg/l		20.0		82	70-130	2	20
Ethanol	**421**		µg/l		400		105	70-130	6	20
Surrogate: 4-Bromofluorobenzene	*51.6*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*49.7*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*46.3*		µg/l		*50.0*		*93*	*70-130*		
Surrogate: Dibromofluoromethane	*51.7*		µg/l		*50.0*		*103*	*70-130*		

Extractable Petroleum Hydrocarbons - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1414800 - SW846 3510C										
Blank (1414800-BLK1)					Prepared: 26-Jun-14 Analyzed: 28-Jun-14					
Gasoline	< 0.2		mg/l	0.2						
Fuel Oil #2	< 0.2		mg/l	0.2						
Fuel Oil #4	< 0.2		mg/l	0.2						
Fuel Oil #6	< 0.2		mg/l	0.2						
Motor Oil	< 0.2		mg/l	0.2						
Ligroin	< 0.2		mg/l	0.2						
Aviation Fuel	< 0.2		mg/l	0.2						
Hydraulic Oil	< 0.2		mg/l	0.2						
Dielectric Fluid	< 0.2		mg/l	0.2						
Unidentified	< 0.2		mg/l	0.2						
Other Oil	< 0.2		mg/l	0.2						
Total Petroleum Hydrocarbons	< 0.2		mg/l	0.2						
Surrogate: 1-Chlorooctadecane	*0.0302*		mg/l		*0.0500*		*60*	*40-140*		
LCS (1414800-BS2)					Prepared: 26-Jun-14 Analyzed: 28-Jun-14					
Fuel Oil #2	**9.2**		mg/l	0.2	10.0		92	40-140		
Surrogate: 1-Chlorooctadecane	*0.0479*		mg/l		*0.0500*		*96*	*40-140*		
LCS Dup (1414800-BSD2)					Prepared: 26-Jun-14 Analyzed: 28-Jun-14					
Fuel Oil #2	**9.3**		mg/l	0.2	10.0		93	40-140	1	200
Surrogate: 1-Chlorooctadecane	*0.0487*		mg/l		*0.0500*		*97*	*40-140*		

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1414652 - EPA200/SW7000 Series										
Blank (1414652-BLK1)					Prepared: 25-Jun-14 Analyzed: 01-Jul-14					
Iron	< 0.0400		mg/l	0.0400						
Lead	< 0.0075		mg/l	0.0075						
LCS (1414652-BS1)					Prepared: 25-Jun-14 Analyzed: 01-Jul-14					
Iron	**1.37**		mg/l	0.0400	1.25		110	85-115		
Lead	**1.27**		mg/l	0.0075	1.25		101	85-115		
LCS Dup (1414652-BSD1)					Prepared: 25-Jun-14 Analyzed: 01-Jul-14					
Iron	**1.51**	QC2	mg/l	0.0400	1.25		121	85-115	9	20
Lead	**1.33**		mg/l	0.0075	1.25		107	85-115	5	20

General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1414574 - General Preparation										
Blank (1414574-BLK1)						Prepared: 24-Jun-14 Analyzed: 25-Jun-14				
Total Suspended Solids	< 5.0		mg/l	5.0						
LCS (1414574-BS1)						Prepared: 24-Jun-14 Analyzed: 25-Jun-14				
Total Suspended Solids	**465**		mg/l	25.0	468		99	90-110		

Notes and Definitions

QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
R06	MRL raised to correlate to batch QC reporting limits.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
LIV	The initial volume for this sample has been reduced due to sample matrix and/or historical data therefore elevating the reporting limit.

Interpretation of Total Petroleum Hydrocarbon Report

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

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

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

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

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

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

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

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

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

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

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

Validated by:
Nicole Leja

SB91546 AME

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

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

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

Report To: ECS - Worcester
Telephone #: 774-776-0171
Project Mgr: Matt Lyne

Invoice To: CFI
P.O No.: 5097 Quote/RQN: _____

Project No: 03-221855
Site Name: CFI # 2250
Location: 115 Orange St/Nantucket State: MA
Sampler(s): M Sera

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

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

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: List Preservative Code below: 2 2 / 4	Check if chlorinated
										8260 / TPH 1/10M / TSS / Total Lead Iced	
SB91546-01	MW-1	6-18-14	8:00	G	GW	3	1	1 AME 6/20	2	X X X X	☐
											☐
											☐
											☐
											☐
											☐
											☐
											☐
											☐
											☐
											☐

QA/QC Reporting Notes:
* additional charges may appply

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

*client notified AME 6/20/14

Relinquished by:	Received by:	Date:	Time:
		6-19-14	930
	3M	6/19/14	1330

Temp °C: Observed 0.8 / Correction Factor 0 / Corrected 0.8 / IR ID # 01

[ ] EDD format: _____
[x] E-mail to: MLyne@ecsconsult.com

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

ATTACHMENT III

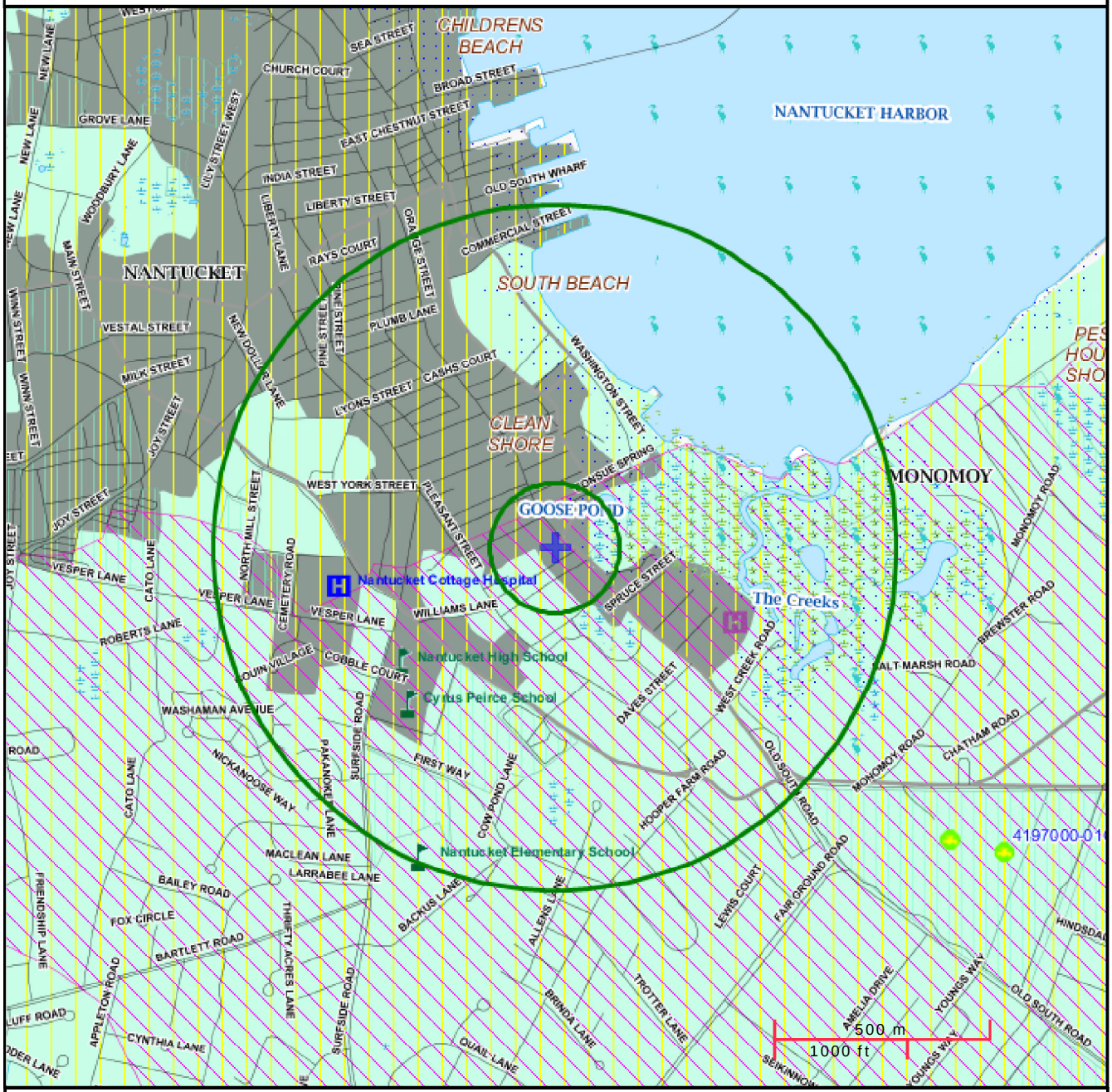
MassDEP - Bureau of Waste Site Cleanup

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

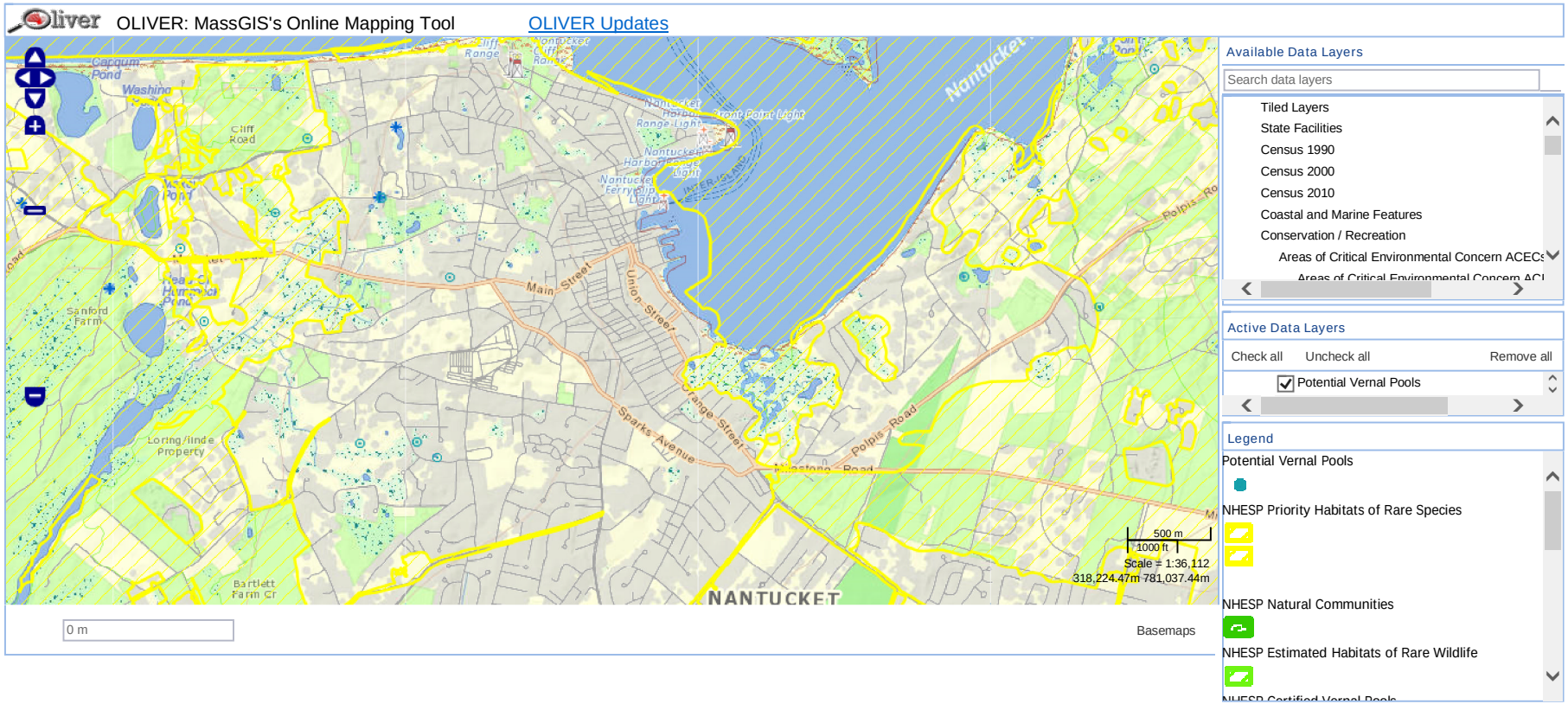
Site Information:
CUMBERLAND FARMS, INC.
115 ORANGE STREET NANTUCKET, MA
NAD83 UTM Meters:
4569975mN , 408319mE (Zone: 19)
July 22, 2014

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

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



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


OLIVER: MassGIS's Online Mapping Tool
OLIVER Updates
Available Data Layers
Search data layers
Tiled Layers
State Facilities
Census 1990
Census 2000
Census 2010
Coastal and Marine Features
Conservation / Recreation
Areas of Critical Environmental Concern ACECs
Active Data Layers
Check all
Uncheck all
Remove all
Potential Vernal Pools
Legend
Potential Vernal Pools
NHESP Priority Habitats of Rare Species
NHESP Natural Communities
NHESP Estimated Habitats of Rare Wildlife
Main Street
Union Street
Orange Street
Sparks Avenue
Polpis Road
Nantucket
Cliff Road
Sanford Farm
Loring/linde Property
Bartlett Farm Cr
NANTUCKET
500 m
1000 ft
Scale = 1:36,112
318,224.47m 781,037.44m
0 m
Basemaps

ATTACHMENT IV

Massachusetts Cultural Resource Information System
MACRIS

Results

Get Results in Report Format
○PDF ◉Spreadsheet

Below are the results of your search, using the following search criteria:
Town(s): Nantucket
Street No: 115
Street Name: orange
Resource Type(s): Area, Building, Burial Ground, Object, Structure

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

No Results Found.

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

MHC Home | MACRIS Home

ATTACHMENT V

Enter your transmittal number → X262508 (Transmittal Number)

Your unique Transmittal Number can be accessed online: http://mass.gov/dep/service/online/trasmfrm.shtml

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. **Copy 2** must accompany your fee payment. **Copy 3** should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

*** Note:**
For BWSC Permits, enter the LSP.

A. Permit Information

1. Permit Code: 7 or 8 character code from permit instructions	2. Name of Permit Category
BRP WM 12	Water Management

3. Type of Project or Activity: EPA General Permit Construction Dewatering

B. Applicant Information – Firm or Individual

1. Name of Firm - Or, if party needing this approval is an individual enter name below: Cumberland Farms Inc

2. **Last Name** of Individual	3. **First Name** of Individual	4. MI
Young	Matthew	

5. Street Address: 100 Crossing Boulevard

6. City/Town	7. State	8. Zip Code	9. Telephone #	10. Ext. #
Framingham	MA	01702	508-270-4477	

11. Contact Person	12. e-mail address (optional)
Matthew Young	myoung@cumberlandgulf.com

C. Facility, Site or Individual Requiring Approval

1. Name of Facility, Site Or Individual: Cumberland Farms Facility

2. Street Address: 115 Orange Street

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #
Nantucket	MA	02554	508-270-4477	

8. DEP Facility Number (if Known)	9. Federal I.D. Number (if Known)	10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

1. Name of Firm Or Individual

2. Address

3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #

8. Contact Person	9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☐ yes ☒ no
   If yes, enter the project's EOEA file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Special Provisions:

1. ☐ **Fee** Exempt (city, town or municipal housing authority)(state agency if fee is $100 or less). *There are no fee exemptions for BWSC permits, regardless of applicant status.*
2. ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. ☐ Homeowner (according to 310 CMR 4.02).

Check Number	Dollar Amount	Date
148524	$950.00	8/4/14