



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

**5 Post Office Square, Suite 100
BOSTON, MA 02109-3912**

CERTIFIED MAIL RETURN RECEIPT REQUESTED

APR 17 2013

Matthew Bagedonow
Project Manager
CWC Builders
7 Wells Avenue
Newton, MA 02459

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Parcel 6A site located at Mason and Porter Streets, Taunton, MA 02180
Bristol County; Authorization #MAG910571

Dear Mr. Bagedonow:

Based on the review of a Notice of Intent (NOI) submitted on behalf of Trinity Taunton Side Works, Inc., by the firm McPhill Associates, LLC, for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as 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 check list includes parameters that exceeded Appendix III limits. In addition we have include pollutants for which your laboratory reports indicated there was insufficient sensitivity to detect these parameters at the minimum levels established in Appendix VI of the RGP.

Also, please note the current metals data submitted with the NOI application is for dissolved (filtered) metals and not for totals metals as required in the RGP regulations, for this reason all the metals listed on the Appendix IV list for Massachusetts discharges have been included in the check list for monitoring until you collect the required influent information for total metals during the initial six month discharge period and at that time

if you wish you may request a deletion of any metal(s), or for any other parameters, established for monitoring that are absent from the influent or not detected in accordance with the minimum levels established in Appendix VI of the RGP.

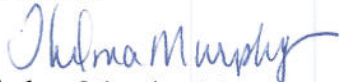
Also, please note the metals included on the checklist are dilution dependent pollutants and subject to limitations based on a dilution factor range (DFR) for fresh waters. Because no dilution was reported for wetland leading to Myrtle Brook, EPA determined that the DFR for each parameter is in the one 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 10 ug/L, cadmium of 0.2 ug/L, trivalent chromium of 48.8 ug/L, hexavalent chromium of 11.4 ug/L, copper of 5.2 ug/L, lead of 1.3 ug/L, mercury of 0.9 ug/L, nickel of 29 ug/L, selenium of 5 ug/L, silver of 1.2, zinc of 66.6 ug/L and iron of 1,000 ug/L, are required to achieve permit compliance at your site

Finally, please note the checklist of all the pollutants attached to this authorization is subject to a recertification if the operations at the site result in a discharge lasting longer than six months. A recertification can be submitted to EPA within six (6) to twelve (12) months of operations in accordance with the 2010 RGP regulations.

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on December 1, 2013. If for any reason the discharge terminates sooner 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, Manager
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Fred Cornaglia Taunton, DPW
William J. Burns, McPhill Associates, LLC

**2010 Remediation General Permit
Summary of Monitoring Parameters^[1]**

NPDES Authorization Number:		MAG910571
Authorization Issued:	April, 2013	
Facility/Site Name:	Parcel 6A	
Facility/Site Address:	Mason and Porter Streets, Taunton, MA 02180, Bristol County	
	Email address of owner: NunesD@trinityfinancial.com	
Legal Name of Operator:	CWC Builders, Inc.	
Operator contact name, title, and Address:	Matthew Bagedonow: Project Manager 7 Wells Avenue, Newton, Mass 02459 Email:mbagedonow@cwcbuilder.com	
Estimated date of Completion:	December1, 2013	
Category and Sub-Category:	Category III- Contaminated Construction Sites. Sub-category A. General Urban Fill Sites and Sub-category B. Known Contaminated Sites	
RGP Termination Date:	September 10, 2015	
Receiving Water:	Myrtle Brook via the city of Taunton drain system	

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

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (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

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (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

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (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/ML 5ug/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/ML 5ug/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

<u>Metal parameter</u>	<u>Total Recoverable Metal Limit @ H ¹⁰ = 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) ^{11/12}</u>	<u>Minimum level=ML</u>
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		Freshwater		
✓	39. Antimony	5.6/ML 10		
✓	40. Arsenic **	10/ML20		
✓	41. Cadmium **	0.2/ML10		
✓	42. Chromium III (trivalent) **	48.8/ML15		
✓	43. Chromium VI (hexavalent) **	11.4/ML10		
✓	44. Copper **	5.2/ML15		
✓	45. Lead **	1.3/ML20		
✓	46. Mercury **	0.9/ML0.2		
✓	47. Nickel **	29/ML20		
✓	48. Selenium **	5/ML20		
✓	49. Silver	1.2/ML10		
✓	50. Zinc **	66.6/ML15		
✓	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
✓	Barium	Monitoring Only

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 criterion 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 "Oroclor 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.

⁹Although 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 $DF \times 1,000 \text{ ug/L}$ (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit = $1,000 \times 2 = 2,000 \text{ ug/L}$, 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



**NOTICE OF INTENT FOR DISCHARGE
UNDER MASSACHUSETTS REMEDIAL
GENERAL PERMIT MAG910000**

PARCEL 6A

TAUNTON MASSACHUSETTS

to

U.S. Environmental Protection Agency
and
Massachusetts Department of
Environmental Protection

March 26, 2013

Project No. 5292



March 26, 2013

U.S Environmental Protection Agency
RGP-NOC Processing Municipal Assistance Unit (CMU)
1 Congress Street, Suite 1100
Boston, MA 02114-2023

Attention: RGP-NOC Processing

Reference: Parcel 6A; Taunton, Massachusetts
Notice of Intent for Construction Dewatering Discharge Under Massachusetts
Remedial General Discharge MAG910000

Ladies and Gentlemen:

The purpose of this letter report is to provide a summary of the site and groundwater quality information in support of an application for approval from the U.S. Environmental Protection Agency (EPA) for the temporary discharge of groundwater directly into Myrtle Brook via the City of Taunton storm drain system during construction at the above referenced site. Refer to **Figure 1** Project Location Plan for the general site locus.

These services were performed and this permit application was prepared with the authorization of Trinity Taunton Sitework, Inc., a contracted representative of THA Mason, Inc. These services are subject to the limitations contained in **Appendix A**.

Existing Conditions

Fronting onto Mason Street to the west, the Parcel 6A site is bounded by residential properties to the south, Porter Street to the east, a railroad right-of-way to the northeast and the Greater Attleboro/Taunton Regional Transit Authority (GATRA) property to the northwest. The Parcel 6A site consists of a two adjoining parcels of land identified as Lots A and B which occupy a total area measuring approximately 6.44 acres. Currently the Parcel 6A site is an active construction site, the perimeter which is surrounded by a chain link fence. Prior to these recent construction activities, the Parcel 6A site was undeveloped. Refer to **Figure 2**, Site Plan, for general site information.

Site and Regulatory History

In summary, available historical information indicates that the subject site served as a railroad service and maintenance facility for many years. From 1888 to 1950 a large roundhouse structure was situated at the center of the site and a machine shop was attached to the western side of the roundhouse along with an associated coal storage shed, paint shop and wood shed. Further, the 1937 and 1950 Sanborn Maps indicate that a foundry was located on the southeastern portion of the subject site.

The above referenced historical operations have affected soil at the subject site. As a result, the DEP has been notified of two separate reporting conditions on Lots A and B to which Release Tracking Numbers (RTNs) 4-24295 and 4-695 have been assigned, respectively. The release condition reported on Lot A was identified during a recent assessment of soil which detected Reportable Concentrations of lead, antimony, arsenic, cadmium, nickel, and trichloroethene. With respect to Lot B, the DEP was initially notified of a petroleum release during April of 1989. Subsequently, subsurface assessments were conducted at the site which identified Reportable Concentrations of arsenic and petroleum hydrocarbons.



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In conjunction with the planned site redevelopment that is discussed below, it is understood that remediation will be conducted to reduce levels of the contaminants of concern in soil so that a Permanent Solution is achieved for both release conditions.

Proposed Development

The proposed development of Lot A is understood to consist of the construction of a 3-story mid-rise residential building identified as "Building A" and three 2 to 3-story wood framed multi-unit townhouse buildings identified as "Buildings B, C and D" across the western and central portions of the site. The proposed buildings are understood to contain no below-grade space. In addition, infrastructure improvements include a below grade storm drain system which consisting of drain lines and below grade storm water retention basins. At-grade parking, community gardens and playgrounds are also proposed for the subject site. It is understood that Lot B is planned to be utilized as a surface parking lot.

Construction Dewatering

Based upon the scope of site redevelopment in conjunction with the depth of groundwater measured at the site, it is anticipated that dewatering of groundwater will be necessary during excavation for some building foundations and below grade infrastructure improvements. In addition, rainwater is anticipated to accumulate within localized trenches after periods of heavy precipitation. It is anticipated that dewatering by means of strategically located sumps and trenches should suffice during construction operations.

It is estimated that the intermittent groundwater discharge will be required during deeper excavations that extend below the surface of groundwater which will be on the order of 35 to 50 gallons per minute (GPM). This estimate of discharge does not include surface runoff which will be removed from the excavation during the limited duration of a rain storm and shortly thereafter.

Construction dewatering will require the discharge of collected groundwater into the storm drain system under the requested Remedial General Permit. A review of available subgrade utility plans provided by the City of Taunton indicates that a dedicated 15-inch diameter storm drain runs beneath Mason Street. The dedicated storm drain beneath Mason street flows southeast connecting to a 15-inch diameter storm drain at the intersection of Myrtle Street. The 15-inch diameter storm drain flows southwest beneath Myrtle Street where it eventually resurfaces and discharges into an Myrtle Brook. The Brook flows to a wetland area located approximately 350 feet southeast of the subject site. The location of Mason Street with relation to the subject site is indicated on **Figure 2**. The location of the catch basin in which groundwater will be discharge and the flow path of the discharge is shown on plans provided by the City of Taunton which are included in **Figures 3A** and **3B**.

Groundwater Treatment

In our opinion, treatment of groundwater across a majority of the subject site will require a 5,000-gallon settling tank and bag filters in series to remove particulate matter containing elevated levels of metals in the effluent to meet allowable total suspended solids (TSS) and metal discharge limits established by the US EPA. However, during dewatering activities at the central portion of the subject site, located within the immediate vicinity of MAI-5, a granular activated carbon (GAC) filtration system will also be necessary to remove elevated levels of petroleum hydrocarbons that were detected in groundwater to meet allowable EPA established discharge limits for petroleum hydrocarbons. A schematic of the treatment system is



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Page 3

shown on **Figure 4**.

To document the effectiveness of the treatment system, samples of the discharge water will be obtained and tested for the presence of TSS, total petroleum hydrocarbons and total metals prior to the start of discharge into the storm drain system. Should the pre-start up testing indicate that the levels of these compounds in the effluent exceed the limits established under the RGP, additional treatment of the effluent will be implemented prior to initial discharge. In addition, should other contaminants be detected within the discharge water during the construction dewatering phase of the project at levels that exceed the effluent limitations, mitigative measures will be implemented to meet the allowable discharge limits.

In conclusion, it is our opinion that groundwater at the site is acceptable for discharge into the wetland area via the City of Taunton storm drain system under a Remedial General Permit. Sampling and analysis of the effluent will be carried out in accordance with the terms of the Remedial General Permit.

Supplemental information appended to this letter in support of the RGP includes the following;

- Notice of Intent Transmittal Form for Permit Application (**Appendix B**)
- A summary of groundwater analysis (**Appendix C, Table 1 and Groundwater Monitoring Reports**);
- A review of Areas of Critical Concern and Endangered and Threatened Species in addition to the Consultation Letter received by the U.S. Fish and Wildlife Service (**Appendix D**);
- A review of National Historic Places (**Appendix E**); and
- Best Management Practice Plan (**Appendix F**)

We trust that the above satisfies your present requirements. Should you have any questions or comments concerning the above, please do not hesitate to contact us.

Very truly yours,

McPHAIL ASSOCIATES, LLC

A handwritten signature in black ink, appearing to read "William J. Burns".

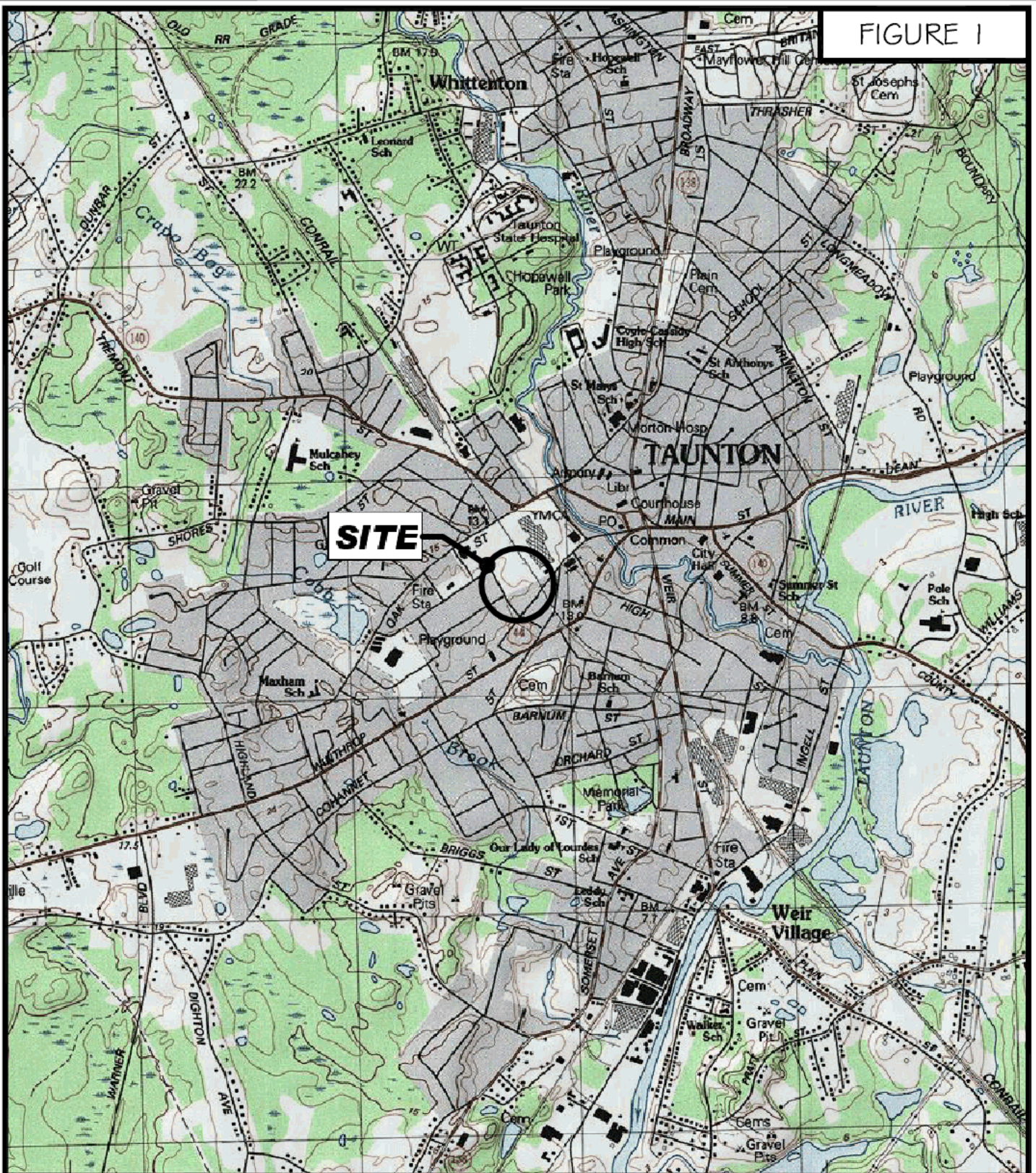
William J. Burns

A handwritten signature in black ink, appearing to read "Peter J. DeChaves".

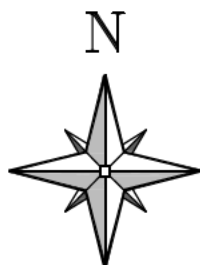
Peter J. DeChaves, L.S.P.
Enclosures

F:\WP5\REPORTS\5292 RGP.wpd
WJB/pjd

FIGURE 1



McPHAIL ASSOCIATES, LLC
Geotechnical and
Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)



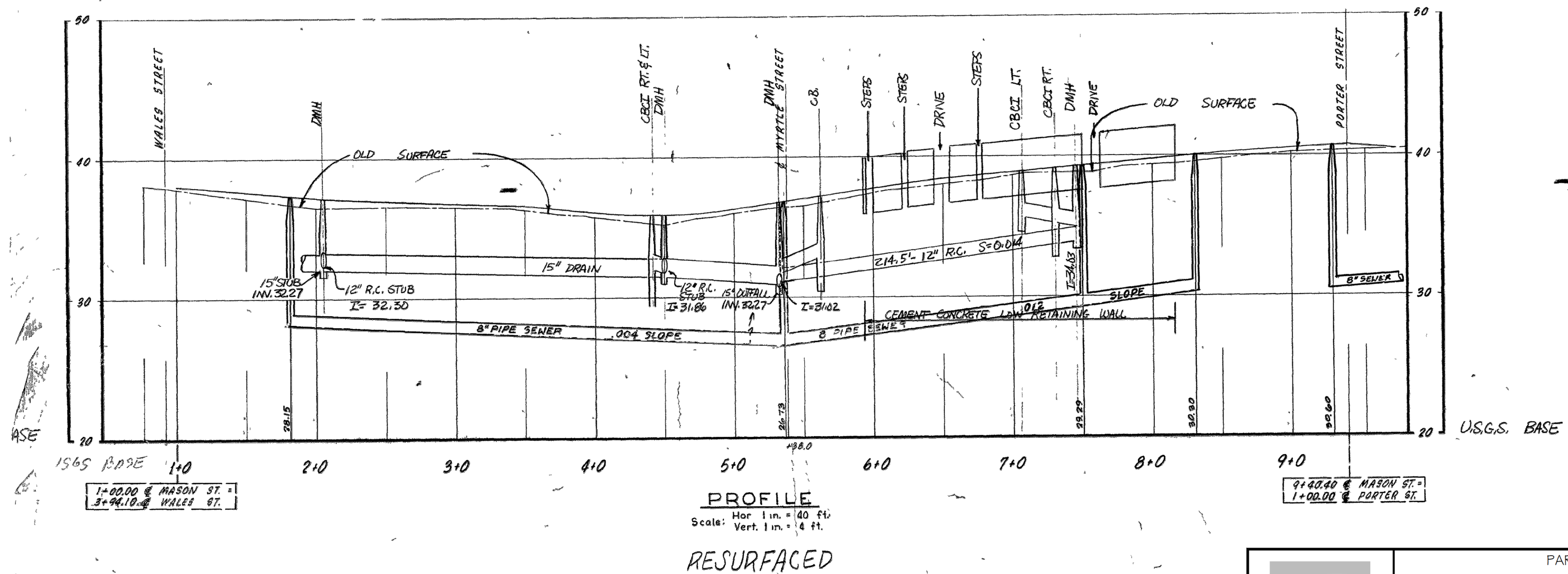
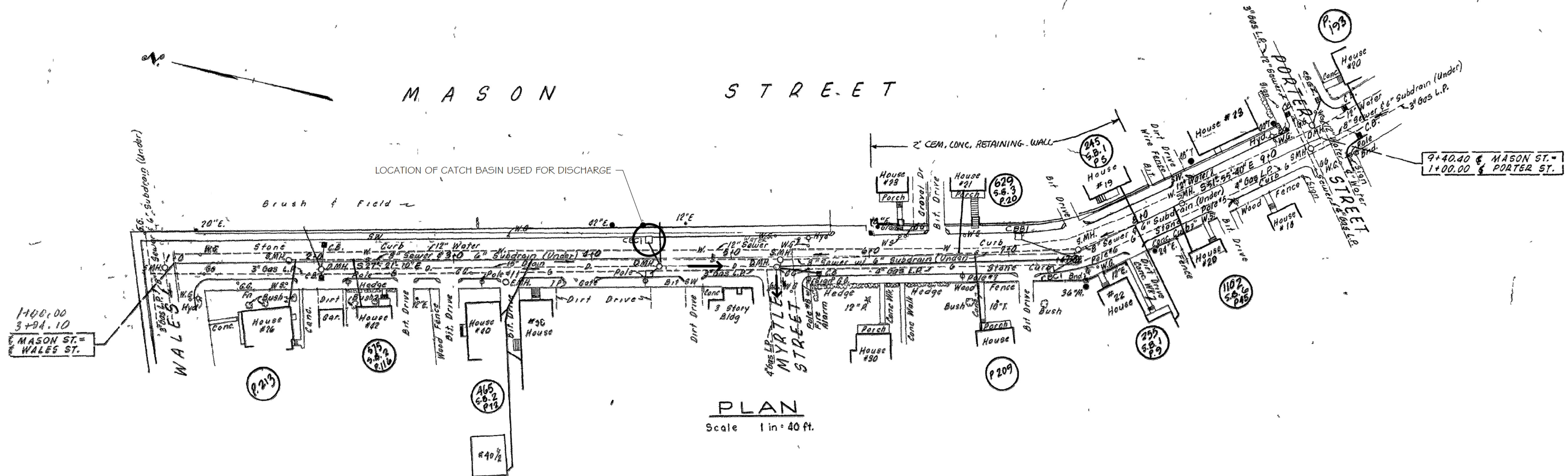
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PROJECT LOCATION PLAN


PARCEL 6A

TAUNTON

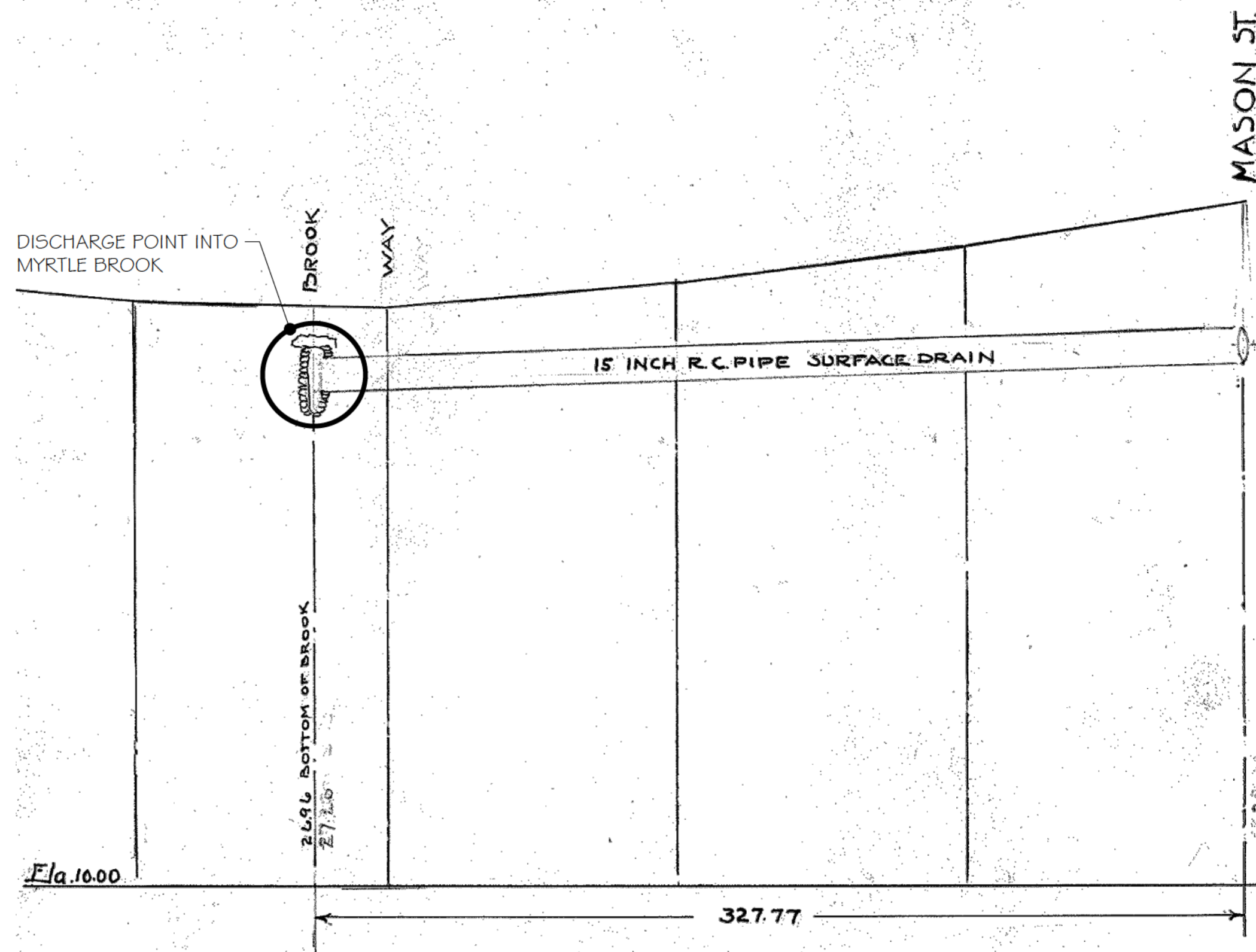
MASSACHUSETTS



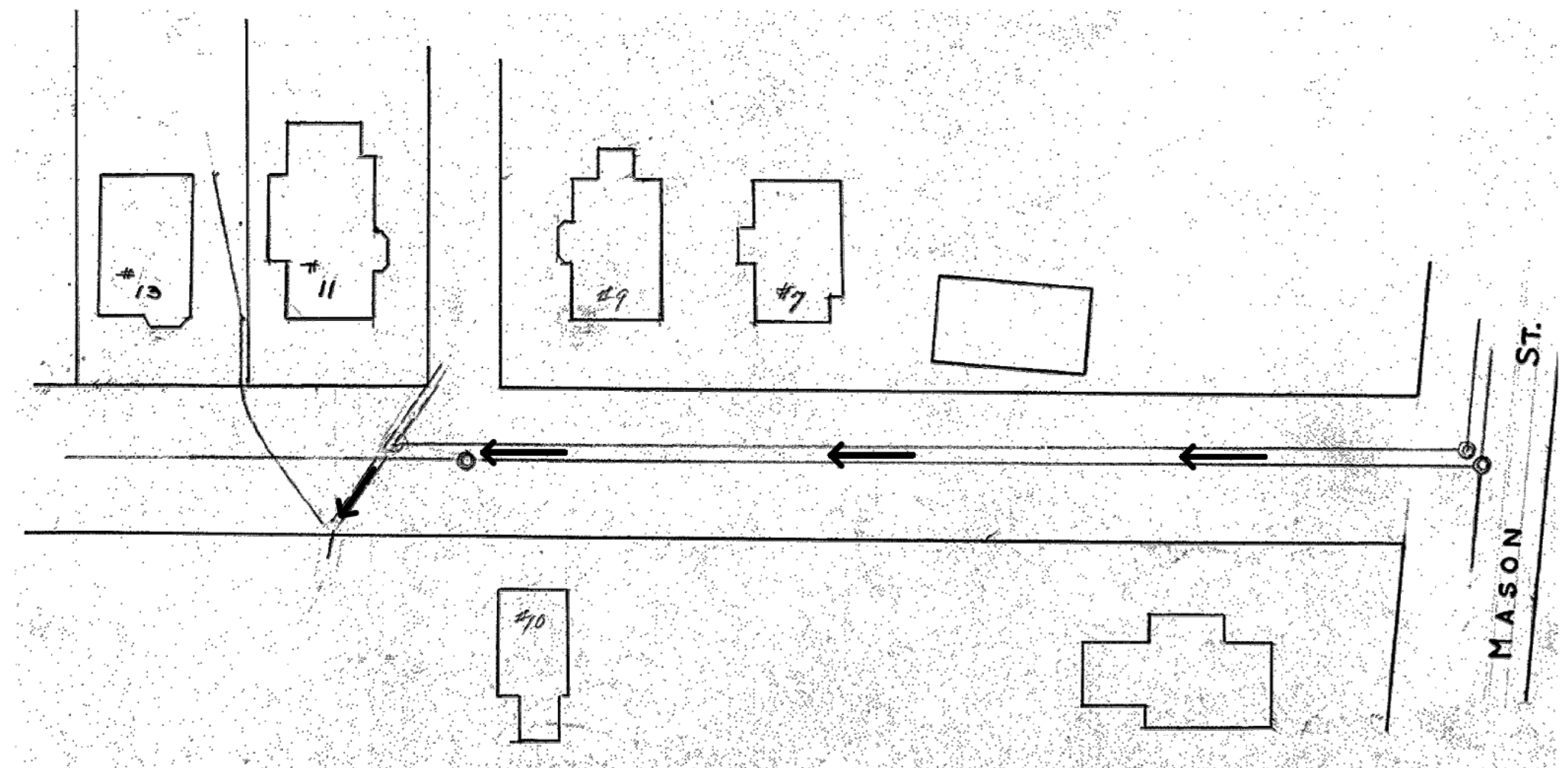
LEGEND
— INDICATES DIRECTION OF FLOW

 McPHAIL ASSOCIATES, LLC Geotechnical and Geoenvironmental Engineers 2269 Massachusetts Avenue Cambridge, MA 02140 617/868-1420 617/868-1423 (Fax)		PARCEL GA	
		TAUNTON MASSACHUSETTS STORM DRAIN DISCHARGE FLOW PLAN FOR TRINITY TAUNTON SITEWORK, INC. BY McPHAIL ASSOCIATES, LLC	
Date: MARCH 2013	Dwn: I.J.M.	Chkd: W.J.B.	Scale: AS NOTED
Project No: 5292		FIGURE 3A	

FILE NAME: H:\Acad\JOB915292\5292-F03B.dwg



CITY OF TAUNTON
ENGINEERING DEPARTMENT
PLAN & PROFILE
SHOWING SURFACE DRAIN
IN PART OF
MYRTLE STREET
HOR. SCALE 1"=40' VERT. SCALE 1"=4'
A.K. CROWELL City Engineer
1938



LEGEND
— INDICATES DIRECTION OF FLOW


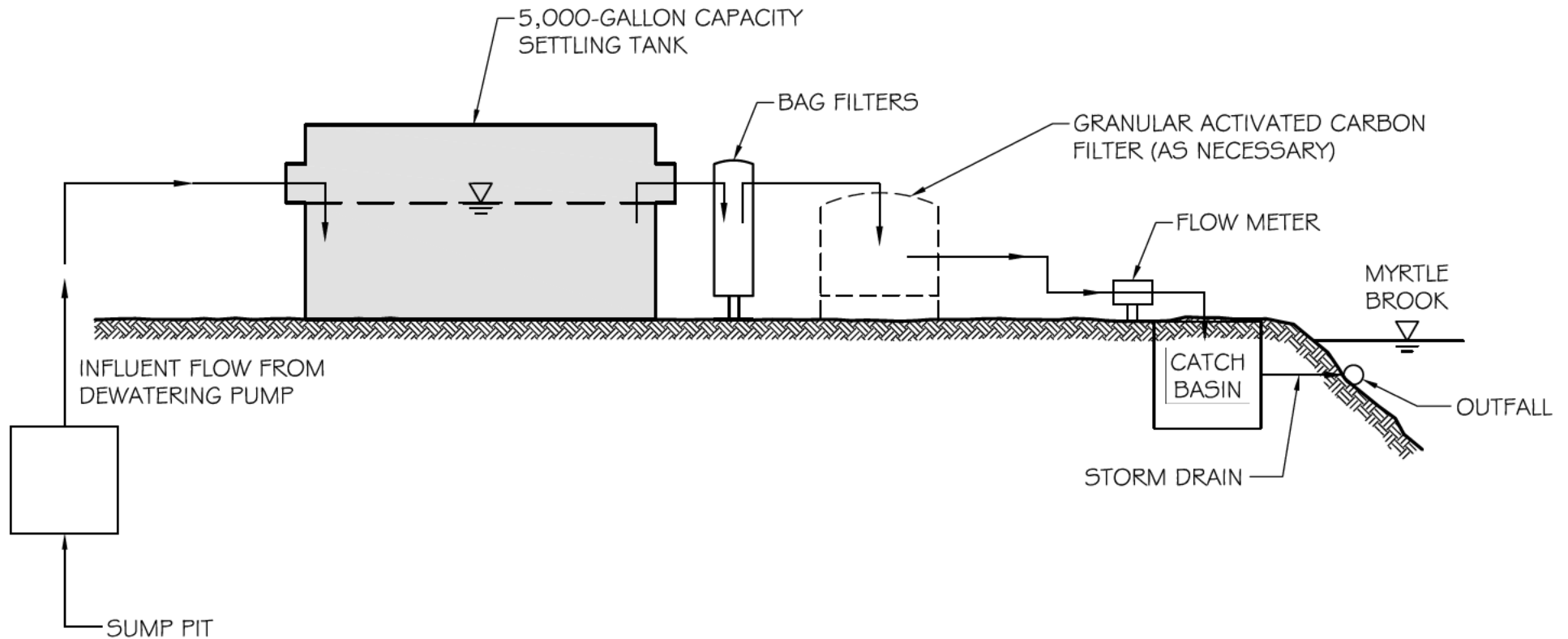
 McPHAIL ASSOCIATES, LLC Geotechnical and Geoenvironmental Engineers 2269 Massachusetts Avenue Cambridge, MA 02140 617/868-1420 617/868-1423 (Fax)	PARCEL 6A			
	TAUNTON		MASSACHUSETTS	
	STORM DRAIN DISCHARGE FLOW PLAN			
	FOR TRINITY TAUNTON SITEWORK, INC. BY McPHAIL ASSOCIATES, LLC			
	Date: MARCH 2013	Dwn: I.J.M.	Chkd: W.J.B.	Scale: AS NOTED
Project No: 5292			FIGURE 3B	

FIGURE 4



Geotechnical and
Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)

PARCEL 6A

TAUNTON

MASSACHUSETTS

SCHEMATIC OF TREATMENT SYSTEM

FOR

TRINITY TAUNTON SITEWORK, INC.

BY

McPHAIL ASSOCIATES, LLC
CONSULTING GEOTECHNICAL ENGINEERS

Date: MARCH 2013	Dwn: I.J.M.	Chkd: W.J.B.	Scale: N.T.S.
Project No: 5292			



APPENDIX A

LIMITATIONS

The purpose of this report is to present the results of testing of groundwater samples obtained from monitoring wells located at the Parcel 6A site in Taunton, Massachusetts, in support of an application for approval of construction site dewatering discharge into surface waters of the Commonwealth of Massachusetts under EPA's Massachusetts Remedial General Permit MAG910000.

The observations were made under the conditions stated in this report. The conclusions presented above were based on these observations. If variations in the nature and extent of subsurface conditions between the widely spaced subsurface explorations become evident in the future, it will be necessary to re-evaluate the conclusions presented herein after performing on-site observations and noting the characteristics of any variations.

The conclusions submitted in this report are based in part upon chemical test data obtained from analysis of groundwater samples, and are contingent upon their validity. The data have been reviewed, and interpretations have been made in the text. It should also be noted that fluctuations in the types and levels of contaminants and variations in their flow paths may occur due to changes in seasonal water table, past practices used in disposal and other factors.

Chemical analyses have been performed for specific constituents during the course of this site assessment, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study may be present in soil and/or groundwater at the site.

This report and application have been prepared on behalf of and for the exclusive use of Trinity Taunton Site Work, Inc. and CWC Builders, Inc. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party nor used in whole or in part by any other party without prior written consent of McPhail Associates, LLC.



APPENDIX B

Notice of Intent Transmittal Form

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 : Parcel 6A		Facility/site mailing address:	
Location of facility/site :	Facility SIC code(s):	Street:	
longitude: 71.1004		Mason and Porter Streets	
latitude: 41.8999			
b) Name of facility/site owner : Trinity Taunton Site Work Inc.		Town: Taunton	
Email address of facility/site owner : NunesD@trinityfinancial.com		State:	Zip:
		MA	02180
Telephone no. of facility/site owner : 617-720-8400		County: Bristol	
Fax no. of facility/site owner : 617-720-8401		Owner is (check one): 1. Federal <input type="radio"/> 2. State/Tribal <input type="radio"/>	
Address of owner (if different from site):		3. Private <input checked="" type="radio"/> 4. Other <input type="radio"/> if so, describe:	
Street: 75 Federal Street; 4th Floor			
Town: Boston	State: MA	Zip: 02110	County: Suffolk
c) Legal name of operator :		Operator telephone no: 617-965-2800 ext. 117	
CWC Builders Inc.		Operator fax no.: 617-965-2880	Operator email: mbagedonow@cwcbuilders.co
Operator contact name and title: Mr. Matthew Bagedonow; Project Manager			
Address of operator (if different from owner):		Street: 7 Wells Avenue	
Town: Newton	State: MA	Zip: 02459	County: Middlesex

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: MAR12AB67
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.

<u>Activity Category</u>	<u>Activity Sub-Category</u>
I - Petroleum Related Site Remediation	A. Gasoline Only Sites <input type="checkbox"/> B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) <input type="checkbox"/> C. Petroleum Sites with Additional Contamination <input type="checkbox"/>
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites <input type="checkbox"/> B. VOC Sites with Additional Contamination <input type="checkbox"/> C. Primarily Heavy Metal Sites <input type="checkbox"/>
III - Contaminated Construction Dewatering	A. General Urban Fill Sites <input checked="" type="checkbox"/> B. Known Contaminated Sites <input checked="" type="checkbox"/>

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

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:

Temporary Construction Dewatering

b) Provide the following information about each discharge:

1) Number of discharge points:	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)?
1	Max. flow 0.1115 Is maximum flow a design value ? Y <input type="radio"/> N <input checked="" type="radio"/>
	Average flow (include units) 0.10035 ft ³ /s Is average flow a design value or estimate? estimate

3) Latitude and longitude of each discharge within 100 feet:

pt.1: lat. 41.898	long. 71.101	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 04/01/2013 end 12/01/2013

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). Please refer to the attached report

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.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
1. Total Suspended Solids (TSS)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	grab			ND			
2. Total Residual Chlorine (TRC)		<input type="checkbox"/>	<input type="checkbox"/>								
3. Total Petroleum Hydrocarbons (TPH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	22	grab	98,EPH-04-1.1 ⁺		12850	3.5	2499.78	0.61
4. Cyanide (CN)	57125	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
5. Benzene (B)	71432	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	100, VPH-04-1.1	2	ND			
6. Toluene (T)	108883	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	100, VPH-04-1.1	2	ND			
7. Ethylbenzene (E)	100414	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	100, VPH-04-1.1	2	ND			
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	100, VPH-04-1.1 ⁺	2	2.1	0.00057	2.01	0.0005
9. Total BTEX ²	n/a	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab			2.1	0.00057	2.01	0.0005
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
11. Methyl-tert-Butyl Ether (MtBE)	1634044	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	100, VPH-04-1.1 ⁺	3	ND			
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	<input checked="" type="checkbox"/>	<input type="checkbox"/>								

* 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.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
13. tert-Amyl Methyl Ether (TAME)	9940508	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	2.0	ND			
14. Naphthalene	91203	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	1,8260B	4	5.6	0.0056	4.37	0.0011
15. Carbon Tetrachloride	56235	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	0.5	ND			
16. 1,2 Dichlorobenzene (o-DCB)	95501	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	2.5	ND			
17. 1,3 Dichlorobenzene (m-DCB)	541731	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	2.5	ND			
18. 1,4 Dichlorobenzene (p-DCB)	106467	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	2.5	ND			
18a. Total dichlorobenzene		<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B		ND			
19. 1,1 Dichloroethane (DCA)	75343	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	0.75	ND			
20. 1,2 Dichloroethane (DCA)	107062	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	0.5	ND			
21. 1,1 Dichloroethene (DCE)	75354	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	0.5	ND			
22. cis-1,2 Dichloroethene (DCE)	156592	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	0.5	ND			
23. Methylene Chloride	75092	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	5.0	ND			
24. Tetrachloroethene (PCE)	127184	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	0.5	ND			
25. 1,1,1 Trichloro-ethane (TCA)	71556	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	2	ND			
26. 1,1,2 Trichloro-ethane (TCA)	79005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	0.5	ND			
27. Trichloroethene (TCE)	79016	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	0.5	ND			

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
28. Vinyl Chloride (Chloroethene)	75014	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B	0.5	ND			
29. Acetone	67641	<input type="checkbox"/>	<input checked="" type="checkbox"/>	18	grab	60 8260B		14	0.0038	9.11	0.0022
30. 1,4 Dioxane	123911	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18	grab	60 8260B		110	0.03	95.28	0.02
31. Total Phenols	108952	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
32. Pentachlorophenol (PCP)	87865	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
33. Total Phthalates (Phthalate esters) ⁴		<input checked="" type="checkbox"/>	<input type="checkbox"/>								
34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	117817	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		<input checked="" type="checkbox"/>	<input type="checkbox"/>								
a. Benzo(a) Anthracene	56553	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8	grab	98,EPH-04-1.1	10	ND			
b. Benzo(a) Pyrene	50328	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	grab	98,EPH-04-1.1	10	ND			
c. Benzo(b)Fluoranthene	205992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	grab	98,EPH-04-1.1 +	10	ND			
d. Benzo(k)Fluoranthene	207089	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	grab	98,EPH-04-1.1 +	10	ND			
e. Chrysene	21801	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	grab	98,EPH-04-1.1	10	ND			
f. Dibenzo(a,h)anthracene	53703	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	grab	98,EPH-04-1.1 +	10	ND			
g. Indeno(1,2,3-cd) Pyrene	193395	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	grab	98,EPH-04-1.1 +	10	ND			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		<input checked="" type="checkbox"/>	<input type="checkbox"/>								

⁴ The sum of individual phthalate compounds.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
h. Acenaphthene	83329	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22	grab	98,EPH-04-1.1		3.5	0.001	4.56	0.0011
i. Acenaphthylene	208968	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	grab	98,EPH-04-1.1	10	ND			
j. Anthracene	120127	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	grab	98,EPH-04-1.1	10	ND			
k. Benzo(ghi) Perylene	191242	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	grab	98,EPH-04-1.1	10	ND			
l. Fluoranthene	206440	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	grab	98,EPH-04-1.1	10	ND			
m. Fluorene	86737	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22	grab	98,EPH-04-1.1		4.1	0.00112	4.61	0.0011
n. Naphthalene	91203	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22	grab	98,EPH-04-1.1		4.9	0.00134	4.67	0.0011
o. Phenanthrene	85018	<input checked="" type="checkbox"/>	<input type="checkbox"/>	22	grab	98,EPH-04-1.1		3.2	0.00087	4.52	0.0011
p. Pyrene	129000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	grab	98,EPH-04-1.1	10	ND			
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
38. Chloride	16887006	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
39. Antimony	7440360	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14	grab			27	0.00737	6.84	0.0017
40. Arsenic	7440382	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14	grab			40	0.01092	8.26	0.0020
41. Cadmium	7440439	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14	grab						
42. Chromium III (trivalent)	16065831	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14	grab			30	0.00819	11.5	0.0028
43. Chromium VI (hexavalent)	18540299	<input type="checkbox"/>	<input type="checkbox"/>								
44. Copper	7440508	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
45. Lead	7439921	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14	grab			890	0.24292	76	0.0187
46. Mercury	7439976	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14	grab			0.58	0.0016	0.23	0.0001
47. Nickel	7440020	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14	grab			41	0.0119	40.07	0.0098
48. Selenium	7782492	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
49. Silver	7440224	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
50. Zinc	7440666	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14	grab			1200	0.32753	219.16	0.0538
51. Iron	7439896	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
Other (describe):		<input type="checkbox"/>	<input checked="" type="checkbox"/>								

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
		<input checked="" type="checkbox"/>	<input type="checkbox"/>								
Barium		<input type="checkbox"/>	<input checked="" type="checkbox"/>	14	GRAB			47	0.01283	189.07	0.0464

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

<p><i>Step 1:</i> Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y <input checked="" type="radio"/> N <input type="radio"/></p>	<p>If yes, which metals?</p> <p>antimony, arsenic, chromium, lead, nickel, and zinc</p>																				
<p><i>Step 2:</i> 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?</p> <table border="1"> <tr> <td>Metal:</td> <td></td> <td>DF:</td> <td>N/A</td> </tr> <tr> <td>Metal:</td> <td></td> <td>DF:</td> <td>N/A</td> </tr> <tr> <td>Metal:</td> <td></td> <td>DF:</td> <td>N/A</td> </tr> <tr> <td>Metal:</td> <td></td> <td>DF:</td> <td>N/A</td> </tr> <tr> <td>Etc.</td> <td></td> <td></td> <td></td> </tr> </table>	Metal:		DF:	N/A	Metal:		DF:	N/A	Metal:		DF:	N/A	Metal:		DF:	N/A	Etc.				<p>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)?</p> <p>Y <input checked="" type="radio"/> N <input type="radio"/> If Y, list which metals:</p> <p>antimony, arsenic, chromium, lead, nickel, and zinc</p>
Metal:		DF:	N/A																		
Metal:		DF:	N/A																		
Metal:		DF:	N/A																		
Metal:		DF:	N/A																		
Etc.																					

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:						
A 5,000-gallon settling tank, bag filters and GAC Filter (as necessary) in series						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank <input checked="" type="checkbox"/>	Air stripper <input type="checkbox"/>	Oil/water separator <input type="checkbox"/>	Equalization tanks <input type="checkbox"/>	Bag filter <input checked="" type="checkbox"/>	GAC filter <input checked="" type="checkbox"/>
	Chlorination <input type="checkbox"/>	De-chlorination <input type="checkbox"/>	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 gpm Maximum flow rate of treatment system gpm

Design flow rate of treatment system gpm

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

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 <input type="checkbox"/>	Within facility (sewer) <input type="checkbox"/>	Storm drain <input checked="" type="checkbox"/>	Wetlands <input type="checkbox"/>	Other (describe): <input type="text"/>
------------------------------------	--	--	---	-----------------------------------	---

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

Please refer to attached report for narrative description and plan

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

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 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.

Please refer to attached report

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:	Parcel 6A	
Operator signature:		
Printed Name & Title:	Mr. Matthew Bagedonow Project Manager	
Date:	3/25/13	



APPENDIX C

RESULTS OF GROUNDWATER ANALYSIS

Groundwater samples obtained by McPhail Associates in 2011 and 2012 were analyzed for dissolved metals, extractable petroleum hydrocarbons (EPH) fractions, and/or polynuclear aromatic hydrocarbons (PAHs). Groundwater samples previously obtained by WES and ECE were analyzed for the presence of total metals, EPH fractions, VOCs and/or PAHs. The results of groundwater chemical testing conducted by McPhail Associates, LLC, ECE and WES are attached and summarized in **Table 1**.

Extractable Petroleum Hydrocarbons

A total of twenty-two (22) groundwater samples have been obtained from monitoring wells at the subject site and analyzed for the presence of EPH and target PAHs. A value for total petroleum hydrocarbons (TPH) was derived utilizing the sum of the detected EPH fractions.

With the exception of monitoring well MAI-5, TPH concentrations calculated from the results of EPH testing were below the RGP effluent limit of 5,000 micrograms per liter (ug/l). The calculated sum of EPH fractions that were detected in the groundwater sample obtained from MAI-5 is 12,500 ug/l which exceeds the RGP effluent limit of 5,000 ug/l.

In addition, the analysis of groundwater samples for the presence of PAHs did not detect concentrations in excess of the applicable RGP effluents limits for discharge.

Volatile Organic Compounds

A total of eighteen (18) groundwater samples obtained from the subject site have been analyzed for the presence of VOCs. The results of the laboratory testing indicate that VOCs were either not detected above the laboratory method detection limits and/or were detected at concentrations below RGP effluent limits for discharge.

Metals

From 2003 through 2004, a total of fourteen (14) groundwater samples were obtained from nine monitoring wells at the subject site and analyzed for the presence of total antimony, arsenic, barium, chromium, lead, mercury, nickel, and zinc. The monitoring wells from which the samples were obtained included MW-1 through MW-4 and MW-6 through MW-10. Subsequently in 2011, groundwater samples were obtained from four separate monitoring wells located within the vicinity of the previously sampled monitoring wells. The samples were submitted for laboratory analysis for the presence of dissolved RCRA-8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver).

Of the fourteen (14) groundwater samples obtained from 2003 through 2004, only four (4) samples exhibited levels of total antimony, arsenic, chromium, lead, and nickel which exceeded the applicable RGP effluent limits for discharge. In addition, most of the groundwater samples that were obtained exhibited levels of zinc which exceeded the RGP effluent discharge limit of 66.6 ug/l. With the exception of barium, dissolved metals testing performed on groundwater samples obtained in 2011 did not detect concentrations



of metals in excess of the laboratory method detection limits. Barium was detected at concentrations which varied from 61 ug/l to 124 ug/l. Given the results of the dissolved metals analysis conducted on groundwater samples obtained from the subject site, the detected concentrations of total antimony, arsenic, chromium, lead, nickel and zinc are considered to be attributable to suspended solids in the samples.

In summary, an isolated area of groundwater at the subject site has been affected by levels of TPH which exceed the RGP effluent limit for discharge. The petroleum impacted groundwater is located at the central portion of the subject site in the immediate vicinity of monitoring well MAI-5. In addition, the results of dissolved metals testing recently completed at the subject site indicates that levels of total metals previously detected in groundwater at the subject site are likely attributable to suspended particles. At a minimum, treatment of dewatered groundwater will be required to reduce levels of suspended particles in the effluent prior to its discharge off-site into the City of Taunton storm drain system. Specifically groundwater will be pre-treated by passing the water through a 5,000-gallon sediment tank and bag filters in series prior to discharge. Within the vicinity of MAI-5, dewatered groundwater will require treatment to reduce levels of petroleum hydrocarbons prior to off-site discharge. As a result, water pumped from this area will also pass through a granular activities carbon filter that will be added after the bag filters.

TABLE 1
ANALYTICAL RESULTS-GROUNDWATER

Parcel 6A; Taunton, MA
Project No. 5293

LOCATION	RGP Effluent Limits	Method 1 GW-3	WES MW2	WES MW3	WES MW4	ECE MW1	ECE MW2	ECE MW3	ECE MW3 Dup	ECE MW4	MW 6	MW 7	MW 7 DUP	MW 8	MW 9	MW 10	
SAMPLING DATE			10/14/2003	10/16/2003	10/16/2003	10/16/2003	10/16/2003	10/16/2003	10/16/2003	10/16/2003	10/14/2003	1/14/2004	1/14/2004	1/14/2004	1/15/2004	1/14/2004	1/15/2004
LAB SAMPLE ID																	
General Chemistry																	
Solids, Total Suspended (ug/l)																	
MCP Dissolved Metals (ug/l)																	
Arsenic, Dissolved		900															
Barium, Dissolved		50000															
Cadmium, Dissolved		4															
Chromium, Dissolved		300	ND														
Lead, Dissolved		10															
Mercury, Dissolved		20															
Selenium, Dissolved		100															
Silver, Dissolved		7															
Total Metals (ug/l)																	
Antimony	5.6		ND(7.8)	27	ND(5)	ND(5)	6	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	
Arsenic	10		ND(9.7)	40	ND(5)	ND(5)	11	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	
Barium			ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	47	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	ND(200)	
Chromium	11.4		ND(11)	30	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	
Lead	1.3		ND(23)	890	ND(5)	11	32	ND(5)	ND(5)	63	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	
Mercury	0.9		ND(0.2)	0.58	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	0.21	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	
Nickel	29		ND(40)	41	ND(40)	ND(40)	ND(40)	ND(40)	ND(40)	ND(40)	ND(40)	ND(40)	ND(40)	ND(40)	ND(40)	ND(40)	
Zinc	66.6		390	590	120	1200	64	ND(20)	ND(20)	90	100	340	33	ND(0.2)	78	23	
Extractable Petroleum Hydrocarbons (ug/l)																	
C9-C18 Aliphatics		50000	ND(110)	ND(120)	ND(100)	ND(110)	410	180	190	200	ND(110)	ND(110)	ND(110)	ND(110)	ND(110)	ND(110)	
C19-C36 Aliphatics		50000	ND(110)	230	ND(100)	160	520	340	420	230	ND(110)	ND(110)	ND(110)	ND(110)	ND(110)	ND(110)	
C11-C22 Aromatics, Adjusted		5000	ND(110)	210	ND(100)	300	1700	1700	2000	470	280	ND(110)	ND(110)	ND(110)	ND(110)	ND(110)	
Calculated Total Petroleum Hydrocarbons (ug/l)																	
TPH	5000		ND	440	ND	460	2630	2220	2610	900	280	ND	ND	ND	ND	ND	
2-Methylnaphthalene		20000	ND(1.1)	ND(1.2)	ND(1)	ND(1.1)	ND(1.1)	8.5	12	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	
Acenaphthene	Group II PAHs	6000	ND(1.1)	ND(1.2)	ND(1)	ND(1.1)	ND(1.1)	3	3.5	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	
Fluorene	Group II PAHs	40	ND(1.1)	ND(1.2)	ND(1)	ND(1.1)	ND(1.1)	3.6	4.1	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	
Naphthalene	20	20000	ND(1.1)	ND(1.2)	ND(1)	ND(1.1)	ND(1.1)	4	4.9	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	
Phenanthrene	Group II PAHs	10000	ND(1.1)	ND(1.2)	ND(1)	ND(1.1)	ND(1.1)	2.5	3.2	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	ND(1.1)	
Acenaphthylene	Group II PAHs	40															
Anthracene	Group II PAHs	30															
Fluoranthene	Group II PAHs	200															
Pyrene	Group II PAHs	20															
Benzo(a)anthracene	0.0038	1000															
Chrysene	0.0038	70															
Benzo(b)fluoranthene	0.0038	400															
Benzo(k)fluoranthene	0.0038	100															
Benzo(a)pyrene	0.0038	500															
Indeno(1,2,3-cd)Pyrene	0.0038	100															
Dibenzo(a,h)anthracene	0.0038	40															
Benzo(ghi)perylene	Group II PAHs	20															
MCP Volatile Organics (ug/l)																	
1,2,4-Trimethylbenzene			ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	7	4	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	
1,4-Dioxane	Monitor Only	50000	ND(50)	ND(50)	ND(50)	110	ND(50)	ND(5)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	ND(50)	
Acetone	Monitor Only	50000	ND(10)	ND(10)	ND(10)	14	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	ND(10)	
p/m-Xylene	Total BTEX 100	5000	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	2.1	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	ND(2)	
Naphthalene	20	20000	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	5.6	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	
SUM			ND	ND	ND	124	ND	14.7	4	ND	ND	ND	ND	ND	ND	ND	

ND-not detected in excess of the laboratory
method detection limits in ()
Bold-exceeds RGP limits

TABLE 1
ANALYTICAL RESULTS-GROUNDWATER

Parcel 6A; Taunton, MA
Project No. 5293

LOCATION	RGP	Method 1 GW-3	MAI-2 (OW)	MAI-3 (OW)	MAI-5 (OW)	MAI-6 (OW)	MAI-3 (OW)	MAI-101 (OW)	MAI-102 (OW)	MAI-103 (OW)	MAI-1 (OW)	MAI-106 (OW)	MAI-107 (OW)	MAI-109 (OW)	MAI-111 (OW)	RAM-3	RAM-3
SAMPLING DATE	Effluent		10/21/2011	10/21/2011	10/21/2011	10/21/2011	11/4/2011	1/11/2012	1/11/2012	1/11/2012	1/11/2012	1/11/2012	1/11/2012	1/11/2012	1/11/2012	3/7/2013	3/7/2013
LAB SAMPLE ID	Limits		L1117331-01	L1117331-02	L1117331-03	L1117331-04	L1118320-01	L1200565-01	L1200565-02	L1200565-03	L1200565-04	L1200565-05	L1200565-06	L1200565-07	L1200565-08	L1303875-01	L1303875-02
General Chemistry																	
Solids, Total Suspended (ug/l)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND(10000)
MCP Dissolved Metals (ug/l)																	
Arsenic, Dissolved		900	ND(5)	ND(5)	ND(5)	ND(5)	-	-	-	-	-	-	-	-	-	-	-
Barium, Dissolved		50000	63	61	73	124	-	-	-	-	-	-	-	-	-	-	-
Cadmium, Dissolved		4	ND(4)	ND(4)	ND(4)	ND(4)	-	-	-	-	-	-	-	-	-	-	-
Chromium, Dissolved		300	ND(10)	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-	-	-
Lead, Dissolved		10	ND(10)	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-	-	-
Mercury, Dissolved		20	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	-	-	-	-	-	-	-	-	-	-	-
Selenium, Dissolved		100	ND(10)	ND(10)	ND(10)	ND(10)	-	-	-	-	-	-	-	-	-	-	-
Silver, Dissolved		7	ND(7)	ND(7)	ND(7)	ND(7)	-	-	-	-	-	-	-	-	-	-	-
Total Metals (ug/l)																	
Antimony	5.6																
Arsenic	10																
Barium																	
Chromium	11.4																
Lead	1.3																
Mercury	0.9																
Nickel	29																
Zinc	66.6																
Extractable Petroleum Hydrocarbons (ug/l)																	
C9-C18 Aliphatics		50000	ND(100)	-	2160	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	-	-	-	-	ND(100)	-
C19-C36 Aliphatics		50000	ND(100)	-	7420	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	-	-	-	-	ND(100)	-
C11-C22 Aromatics, Adjusted		5000	ND(100)	-	3270	ND(100)	108	ND(100)	ND(100)	ND(100)	ND(100)	-	-	-	-	ND(100)	-
Calculated Total Petroleum Hydrocarbons (ug/l)																	
TPH	5000		ND		12850	ND	108	ND	ND	ND	ND					ND	
2-Methylnaphthalene		20000	ND(10.1)	-	11.6	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Acenaphthene	Group II PAHs	6000	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Fluorene	Group II PAHs	40	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Naphthalene	20	20000	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Phenanthrene	Group II PAHs	10000	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Acenaphthylene	Group II PAHs	40	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Anthracene	Group II PAHs	30	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Fluoranthene	Group II PAHs	200	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Pyrene	Group II PAHs	20	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Benzo(a)anthracene	0.0038	1000	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Chrysene	0.0038	70	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Benzo(b)fluoranthene	0.0038	400	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Benzo(k)fluoranthene	0.0038	100	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Benzo(a)pyrene	0.0038	500	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Indeno(1,2,3-cd)Pyrene	0.0038	100	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Dibenzo(a,h)anthracene	0.0038	40	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
Benzo(ghi)perylene	Group II PAHs	20	ND(10.1)	-	ND(10.1)	ND(10)	ND(10)	ND(10.1)	ND(10)	ND(10.2)	ND(10.1)	-	-	-	-	-	-
MCP Volatile Organics (ug/l)																	
1,2,4-Trimethylbenzene			-	-	-	-	-	-	-	-	-	ND(2)	ND(2)	ND(2)	ND(2)	-	-
1,4-Dioxane	Monitor Only	50000	-	-	-	-	-	-	-	-	-	ND(250)	ND(250)	ND(250)	ND(250)	-	-
Acetone	Monitor Only	50000	-	-	-	-	-	-	-	-	-	ND(5)	ND(5)	ND(5)	ND(5)	-	-
p/m-Xylene	Total BTEX 100	5000	-	-	-	-	-	-	-	-	-	ND(2)	ND(2)	ND(2)	ND(2)	-	-
Naphthalene	20	20000	-	-	-	-	-	-	-	-	-	ND(2)	ND(2)	ND(2)	ND(2)	-	-
SUM			-	-	-	-	-	-	-	-	-	ND	ND	ND	ND	-	-

ND-not detected in excess of the laboratory
method detection limits in ()
Bold-exceeds RGP limits

TABLE 2
Calculations of Mass of Compounds

Parcel 6A
Taunton, Massachusetts
McPhail Job No. 4575

Max flow (GPM) = 50			
Max Flow (MGD) = 0.072			
Compound #	Max Concentration (ug/l)	Max Concentration (mg/l)	MASS (kg)
Antimony	27.00	0.027	0.00737
Arsenic	40.00	0.04	0.01092
Barium	47.00	0.047	0.01283
Chromium	30.00	0.03	0.00819
Lead	890.00	0.89	0.24292
Mercury	0.58	0.00058	0.00016
Nickel	41.00	0.041	0.01119
Zinc	1200.00	1.2	0.32753
2-Methylnaphthalene	12.00	0.012	0.00328
Acenaphthene	3.50	0.0035	0.00096
Fluorene	4.10	0.0041	0.00112
Naphthalene	4.90	0.0049	0.00134
Phenanthrene	3.20	0.0032	0.00087
1,2,4-Trimethylbenzene	7.00	0.007	0.00191
1,4-Dioxane	110.00	0.11	0.03002
Acetone	14.00	0.014	0.00382
p/m-Xylene	2.10	0.0021	0.00057
Naphthalene	5.60	0.0056	0.00153
TPH	12850.00	12.85	3.50735
Avg flow (GPM) = 45			
Avg Flow (MGD) = 0.0648			
Compound #	Average Concentration (ug/l)	Average Concentration (mg/l)	MASS (kg)
Antimony	6.84	0.00684	0.0017
Arsenic	8.26	0.00826	0.0020
Barium	189.07	0.18907	0.0464
Chromium	11.50	0.0115	0.0028
Lead	76.00	0.076	0.0187
Mercury	0.23	0.00023	0.0001
Nickel	40.07	0.04007	0.0098
Zinc	219.16	0.21916	0.0538
2-Methylnaphthalene	5.26	0.00526	0.0013
Acenaphthene	4.56	0.00456	0.0011
Fluorene	4.61	0.00461	0.0011
Naphthalene	4.67	0.00467	0.0011
Phenanthrene	4.52	0.00452	0.0011
1,2,4-Trimethylbenzene	2.39	0.00239	0.0006
1,4-Dioxane	95.28	0.09528	0.0234
Acetone	9.11	0.00911	0.0022
p/m-Xylene	2.01	0.00201	0.0005
Naphthalene	4.37	0.00437	0.0011
TPH	2,499.78	2.49978	0.6141

GPM = Gallons Per Minute
MGD = Million Gallons Per Day
ug/l = Micrograms per liter
mg/l = Milligrams per liter
kg = Kilograms



ANALYTICAL REPORT

Lab Number:	L1117331
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	PARCEL 6A
Project Number:	5292.9.00
Report Date:	11/01/11

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Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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



Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1117331
Report Date: 11/01/11

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1117331-01	MAI-2 (OW)	TAUNTON	10/21/11 14:00
L1117331-02	MAI-3 (OW)	TAUNTON	10/21/11 13:30
L1117331-03	MAI-5 (OW)	TAUNTON	10/21/11 13:00
L1117331-04	MAI-6 (OW)	TAUNTON	10/21/11 12:35

Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is 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
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
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
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
E 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).	YES
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
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
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1117331
Report Date: 11/01/11

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEX data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

MCP Related Narratives

Sample Receipt

The element list for the Dissolved Metals analysis was supplied by the client.

EPH

At the client's request, the results for L1117331-02 are not reported.

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The WG497584-2/-3 LCS/LCSD RPD, associated with L1117331-01, -03 and -04, is above the acceptance criteria for Naphthalene (26%).

Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1117331
Report Date: 11/01/11

Case Narrative (continued)

Dissolved Metals

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

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

Authorized Signature:  Elizabeth Simmons

Title: Technical Director/Representative

Date: 11/01/11

ORGANICS

PETROLEUM HYDROCARBONS

Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

SAMPLE RESULTS

Lab ID: L1117331-03
 Client ID: MAI-5 (OW)
 Sample Location: TAUNTON
 Matrix: Water
 Analytical Method: 98,EPH-04-1.1
 Analytical Date: 10/26/11 16:10
 Analyst: AS

Date Collected: 10/21/11 13:00
 Date Received: 10/21/11
 Field Prep: Not Specified
 Extraction Method: EPA 3510C
 Extraction Date: 10/23/11 17:14
 Cleanup Method1: EPH-04-1
 Cleanup Date1: 10/25/11

Quality Control Information

Condition of sample received: Satisfactory
 Aqueous Preservative: Laboratory Provided Preserved Container
 Sample Temperature upon receipt: Received on Ice
 Sample Extraction method: Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	2160		ug/l	100	--	1
C19-C36 Aliphatics	7420		ug/l	100	--	1
C11-C22 Aromatics	3280		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	3270		ug/l	100	--	1
Naphthalene	ND		ug/l	10.1	--	1
2-Methylnaphthalene	11.6		ug/l	10.1	--	1
Acenaphthylene	ND		ug/l	10.1	--	1
Acenaphthene	ND		ug/l	10.1	--	1
Fluorene	ND		ug/l	10.1	--	1
Phenanthrene	ND		ug/l	10.1	--	1
Anthracene	ND		ug/l	10.1	--	1
Fluoranthene	ND		ug/l	10.1	--	1
Pyrene	ND		ug/l	10.1	--	1
Benzo(a)anthracene	ND		ug/l	10.1	--	1
Chrysene	ND		ug/l	10.1	--	1
Benzo(b)fluoranthene	ND		ug/l	10.1	--	1
Benzo(k)fluoranthene	ND		ug/l	10.1	--	1
Benzo(a)pyrene	ND		ug/l	10.1	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.1	--	1
D benzo(a,h)anthracene	ND		ug/l	10.1	--	1
Benzo(ghi)perylene	ND		ug/l	10.1	--	1

Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

SAMPLE RESULTS

Lab ID: L1117331-03

Date Collected: 10/21/11 13:00

Client ID: MAI-5 (OW)

Date Received: 10/21/11

Sample Location: TAUNTON

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	46		40-140
o-Terphenyl	93		40-140
2-Fluorobiphenyl	82		40-140
2-Bromonaphthalene	112		40-140

Project Name: PARCEL 6A**Lab Number:** L1117331**Project Number:** 5292.9.00**Report Date:** 11/01/11**SAMPLE RESULTS**

Lab ID: L1117331-04
Client ID: MAI-6 (OW)
Sample Location: TAUNTON
Matrix: Water
Analytical Method: 98,EPH-04-1.1
Analytical Date: 10/26/11 16:54
Analyst: AS

Date Collected: 10/21/11 12:35
Date Received: 10/21/11
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/23/11 17:14
Cleanup Method1: EPH-04-1
Cleanup Date1: 10/25/11

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.0	--	1
2-Methylnaphthalene	ND		ug/l	10.0	--	1
Acenaphthylene	ND		ug/l	10.0	--	1
Acenaphthene	ND		ug/l	10.0	--	1
Fluorene	ND		ug/l	10.0	--	1
Phenanthrene	ND		ug/l	10.0	--	1
Anthracene	ND		ug/l	10.0	--	1
Fluoranthene	ND		ug/l	10.0	--	1
Pyrene	ND		ug/l	10.0	--	1
Benzo(a)anthracene	ND		ug/l	10.0	--	1
Chrysene	ND		ug/l	10.0	--	1
Benzo(b)fluoranthene	ND		ug/l	10.0	--	1
Benzo(k)fluoranthene	ND		ug/l	10.0	--	1
Benzo(a)pyrene	ND		ug/l	10.0	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.0	--	1
D benzo(a,h)anthracene	ND		ug/l	10.0	--	1
Benzo(ghi)perylene	ND		ug/l	10.0	--	1

Project Name: PARCEL 6A**Lab Number:** L1117331**Project Number:** 5292.9.00**Report Date:** 11/01/11**SAMPLE RESULTS**

Lab ID: L1117331-04

Date Collected: 10/21/11 12:35

Client ID: MAI-6 (OW)

Date Received: 10/21/11

Sample Location: TAUNTON

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	49		40-140
o-Terphenyl	68		40-140
2-Fluorobiphenyl	78		40-140
2-Bromonaphthalene	78		40-140

Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 98,EPH-04-1.1

Extraction Method: EPA 3510C

Analytical Date: 10/25/11 17:08

Extraction Date: 10/23/11 17:14

Analyst: AS

Cleanup Method1: EPH-04-1

Cleanup Date1: 10/25/11

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01,03-04 Batch: WG497584-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	10.0	--
2-Methylnaphthalene	ND		ug/l	10.0	--
Acenaphthylene	ND		ug/l	10.0	--
Acenaphthene	ND		ug/l	10.0	--
Fluorene	ND		ug/l	10.0	--
Phenanthrene	ND		ug/l	10.0	--
Anthracene	ND		ug/l	10.0	--
Fluoranthene	ND		ug/l	10.0	--
Pyrene	ND		ug/l	10.0	--
Benzo(a)anthracene	ND		ug/l	10.0	--
Chrysene	ND		ug/l	10.0	--
Benzo(b)fluoranthene	ND		ug/l	10.0	--
Benzo(k)fluoranthene	ND		ug/l	10.0	--
Benzo(a)pyrene	ND		ug/l	10.0	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.0	--
Dibenzo(a,h)anthracene	ND		ug/l	10.0	--
Benzo(ghi)perylene	ND		ug/l	10.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	63		40-140
o-Terphenyl	70		40-140
2-Fluorobiphenyl	88		40-140
2-Bromonaphthalene	87		40-140

Lab Control Sample Analysis Batch Quality Control

Project Name: PARCEL 6A

Project Number: 5292.9.00

Lab Number: L1117331

Report Date: 11/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01,03-04 Batch: WG497584-2 WG497584-3								
C9-C18 Aliphatics	64		60		40-140	6		25
C19-C36 Aliphatics	84		79		40-140	6		25
C11-C22 Aromatics	78		69		40-140	12		25
Naphthalene	77		59		40-140	26	Q	25
2-Methylnaphthalene	82		65		40-140	23		25
Acenaphthylene	74		60		40-140	21		25
Acenaphthene	79		65		40-140	19		25
Fluorene	74		65		40-140	13		25
Phenanthrene	79		72		40-140	9		25
Anthracene	75		68		40-140	10		25
Fluoranthene	77		71		40-140	8		25
Pyrene	80		73		40-140	9		25
Benzo(a)anthracene	71		63		40-140	12		25
Chrysene	75		68		40-140	10		25
Benzo(b)fluoranthene	78		69		40-140	12		25
Benzo(k)fluoranthene	74		66		40-140	11		25
Benzo(a)pyrene	68		59		40-140	14		25
Indeno(1,2,3-cd)Pyrene	74		65		40-140	13		25
Dibenzo(a,h)anthracene	69		58		40-140	17		25
Benzo(ghi)perylene	74		66		40-140	11		25
Nonane (C9)	52		41		30-140	24		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: PARCEL 6A

Project Number: 5292.9.00

Lab Number: L1117331

Report Date: 11/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01,03-04 Batch: WG497584-2 WG497584-3								
Decane (C10)	62		50		40-140	21		25
Dodecane (C12)	69		58		40-140	17		25
Tetradecane (C14)	73		65		40-140	12		25
Hexadecane (C16)	78		74		40-140	5		25
Octadecane (C18)	81		78		40-140	4		25
Nonadecane (C19)	82		84		40-140	2		25
Eicosane (C20)	84		83		40-140	1		25
Docosane (C22)	82		80		40-140	2		25
Tetracosane (C24)	82		81		40-140	1		25
Hexacosane (C26)	83		82		40-140	1		25
Octacosane (C28)	80		79		40-140	1		25
Triacotane (C30)	83		82		40-140	1		25
Hexatriacontane (C36)	81		78		40-140	4		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	73		67		40-140
o-Terphenyl	71		60		40-140
2-Fluorobiphenyl	85		77		40-140
2-Bromonaphthalene	89		77		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

METALS

Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

SAMPLE RESULTS

Lab ID: L1117331-03

Date Collected: 10/21/11 13:00

Client ID: MAI-5 (OW)

Date Received: 10/21/11

Sample Location: TAUNTON

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab											
Arsenic, Dissolved	ND		mg/l	0.005	--	1	10/25/11 11:30	10/27/11 09:56	EPA 3005A	97,6010B	AI
Barium, Dissolved	0.073		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:56	EPA 3005A	97,6010B	AI
Cadmium, Dissolved	ND		mg/l	0.004	--	1	10/25/11 11:30	10/27/11 09:56	EPA 3005A	97,6010B	AI
Chromium, Dissolved	ND		mg/l	0.01	--	1	10/25/11 11:30	10/27/11 09:56	EPA 3005A	97,6010B	AI
Lead, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:56	EPA 3005A	97,6010B	AI
Mercury, Dissolved	ND		mg/l	0.0002	--	1	10/25/11 18:30	10/26/11 12:52	EPA 7470A	97,7470A	JP
Selenium, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:56	EPA 3005A	97,6010B	AI
Silver, Dissolved	ND		mg/l	0.007	--	1	10/25/11 11:30	10/27/11 09:56	EPA 3005A	97,6010B	AI



Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

SAMPLE RESULTS

Lab ID: L1117331-04

Date Collected: 10/21/11 12:35

Client ID: MAI-6 (OW)

Date Received: 10/21/11

Sample Location: TAUNTON

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab											
Arsenic, Dissolved	ND		mg/l	0.005	--	1	10/25/11 11:30	10/27/11 09:59	EPA 3005A	97,6010B	AI
Barium, Dissolved	0.124		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:59	EPA 3005A	97,6010B	AI
Cadmium, Dissolved	ND		mg/l	0.004	--	1	10/25/11 11:30	10/27/11 09:59	EPA 3005A	97,6010B	AI
Chromium, Dissolved	ND		mg/l	0.01	--	1	10/25/11 11:30	10/27/11 09:59	EPA 3005A	97,6010B	AI
Lead, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:59	EPA 3005A	97,6010B	AI
Mercury, Dissolved	ND		mg/l	0.0002	--	1	10/25/11 18:30	10/26/11 12:54	EPA 7470A	97,7470A	JP
Selenium, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:59	EPA 3005A	97,6010B	AI
Silver, Dissolved	ND		mg/l	0.007	--	1	10/25/11 11:30	10/27/11 09:59	EPA 3005A	97,6010B	AI



Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 01-04 Batch: WG497975-1										
Arsenic, Dissolved	ND		mg/l	0.005	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI
Barium, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI
Cadmium, Dissolved	ND		mg/l	0.004	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI
Chromium, Dissolved	ND		mg/l	0.01	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI
Lead, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI
Selenium, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI
Silver, Dissolved	ND		mg/l	0.007	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 01-04 Batch: WG498106-1										
Mercury, Dissolved	ND		mg/l	0.0002	--	1	10/25/11 18:30	10/26/11 12:42	97,7470A	JP

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis Batch Quality Control

Project Name: PARCEL 6A

Project Number: 5292.9.00

Lab Number: L1117331

Report Date: 11/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01-04 Batch: WG497975-2 WG497975-3								
Arsenic, Dissolved	115		112		80-120	3		20
Barium, Dissolved	107		106		80-120	1		20
Cadmium, Dissolved	112		109		80-120	3		20
Chromium, Dissolved	105		105		80-120	0		20
Lead, Dissolved	110		108		80-120	2		20
Selenium, Dissolved	115		112		80-120	3		20
Silver, Dissolved	109		108		80-120	1		20

MCP Dissolved Metals - Westborough Lab Associated sample(s): 01-04 Batch: WG498106-2 WG498106-3								
Mercury, Dissolved	110		110		80-120	0		20

Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1117331-01A	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	EPH-DELUX-10(14)
L1117331-01B	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	EPH-DELUX-10(14)
L1117331-01C	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-01D	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-01X	Plastic 1000ml HNO3 preserved sp	A	<2	2	Y	Absent	MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-SE-6010S-10(180)
L1117331-02A	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	-
L1117331-02B	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	-
L1117331-02C	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-02D	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-02X	Plastic 1000ml HNO3 preserved sp	A	<2	2	Y	Absent	MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-SE-6010S-10(180)
L1117331-03A	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	EPH-DELUX-10(14)
L1117331-03B	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	EPH-DELUX-10(14)
L1117331-03C	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-03D	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-03X	Plastic 1000ml HNO3 preserved sp	A	<2	2	Y	Absent	MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-SE-6010S-10(180)

*Values in parentheses indicate holding time in days



Project Name: PARCEL 6A

Project Number: 5292.9.00

Lab Number: L1117331

Report Date: 11/01/11

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1117331-04A	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	EPH-DELUX-10(14)
L1117331-04B	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	EPH-DELUX-10(14)
L1117331-04C	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-04D	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-04X	Plastic 1000ml HNO3 preserved sp	A	<2	2	Y	Absent	MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-SE-6010S-10(180)

*Values in parentheses indicate holding time in days

Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1117331
Report Date: 11/01/11

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

Data Qualifiers

- | | |
|-----------|---|
| A | - Spectra identified as "Aldol Condensation Product". |
| B | - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. |
| C | - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses. |
| D | - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte. |
| E | - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument. |
| G | - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated. |
| H | - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection. |
| I | - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference. |
| M | - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte. |
| NJ | - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search. |

Report Format: Data Usability Report



Project Name: PARCEL 6A**Lab Number:** L1117331**Project Number:** 5292.9.00**Report Date:** 11/01/11**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1117331
Report Date: 11/01/11

REFERENCES

- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.
- 98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

LIMITATION OF LIABILITIES

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

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



Certificate/Approval Program Summary

Last revised September 19, 2011 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID: 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID: 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE.
Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 6010B, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5035, 8015B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**
 Refer to MA-DEP Certificate for Potable and Non-Potable Water.
 Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S²⁻ D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.



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

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab:

10/21/11

ALPHA Job #:

L1117331

Project Information

Project Name: Parcel 6A

Project Location: Taunton

Project #: 5292.9.00

Project Manager: Amy Falconeiri

ALPHA Quote #:

Turn-Around Time

☒ Standard

☐ RUSH (only confirmed if pre-approved!)

Date Due: 10/28/11

Time:

Report Information - Data Deliverables

☐ FAX

☐ EMAIL

☐ ADEx

☐ Add'l Deliverables

Billing Information

☐ Same as Client info

PO #:

Regulatory Requirements/Report Limits

State /Fed Program MA/DEP

Criteria RCS-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☒ Yes

☐ No

Are MCP Analytical Methods Required?

☐ Yes

☒ No

Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)

☐ Yes

☒ No

Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS
Dissolved Metals
EPH

SAMPLE HANDLING

Filtration _____

☐ Done

☐ Not needed

☐ Lab to do

Preservation

☐ Lab to do

(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

Client Information

Client: McPhail Associates

Address: 2269 MASS. AVE

CAMBRIDGE, MA 02140

Phone: 617 868 1420

Fax:

Email:

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials											Sample Specific Comments	
		Date	Time														
17331	MAI-2 (ow)	10/21/11	1400	H2O	FBK	X	X									2- Amber (L) 2- plastic	4
2	MAI-3 (ow)	10/21/11	1330	H2O	FBK	X	X									"	4
3	MAI-5 (ow)	10/21/11	1300	H2O	FBK	X	X									"	4
4	MAI-6 (ow)	10/21/11	1235	H2O	FBK	X	X									"	4

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
MA MCP or CT RCP?

Container Type

P A

Preservative

C B

Relinquished By:

Date/Time

10/21/11 1600
10/21/11 1805

Received By:

Date/Time

10/21/11 1605
10/21/11 1805

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



ANALYTICAL REPORT

Lab Number:	L1200565
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	PARCEL 6A
Project Number:	5292.9.01
Report Date:	01/17/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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



Project Name: PARCEL 6A
Project Number: 5292.9.01

Lab Number: L1200565
Report Date: 01/17/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1200565-01	MAI-101 (OW)	TAUNTON, MA	01/11/12 08:30
L1200565-02	MAI-102 (OW)	TAUNTON, MA	01/11/12 09:00
L1200565-03	MAI-103 (OW)	TAUNTON, MA	01/11/12 09:30
L1200565-04	MAI-1 (OW)	TAUNTON, MA	01/11/12 08:00
L1200565-05	MAI-106 (OW)	TAUNTON, MA	01/11/12 10:00
L1200565-06	MAI-107 (OW)	TAUNTON, MA	01/11/12 10:30
L1200565-07	MAI-109 (OW)	TAUNTON, MA	01/11/12 11:00
L1200565-08	MAI-111 (OW)	TAUNTON, MA	01/11/12 11:30

Project Name: PARCEL 6A

Lab Number: L1200565

Project Number: 5292.9.01

Report Date: 01/17/12

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is 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
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
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
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
E 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).	YES
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
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
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: PARCEL 6A
Project Number: 5292.9.01

Lab Number: L1200565
Report Date: 01/17/12

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

MCP Related Narratives

Volatile Organics

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The WG513755-2 LCSD recovery, associated with L1200565-05 through -08, is below the acceptance criteria for 2-Hexanone (69%); however, it has been identified as a "difficult" analyte and is within the 40-160% acceptance limits. The results of the associated samples are reported; however, all results are considered to have a potentially low bias for this compound.

The WG513755-1/-2 LCS/LCSD RPDs, associated with L1200565-05 through -08, are above the acceptance criteria for 2-Butanone (25%) and 4-Methyl-2-pentanone (27%).

The initial calibration, associated with L1200565-05 through -08, did not meet the method required minimum

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**Case Narrative (continued)**

response factors on the lowest calibration standards for 1,4-Dioxane (0.00304), as well as the average response factor for tert-Butyl alcohol and 1,4-Dioxane.

The continuing calibration standard, associated with L1200565-05 through -08, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

EPH

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

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

Authorized Signature:



Cynthia McQueen

Title: Technical Director/Representative

Date: 01/17/12

ORGANICS

VOLATILES

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-05
Client ID: MAI-106 (OW)
Sample Location: TAUNTON, MA
Matrix: Water
Analytical Method: 97,8260B
Analytical Date: 01/13/12 12:47
Analyst: MM

Date Collected: 01/11/12 10:00
Date Received: 01/11/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethy benzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-05
 Client ID: MAI-106 (OW)
 Sample Location: TAUNTON, MA

Date Collected: 01/11/12 10:00
 Date Received: 01/11/12
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Buty benzene	ND		ug/l	2.0	--	1
sec-Buty benzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propy benzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Ethyl ether	ND		ug/l	2.0	--	1
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-05
 Client ID: MAI-106 (OW)
 Sample Location: TAUNTON, MA

Date Collected: 01/11/12 10:00
 Date Received: 01/11/12
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	250	--	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-06
Client ID: MAI-107 (OW)
Sample Location: TAUNTON, MA
Matrix: Water
Analytical Method: 97,8260B
Analytical Date: 01/13/12 13:20
Analyst: MM

Date Collected: 01/11/12 10:30
Date Received: 01/11/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethy benzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-06
 Client ID: MAI-107 (OW)
 Sample Location: TAUNTON, MA

Date Collected: 01/11/12 10:30
 Date Received: 01/11/12
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Buty benzene	ND		ug/l	2.0	--	1
sec-Buty benzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propy benzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Ethyl ether	ND		ug/l	2.0	--	1
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-06
 Client ID: MAI-107 (OW)
 Sample Location: TAUNTON, MA

Date Collected: 01/11/12 10:30
 Date Received: 01/11/12
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	250	--	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	111		70-130

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-07
Client ID: MAI-109 (OW)
Sample Location: TAUNTON, MA
Matrix: Water
Analytical Method: 97,8260B
Analytical Date: 01/13/12 13:52
Analyst: MM

Date Collected: 01/11/12 11:00
Date Received: 01/11/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethy benzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-07
 Client ID: MAI-109 (OW)
 Sample Location: TAUNTON, MA

Date Collected: 01/11/12 11:00
 Date Received: 01/11/12
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Buty benzene	ND		ug/l	2.0	--	1
sec-Buty benzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propy benzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Ethyl ether	ND		ug/l	2.0	--	1
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-07
 Client ID: MAI-109 (OW)
 Sample Location: TAUNTON, MA

Date Collected: 01/11/12 11:00
 Date Received: 01/11/12
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	250	--	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	111		70-130

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-08
Client ID: MAI-111 (OW)
Sample Location: TAUNTON, MA
Matrix: Water
Analytical Method: 97,8260B
Analytical Date: 01/13/12 14:25
Analyst: MM

Date Collected: 01/11/12 11:30
Date Received: 01/11/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	--	1
1,1-Dichloroethane	ND		ug/l	1.0	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	1.0	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.0	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	1.0	--	1
Trichlorofluoromethane	ND		ug/l	2.0	--	1
1,2-Dichloroethane	ND		ug/l	1.0	--	1
1,1,1-Trichloroethane	ND		ug/l	1.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.0	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	1.0	--	1
Ethy benzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	2.0	--	1
Bromomethane	ND		ug/l	2.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	1.0	--	1
1,3-Dichlorobenzene	ND		ug/l	1.0	--	1
1,4-Dichlorobenzene	ND		ug/l	1.0	--	1

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-08
 Client ID: MAI-111 (OW)
 Sample Location: TAUNTON, MA

Date Collected: 01/11/12 11:30
 Date Received: 01/11/12
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Dibromomethane	ND		ug/l	2.0	--	1
1,2,3-Trichloropropane	ND		ug/l	2.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	2.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	2.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.0	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.0	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Bromobenzene	ND		ug/l	2.0	--	1
n-Buty benzene	ND		ug/l	2.0	--	1
sec-Buty benzene	ND		ug/l	2.0	--	1
tert-Butylbenzene	ND		ug/l	2.0	--	1
o-Chlorotoluene	ND		ug/l	2.0	--	1
p-Chlorotoluene	ND		ug/l	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--	1
Hexachlorobutadiene	ND		ug/l	0.60	--	1
Isopropylbenzene	ND		ug/l	2.0	--	1
p-Isopropyltoluene	ND		ug/l	2.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
n-Propy benzene	ND		ug/l	2.0	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--	1
Ethyl ether	ND		ug/l	2.0	--	1
Isopropyl Ether	ND		ug/l	2.0	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-08
 Client ID: MAI-111 (OW)
 Sample Location: TAUNTON, MA

Date Collected: 01/11/12 11:30
 Date Received: 01/11/12
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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MCP Volatile Organics - Westborough Lab

1,4-Dioxane	ND		ug/l	250	--	1
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	85		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	94		70-130

Project Name: PARCEL 6A

Lab Number: L1200565

Project Number: 5292.9.01

Report Date: 01/17/12

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 01/13/12 08:27
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 05-08 Batch: WG513755-3					
Methylene chloride	ND		ug/l	2.0	--
1,1-Dichloroethane	ND		ug/l	1.0	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	1.0	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.0	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	1.0	--
Trichlorofluoromethane	ND		ug/l	2.0	--
1,2-Dichloroethane	ND		ug/l	1.0	--
1,1,1-Trichloroethane	ND		ug/l	1.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.0	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	1.0	--
Ethy benzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	2.0	--
Bromomethane	ND		ug/l	2.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	1.0	--
1,3-Dichlorobenzene	ND		ug/l	1.0	--
1,4-Dichlorobenzene	ND		ug/l	1.0	--

Project Name: PARCEL 6A

Lab Number: L1200565

Project Number: 5292.9.01

Report Date: 01/17/12

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 01/13/12 08:27
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 05-08 Batch: WG513755-3					
Methyl tert butyl ether	ND		ug/l	2.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-Xylene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
Dibromomethane	ND		ug/l	2.0	--
1,2,3-Trichloropropane	ND		ug/l	2.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	2.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	2.0	--
2-Butanone	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.0	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.0	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	--
Bromobenzene	ND		ug/l	2.0	--
n-Buty benzene	ND		ug/l	2.0	--
sec-Buty benzene	ND		ug/l	2.0	--
tert-Butylbenzene	ND		ug/l	2.0	--
o-Chlorotoluene	ND		ug/l	2.0	--
p-Chlorotoluene	ND		ug/l	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	--
Hexachlorobutadiene	ND		ug/l	0.60	--
Isopropylbenzene	ND		ug/l	2.0	--
p-Isopropyltoluene	ND		ug/l	2.0	--
Naphthalene	ND		ug/l	2.0	--
n-Propy benzene	ND		ug/l	2.0	--

Project Name: PARCEL 6A

Lab Number: L1200565

Project Number: 5292.9.01

Report Date: 01/17/12

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8260B
 Analytical Date: 01/13/12 08:27
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
MCP Volatile Organics - Westborough Lab for sample(s): 05-08 Batch: WG513755-3					
1,2,3-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trichlorobenzene	ND		ug/l	2.0	--
1,3,5-Trimethylbenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.0	--
Ethyl ether	ND		ug/l	2.0	--
Isopropyl Ether	ND		ug/l	2.0	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,4-Dioxane	ND		ug/l	250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	97		70-130
D bromofluoromethane	106		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: PARCEL 6A

Project Number: 5292.9.01

Lab Number: L1200565

Report Date: 01/17/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 05-08 Batch: WG513755-1 WG513755-2								
Methylene chloride	98		106		70-130	8		20
1,1-Dichloroethane	96		99		70-130	3		20
Chloroform	96		104		70-130	8		20
Carbon tetrachloride	115		122		70-130	6		20
1,2-Dichloropropane	103		112		70-130	8		20
Dibromochloromethane	108		106		70-130	2		20
1,1,2-Trichloroethane	94		99		70-130	5		20
Tetrachloroethene	105		114		70-130	8		20
Chlorobenzene	95		100		70-130	5		20
Trichlorofluoromethane	117		125		70-130	7		20
1,2-Dichloroethane	102		105		70-130	3		20
1,1,1-Trichloroethane	107		113		70-130	5		20
Bromodichloromethane	100		109		70-130	9		20
trans-1,3-Dichloropropene	91		96		70-130	5		20
cis-1,3-Dichloropropene	98		104		70-130	6		20
1,1-Dichloropropene	99		108		70-130	9		20
Bromoform	96		100		70-130	4		20
1,1,2,2-Tetrachloroethane	83		88		70-130	6		20
Benzene	101		104		70-130	3		20
Toluene	95		96		70-130	1		20
Ethylbenzene	94		100		70-130	6		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: PARCEL 6A

Project Number: 5292.9.01

Lab Number: L1200565

Report Date: 01/17/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 05-08 Batch: WG513755-1 WG513755-2								
Chloromethane	72		76		70-130	5		20
Bromomethane	111		113		70-130	2		20
Vinyl chloride	80		88		70-130	10		20
Chloroethane	90		101		70-130	12		20
1,1-Dichloroethene	107		114		70-130	6		20
trans-1,2-Dichloroethene	101		111		70-130	9		20
Trichloroethene	105		110		70-130	5		20
1,2-Dichlorobenzene	97		103		70-130	6		20
1,3-Dichlorobenzene	97		104		70-130	7		20
1,4-Dichlorobenzene	97		110		70-130	13		20
Methyl tert butyl ether	100		99		70-130	1		20
p/m-Xylene	95		102		70-130	7		20
o-Xylene	97		100		70-130	3		20
cis-1,2-Dichloroethene	98		108		70-130	10		20
Dibromomethane	115		128		70-130	11		20
1,2,3-Trichloropropane	83		91		70-130	9		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	75		80		70-130	6		20
Acetone	101		100		70-130	1		20
Carbon disulfide	130		111		70-130	16		20
2-Butanone	99		77		70-130	25	Q	20

Lab Control Sample Analysis

Batch Quality Control

Project Name: PARCEL 6A

Project Number: 5292.9.01

Lab Number: L1200565

Report Date: 01/17/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 05-08 Batch: WG513755-1 WG513755-2								
4-Methyl-2-pentanone	114		87		70-130	27	Q	20
2-Hexanone	79		69	Q	70-130	14		20
Bromochloromethane	109		118		70-130	8		20
Tetrahydrofuran	85		84		70-130	1		20
2,2-Dichloropropane	107		114		70-130	6		20
1,2-Dibromoethane	104		112		70-130	7		20
1,3-Dichloropropane	91		96		70-130	5		20
1,1,1,2-Tetrachloroethane	104		110		70-130	6		20
Bromobenzene	94		108		70-130	14		20
n-Butylbenzene	89		100		70-130	12		20
sec-Butylbenzene	92		104		70-130	12		20
tert-Butylbenzene	91		99		70-130	8		20
o-Chlorotoluene	85		94		70-130	10		20
p-Chlorotoluene	87		95		70-130	9		20
1,2-Dibromo-3-chloropropane	87		94		70-130	8		20
Hexachlorobutadiene	116		128		70-130	10		20
Isopropylbenzene	101		108		70-130	7		20
p-Isopropyltoluene	97		104		70-130	7		20
Naphthalene	94		102		70-130	8		20
n-Propylbenzene	89		99		70-130	11		20
1,2,3-Trichlorobenzene	101		106		70-130	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: PARCEL 6A

Lab Number: L1200565

Project Number: 5292.9.01

Report Date: 01/17/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Volatile Organics - Westborough Lab Associated sample(s): 05-08 Batch: WG513755-1 WG513755-2								
1,2,4-Trichlorobenzene	108		112		70-130	4		20
1,3,5-Trimethylbenzene	91		96		70-130	5		20
1,2,4-Trimethylbenzene	90		97		70-130	7		20
Ethyl ether	110		112		70-130	2		20
Isopropyl Ether	85		86		70-130	1		20
Ethyl-Tert-Butyl-Ether	98		97		70-130	1		20
Tertiary-Amyl Methyl Ether	109		104		70-130	5		20
1,4-Dioxane	107		115		70-130	7		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		101		70-130
Toluene-d8	91		97		70-130
4-Bromofluorobenzene	90		94		70-130
Dibromofluoromethane	108		120		70-130

Project Name: PARCEL 6A

Lab Number: L1200565

Project Number: 5292.9.01

Report Date: 01/17/12

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

B Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1200565-01A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-01B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-01C	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	-
L1200565-01D	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	-
L1200565-02A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-02B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-03A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-03B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-04A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-04B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-05A	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-05B	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-06A	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-06B	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-07A	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-07B	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-08A	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-08B	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)

*Values in parentheses indicate holding time in days



Project Name: PARCEL 6A
Project Number: 5292.9.01

Lab Number: L1200565
Report Date: 01/17/12

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

Data Qualifiers

- | | |
|-----------|---|
| A | - Spectra identified as "Aldol Condensation Product". |
| B | - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. |
| C | - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses. |
| D | - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte. |
| E | - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument. |
| G | - The concentration may be biased high due to matrix interferences (i.e., co-elution) with non-target compound(s). The result should be considered estimated. |
| H | - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection. |
| I | - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference. |
| M | - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte. |
| NJ | - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search. |

Report Format: Data Usability Report



Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: PARCEL 6A
Project Number: 5292.9.01

Lab Number: L1200565
Report Date: 01/17/12

REFERENCES

- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.
- 98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

LIMITATION OF LIABILITIES

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

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



Certificate/Approval Program Summary

Last revised January 3, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

Non-Potable Water (Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S²⁻ D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 3005A, 3015, 1312, 6010B, 6010C, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.



CHAIN OF CUSTODY

PAGE 1 OF 1

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

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

Client Information

Client: McPheer Associates
Address: 2269 Mass. Ave.
Cambridge, MA
Phone: 617-868-1420
Fax: 617-868-1423
Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Parcel 6A
Project Location: Taunton, MA
Project #: 5292.9.01
Project Manager: Amy Falconeiri
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: 1/17/12 Time:

1/18/2012

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

Date Rec'd in Lab: 1/11/12

ALPHA Job #: 21200565

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEX ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program mcp Criteria GW2/3

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☒ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS		SAMPLE HANDLING		TOTAL # BOTTLES
EPH DIX VOCs		Filtration _____ <input type="checkbox"/> Done <input type="checkbox"/> Not needed <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please specify below)		
Sample Specific Comments				

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials												
		Date	Time														
0565	B-101																
-01	MAI-101 (ow)	1/11/12	830	H2O	ADS	X										2- Amber Liter	2
-02	MAI-102 (ow)		900	H2O	ADS	X										"	2
-03	MAI-103 (ow)		930	H2O	ADS	X										"	2
-04	MAI-1 (ow)		800	H2O	ADS	X										"	2
-05	MAI-106 (ow)		1000	H2O	ADS	X										2- Vials	2
-06	MAI-107 (ow)		1030	H2O	ADS	X										"	2
-07	MAI-109 (ow)		1100	H2O	ADS	X										"	2
-08	MAI-111 (ow)		1130	H2O	ADS	X										"	2

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
MA MCP or CT RCP?

Container Type

Preservative

A V
B B

Relinquished By:

Date/Time

Received By:

Date/Time

[Signature]

1/11/12 1600
1/11/12 1735

[Signature]

1/11/12 1630
1/11/12 1735

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

7A
Volatile CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1200565

Instrument ID: Jack.i Calibration Date: 13-JAN-2012 Time: 06:50

Lab File ID: 0113A03 Init. Calib. Date(s): 10-NOV-2 10-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 14:05 17:52

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
dichlorodifluoromethane	.63412	.4754	.1	25	20	F
chloromethane	.95786	.69159	.1	28	20	F
vinyl chloride	.74427	.59696	.1	20	20	
bromomethane	.39483	.43865	.1	-11	20	
chloroethane	.39305	.35392	.1	10	20	
trichlorofluoromethane	.82135	.96323	.1	-17	20	
ethyl ether	.27366	.30104	.05	-10	20	
1,1,-dichloroethene	.52913	.56455	.1	-7	20	
carbon disulfide	1.3417	1.7381	.1	-30	20	F
freon-113	.49861	.54543	.1	-9	20	
iodomethane	.46115	.93248	.05	-102	20	F
acrolin	.06123	.03081	.05	50	20	F
methylene chloride	.59325	.57906	.1	2	20	
acetone	.17578	.1774	.1	-1	20	
trans-1,2-dichloroethene	.5946	.59823	.1	-1	20	
methyl acetate	.47873	.44075	.1	8	20	
methyl tert butyl ether	1.4467	1.4451	.1	0	20	
Diisopropyl Ether	2.2812	1.9488	.01	15	20	
tert butyl alcohol	.04495	.04338	.05	4	20	F
1,1-dichloroethane	1.1853	1.1403	.2	4	20	
Halothane	.42592	.55195	.05	-30	20	F
Ethyl-Tert-Butyl-Ether	1.8167	1.7845	.05	2	20	
vinyl acetate	1.0104	.94825	.05	6	20	
acrylonitrile	.19335	.16312	.05	16	20	
cis-1,2-dichloroethene	.65975	.64661	.1	2	20	
2,2-dichloropropane	.8794	.9453	.05	-7	20	
bromochloromethane	.30073	.328	.05	-9	20	
chloroform	1.1719	1.1193	.2	4	20	
carbontetrachloride	.75039	.86341	.1	-15	20	
ethyl acetate	.58943	.48695	.05	17	20	
tetrahydrofuran	.19351	.16475	.05	15	20	
1,1,1-trichloroethane	.93377	.9997	.1	-7	20	
1,1-dichloropropene	.86955	.8597	.05	1	20	
2-butanone	.27149	.26835	.1	1	20	
benzene	2.5011	2.5217	.5	-1	20	
Tertiary-Amyl Methyl Ether	1.4357	1.5682	.05	-9	20	
1,2-dichloroethane	.77064	.78864	.1	-2	20	
trichloroethene	.67819	.71358	.2	-5	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1200565

Instrument ID: Jack.i Calibration Date: 13-JAN-2012 Time: 06:50

Lab File ID: 0113A03 Init. Calib. Date(s): 10-NOV-2 10-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 14:05 17:52

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
dibromomethane	.28908	.33311	.05	-15	20	
1,2-dichloropropane	.60764	.62556	.1	-3	20	
bromodichloromethane	.77452	.77627	.2	0	20	
1,4-dioxane	.00288	.00309	.05	-7	20	F
cis-1,3-dichloropropene	.84496	.82429	.2	2	20	
toluene	1.9564	1.8619	.4	5	20	
2-chloroethylvinyl ether	.18925	.24915	.05	-32	20	F
tetrachloroethene	.88552	.92673	.2	-5	20	
4-methyl-2-pentanone	.1822	.20721	.1	-14	20	
trans-1,3-dichloropropene	.94644	.85797	.1	9	20	
1,1,2-trichloroethane	.54839	.51719	.1	6	20	
chlorodibromomethane	.7176	.77454	.1	-8	20	
1,3-dichloropropane	1.0278	.93349	.05	9	20	
1,2-dibromoethane	.47291	.49041	.1	-4	20	
2-hexanone	.51913	.40947	.1	21	20	F
chlorobenzene	2.1771	2.0720	.5	5	20	
ethyl benzene	3.3045	3.1135	.1	6	20	
1,1,1,2-tetrachloroethane	.78864	.81908	.05	-4	20	
p/m xylene	1.3059	1.2412	.1	5	20	
o xylene	1.3257	1.2809	.3	3	20	
bromoform	.76614	.73831	.1	4	20	
styrene	2.0857	2.1918	.3	-5	20	
isopropylbenzene	2.8673	2.8851	.1	-1	20	
bromobenzene	1.5900	1.5029	.05	5	20	
n-propylbenzene	5.7418	5.1039	.05	11	20	
1,1,2,2,-tetrachloroethane	1.3867	1.1451	.3	17	20	
4-ethyltoluene	5.1002	4.3200	.05	15	20	
2-chlorotoluene	4.4556	3.7946	.05	15	20	
1,2,3-trichloropropane	1.0206	.84412	.05	17	20	
1,3,5-trimethybenzene	4.6142	4.1815	.05	9	20	
trans-1,4-dichloro-2-butene	100	79.359	.05	21	20	F
4-chlorotoluene	4.0527	3.5098	.05	13	20	
tert-butylbenzene	3.6802	3.3587	.05	9	20	
1,2,4-trimethylbenzene	4.7087	4.2208	.05	10	20	
sec-butylbenzene	4.3264	4.0007	.01	8	20	
p-isopropyltoluene	3.8741	3.7738	.05	3	20	
1,3-dichlorobenzene	2.7407	2.6470	.6	3	20	
1,4-dichlorobenzene	2.7555	2.6844	.5	3	20	

FORM VII MCP-8260-10

ESS Laboratory

Division of Thielsch Engineering, Inc.

March 11, 1999

Christine LeBlanc
East Coast Engineering
1516A Front Street
Marion, MA 02738

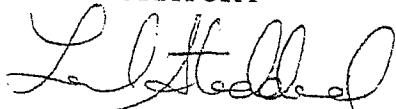
Dear Christine LeBlanc:

We appreciate this opportunity to provide you with our analytical services. ESS Laboratory is committed to providing the highest quality service. Our dedication to each client includes responsiveness to emergencies, dependable, well-written reports, and client services, which include the availability of all analysts to answer your inquiries.

Enclosed is your data report. The invoice for this project is being forwarded to your Accounts Payable Department unless other arrangements have previously been made with the laboratory. Samples will be disposed of thirty days after the final report has been mailed. If you have any questions or concerns, please feel free to call our Customer Service Department. We value our continued relationship and look forward to hearing from you in the future.

Sincerely,

ESS LABORATORY



Laurel Stoddard
Laboratory Director

Enclosure

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

PROJECT NARRATIVE

CLIENT: East Coast Engineering

CLIENT PROJECT ID: Parcel 6A Taunton

ESS PROJECT ID: 99030007

Sample Receipt

Four solid samples, which were originally received on February 11, 1999 as ESS Laboratory project 99020120, were relogged on March 1, 1999 as ESS Laboratory project 99030007 for the analysis specified on the enclosed Chain of Custody Record.

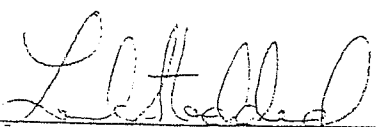
Analytical Summary

The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan.

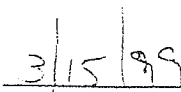
No unusual observations noted.

This signed Certificate of Analysis is our approved release of your analytical results. Beginning with this Project Narrative, the entire report has been paginated. The Chain of Custody is the final report page. This report should not be copied except in full without the approval of the laboratory.

End of project narrative.



Laurel Stoddard/Eric Baanante
Laboratory Director/Operations Manager



Date

A

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

TCLP Metals

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE-MW1 S1 0-2'
Date Sampled: 2/11/99
TCLP Extraction Date: 3/8/99

ESS Project ID: 99030007
ESS Sample ID: 99030007-01
Units: mg/L
Dilution: 1
Percent Solid: N/A

Test Name	Result	MRL	TCLP Limit	Date Analyzed	Analyst	Method
Lead	ND	0.1	5	3/9/99	TA	1311/6010

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By:

Date:

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

TCLP Metals

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW4 S2 5-7'
Date Sampled: 2/11/99
TCLP Extraction Date: 3/7/99

ESS Project ID: 99030007
ESS Sample ID: 99030007-04
Units: mg/L
Dilution: 1
Percent Solid: N/A

Test Name	Result	MRL	TCLP Limit	Date Analyzed	Analyst	Method
Arsenic	ND	0.1	5	3/8/99	SAM	1311/6010
Cadmium	ND	0.01	1	3/8/99	SAM	1311/6010
Chromium	ND	0.05	5	3/8/99	SAM	1311/6010
Lead	22.6	0.1	5	3/8/99	SAM	1311/6010
Mercury	ND	0.0005	0.2	3/8/99	AR	1311/7470

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: LAS

Date: 3/12/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

March 10, 1999

Christine LaBlanc
East Coast Engineering
1516A Front Street
Marion, MA 02738

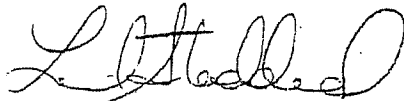
Dear Christine LeBlanc:

We appreciate this opportunity to provide you with our analytical services. ESS Laboratory is committed to providing the highest quality service. Our dedication to each client includes responsiveness to emergencies, dependable, well-written reports, and client services, which include the availability of all analysts to answer your inquiries.

Enclosed is your data report. The invoice for this project is being forwarded to your Accounts Payable Department unless other arrangements have previously been made with the laboratory. Samples will be disposed of thirty days after the final report has been mailed. If you have any questions or concerns, please feel free to call our Customer Service Department. We value our continued relationship and look forward to hearing from you in the future.

Sincerely,

ESS LABORATORY



Laurel Stoddard
Laboratory Director

Enclosure

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

PROJECT NARRATIVE

CLIENT: East Coast Engineering

CLIENT PROJECT ID: Parcel 6A Taunton

ESS PROJECT ID: 99030024

Sample Receipt

Ten liquid samples and one Trip Blank were received on March 2, 1999 for the analysis specified on the enclosed Chain of Custody Record.

Analytical Summary

The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan.

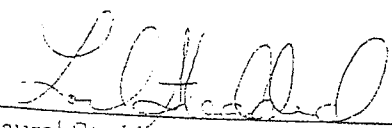
Semivolatile Organics Analysis

Surrogate recoveries were outside of the recommended ranges for samples 99030024-02 and -07.

No other observations noted.

This signed Certificate of Analysis is our approved release of your analytical results. Beginning with this Project Narrative, the entire report has been paginated. The Chain of Custody is the final report page. This report should not be copied except in full without the approval of the laboratory.

End of project narrative.



Laurel Stoddard/Eric Baanante
Laboratory Director/Operations Manager

3/15/99

Date

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Dissolved Metals

Client Name: East Coast Engineering

Client Project ID: Parcel 6A Taunton

Client Sample ID: WES MW3

Date Sampled: 3/1/99

ESS Project ID: 99030024

ESS Sample ID: 99030024-01

Units: mg/L

Dilution: 1

Percent Solid: N/A

Test Name	Result	MRL	Date Analyzed	Analyst	Method
Arsenic	ND	0.1	3/5/99	TA	6010
Cadmium	ND	0.01	3/5/99	TA	6010
Chromium	ND	0.05	3/5/99	TA	6010
Lead	ND	0.1	3/5/99	TA	6010
Mercury	ND	0.0005	3/4/99	AR	7470

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: CAS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Total Petroleum Hydrocarbon

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: WES MW3
Date Sampled: 3/1/99
Extraction Date: 3/2/99
Date Analyzed: 3/4/99
Analyst: AS

ESS Project ID: 99030024
ESS Sample ID: 99030024-01
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL
Total Petroleum Hydrocarbons	ND	0.5

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	74	39-137

Approved By: ES

Date: 3/10/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: WES MW3
Date Sampled: 3/1/99
Date Analyzed: 3/4/99
Analyst: JR

ESS Project ID: 99030024
ESS Sample ID: 99030024-01
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	1
1,2-Dichlorobenzene	ND	2
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
1,2-Dibromo-3-Chloropropane	ND	1
1,2-Dibromoethane	ND	2
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichlorobenzene	ND	1
1,3,5-Trimethylbenzene	ND	1
1,3-Dichloropropane	ND	1
1,4-Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	1
2-Chlorotoluene	ND	20
2-Hexanone	ND	1
4-Chlorotoluene	ND	10
4-Isopropyltoluene	ND	1
4-Methyl-2-Pentanone	ND	1
Acetone	ND	10
Benzene	ND	20
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	2
Carbon Disulfide	ND	2

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Project ID: Parcel 6A Taunton

Client Sample ID: WES MW3

ESS Project ID: 99030024

ESS Sample ID: 99030024-01

Compound Name	Result	MRL
Carbon Tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2 Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	0.5
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	0.6
Isopropylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Napthalene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	1
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	1
Trichloroethene	ND	0.5
Trichlorofluoromethane	ND	1
Vinyl Chloride	ND	2
Xylenes (Total)	ND	2
		1

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: LAB

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Polynuclear Aromatic Hydrocarbons by EPA Method 8270c (SIM Modified)

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: WES MW3
Date Sampled: 3/1/99
Date Extracted: 3/2/99
Date Analyzed: 3/4/99
Analyst: AC

ESS Project ID: 99030024
ESS Sample ID: 99030024-01
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL
2-Methylnaphthalene	ND	0.2
Acenaphthene	ND	0.2
Acenaphthylene	ND	0.2
Anthracene	ND	0.2
Benzo(a)anthracene	ND	0.2
Benzo(a)pyrene	ND	0.2
Benzo(b)fluoranthene	ND	0.2
Benzo(g,h,i)perylene	ND	0.2
Benzo(k)fluoranthene	ND	0.2
Chrysene	ND	0.1
Dibenzo(a,h)Anthracene	ND	0.2
Fluoranthene	ND	0.2
Fluorene	ND	0.2
Indeno(1,2,3-cd)Pyrene	ND	0.2
Naphthalene	ND	0.2
Phenanthrene	ND	0.2
Pyrene	ND	0.2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: WES

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Dissolved Metals

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW4
Date Sampled: 3/1/99

ESS Project ID: 99030024
ESS Sample ID: 99030024-03
Units: mg/L
Dilution: 1
Percent Solid: N/A

Test Name	Result	MRL	Date Analyzed	Analyst	Method
Arsenic	ND	0.1	3/5/99	SAM	6010
Cadmium	ND	0.01	3/5/99	SAM	6010
Chromium	ND	0.05	3/5/99	SAM	6010
Lead	ND	0.1	3/5/99	SAM	6010
Mercury	ND	0.0005	3/4/99	AR	7470

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: CRS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Total Petroleum Hydrocarbon

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW4
Date Sampled: 3/1/99
Extraction Date: 3/2/99
Date Analyzed: 3/4/99
Analyst: AS

ESS Project ID: 99030024
ESS Sample ID: 99030024-03
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL
Total Petroleum Hydrocarbons	13.7	0.5

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	70	39-137

Approved By: AS

Date: 3/1/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW4
Date Sampled: 3/1/99
Date Analyzed: 3/5/99
Analyst: MD

ESS Project ID: 99030024
ESS Sample ID: 99030024-03
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	1
1,2-Dichlorobenzene	ND	2
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	14	1
1,2-Dibromo-3-Chloropropane	ND	1
1,2-Dibromoethane	ND	2
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichlorobenzene	ND	1
1,3,5-Trimethylbenzene	2	1
1,3-Dichloropropane	ND	1
1,4-Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	1
2-Chlorotoluene	ND	20
2-Hexanone	ND	1
4-Chlorotoluene	ND	10
4-Isopropyltoluene	3	1
4-Methyl-2-Pentanone	ND	1
Acetone	ND	10
Benzene	ND	20
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	2
Carbon Disulfide	ND	2

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW4

ESS Project ID: 99030024
ESS Sample ID: 99030024-03

Compound Name	Result	MRL
Carbon Tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2 Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	0.5
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	0.6
Isopropylbenzene	2	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Napthalene	18	1
sec-Butylbenzene	3	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	1
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	0.5
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl Chloride	ND	2
Xylenes (Total)	ND	1

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: ES

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Polynuclear Aromatic Hydrocarbons by EPA Method 8270c (SIM Modified)

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: BCE MW4
Date Sampled: 3/1/99
Date Extracted: 3/2/99
Date Analyzed: 3/4/99
Analyst: AC

ESS Project ID: 99030024
ESS Sample ID: 99030024-03
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL
2-Methylnaphthalene	1.6	0.2
Acenaphthene	0.9	0.2
Acenaphthylene	0.3	0.2
Anthracene	0.4	0.2
Benzo(a)anthracene	0.8	0.2
Benzo(a)pyrene	0.6	0.2
Benzo(b)fluoranthene	1.2	0.2
Benzo(g,h,i)perylene	0.6	0.2
Benzo(k)fluoranthene	0.5	0.1
Chrysene	0.9	0.2
Dibenzo(a,h)Anthracene	0.2	0.2
Fluoranthene	1.7	0.2
Fluorene	1.3	0.2
Indeno(1,2,3-cd)Pyrene	0.6	0.2
Naphthalene	0.7	0.2
Phenanthrene	2.9	0.2
Pyrene	1.6	0.2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: WAS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Dissolved Metals

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW1
Date Sampled: 3/1/99

ESS Project ID: 99030024
ESS Sample ID: 99030024-08
Units: mg/L
Dilution: 1
Percent Solid: N/A

Test Name	Result	MRL	Date Analyzed	Analyst	Method
Arsenic	ND	0.1	3/5/99	SAM	6010
Cadmium	ND	0.01	3/5/99	SAM	6010
Chromium	ND	0.05	3/5/99	SAM	6010
Lead	ND	0.1	3/5/99	SAM	6010
Mercury	ND	0.0005	3/4/99	AR	7470

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By:

Date:

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Total Petroleum Hydrocarbon

Client Name: East Coast Engineering

Client Project ID: Parcel 6A Taunton

Client Sample ID: ECE MW1

Date Sampled: 3/1/99

Extraction Date: 3/2/99

Date Analyzed: 3/6/99

Analyst: AS

ESS Project ID: 99030024

ESS Sample ID: 99030024-08

Units: mg/L

Dilution: 1

Percent Solid: N/A

Sample Amount: 950 ml

Test Name	Result	MRL
Total Petroleum Hydrocarbons	ND	0.53

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	96	39-137

Approved By: AS

Date: 3/6/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW1
Date Sampled: 3/1/99
Date Analyzed: 3/5/99
Analyst: JR

ESS Project ID: 99030024
ESS Sample ID: 99030024-08
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	2
1,2 Dichlorobenzene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
1,2-Dibromo-3-Chloropropane	ND	2
1,2-Dibromoethane	ND	1
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3 Dichlorobenzene	ND	1
1,3,5-Trimethylbenzene	ND	1
1,3-Dichloropropane	ND	1
1,4 Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	20
2-Chlorotoluene	ND	1
2-Hexanone	ND	10
4-Chlorotoluene	ND	1
4-Isopropyltoluene	2	1
4-Methyl-2-Pentanone	ND	10
Acetone	ND	20
Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	2
Bromomethane	ND	2
Carbon Disulfide	ND	1

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW1

ESS Project ID: 99030024
ESS Sample ID: 99030024-08

Compound Name	Result	MRL
Carbon Tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2-Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	0.5
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	0.6
Isopropylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Napthalene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	1
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	0.5
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl Chloride	ND	2
Xylenes (Total)	ND	1

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: CS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Polynuclear Aromatic Hydrocarbons by EPA Method 8270c (SIM Modified)

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW1
Date Sampled: 3/1/99
Date Extracted: 2/3/99
Date Analyzed: 3/11/99
Analyst: RS

ESS Project ID: 99030024
ESS Sample ID: 99030024-08
Units: $\mu\text{g/L}$
Dilution: 1
Percent Solid: N/A
Sample Amount: 950 ml

Test Name	Result	MRL
2-Methylnaphthalene	ND	0.2
Acenaphthene	0.8	0.2
Acenaphthylene	ND	0.2
Anthracene	ND	0.2
Benzo(a)anthracene	ND	0.2
Benzo(a)pyrene	ND	0.2
Benzo(b)fluoranthene	0.2	0.2
Benzo(g,h,i)perylene	0.2	0.2
Benzo(k)fluoranthene	ND	0.1
Chrysene	ND	0.2
Dibenzo(a,h)Anthracene	ND	0.2
Fluoranthene	ND	0.2
Fluorene	0.5	0.2
Indeno(1,2,3-cd)Pyrene	0.2	0.2
Naphthalene	0.5	0.2
Phenanthrene	0.2	0.2
Pyrene	ND	0.2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: RS

Date: 3/12/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Dissolved Metals

Client Name: East Coast Engineering

Client Project ID: Parcel 6A Taunton

Client Sample ID: WES MW4

Date Sampled: 3/1/99

ESS Project ID: 99030024

ESS Sample ID: 99030024-09

Units: mg/L

Dilution: 1

Percent Solid: N/A

Test Name	Result	MRL	Date Analyzed	Analyst	Method
Arsenic	ND	0.1	3/5/99	SAM	6010
Cadmium	ND	0.01	3/5/99	SAM	6010
Chromium	ND	0.05	3/5/99	SAM	6010
Lead	ND	0.1	3/5/99	SAM	6010
Mercury	ND	0.0005	3/4/99	AR	7470

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: CDS

Date: 3/1/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Total Petroleum Hydrocarbon

Client Name: East Coast Engineering

Client Project ID: Parcel 6A Taunton

Client Sample ID: WES MW4

Date Sampled: 3/1/99

Extraction Date: 3/2/99

Date Analyzed: 3/6/99

Analyst: AS

ESS Project ID: 99030024

ESS Sample ID: 99030024-09

Units: mg/L

Dilution: 1

Percent Solid: N/A

Sample Amount: 950 ml

Test Name	Result	MRL
Total Petroleum Hydrocarbons	ND	0.53

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	94	39-137

Approved By: AS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: WES MW4
Date Sampled: 3/1/99
Date Analyzed: 3/5/99
Analyst: JR

ESS Project ID: 99030024
ESS Sample ID: 99030024-09
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	1
1,2-Dichlorobenzene	ND	2
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
1,2-Dibromo-3-Chloropropane	ND	1
1,2-Dibromoethane	ND	2
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichlorobenzene	ND	1
1,3,5-Trimethylbenzene	ND	1
1,3-Dichloropropane	ND	1
1,4-Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	20
2-Chlorotoluene	ND	1
2-Hexanone	ND	10
4-Chlorotoluene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-Pentanone	ND	10
Acetone	ND	20
Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	2
Bromomethane	ND	2
Carbon Disulfide	ND	1

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Project ID: Parcel 6A Taunton
Client Sample ID: WES MW4

ESS Project ID: 99030024
ESS Sample ID: 99030024-09

Compound Name	Result	MRL
Carbon Tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2 Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	0.5
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	0.6
Isopropylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Napthalene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	1
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	0.5
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl Chloride	ND	2
Xylenes (Total)	ND	1

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: CAS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Polynuclear Aromatic Hydrocarbons by EPA Method 8270c (SIM Modified)

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: WES MW4
Date Sampled: 3/1/99
Date Extracted: 3/2/99
Date Analyzed: 3/11/99
Analyst: RS

ESS Project ID: 99030024
ESS Sample ID: 99030024-09
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 950 ml

Test Name	Result	MRL
2-Methylnaphthalene	ND	0.2
Acenaphthene	ND	0.2
Acenaphthylene	ND	0.2
Anthracene	ND	0.2
Benzo(a)anthracene	ND	0.2
Benzo(a)pyrene	0.2	0.2
Benzo(b)fluoranthene	0.2	0.2
Benzo(g,h,i)perylene	0.2	0.2
Benzo(k)fluoranthene	ND	0.1
Chrysene	ND	0.2
Dibenzo(a,h)Anthracene	0.2	0.2
Fluoranthene	ND	0.2
Fluorene	ND	0.2
Indeno(1,2,3-cd)Pyrene	0.3	0.2
Naphthalene	ND	0.2
Phenanthrene	ND	0.2
Pyrene	ND	0.2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: RS

Date: 3/12/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Dissolved Metals

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW5
Date Sampled: 3/1/99

ESS Project ID: 99030024
ESS Sample ID: 99030024-10
Units: mg/L
Dilution: 1
Percent Solid: N/A

Test Name	Result	MRL	Date Analyzed	Analyst	Method
Arsenic	ND	0.1	3/5/99	SAM	6010
Cadmium	ND	0.01	3/5/99	SAM	6010
Chromium	ND	0.05	3/5/99	SAM	6010
Lead	ND	0.1	3/5/99	SAM	6010
Mercury	ND	0.0005	3/4/99	AR	7470

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: UES

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Total Petroleum Hydrocarbon

Client Name: East Coast Engineering

Client Project ID: Parcel 6A Taunton

Client Sample ID: ECE MW5

Date Sampled: 3/1/99

Extraction Date: 3/2/99

Date Analyzed: 3/6/99

Analyst: AS

ESS Project ID: 99030024

ESS Sample ID: 99030024-10

Units: mg/L

Dilution: 1

Percent Solid: N/A

Sample Amount: 900 ml

Test Name	Result	MRL
Total Petroleum Hydrocarbons	ND	0.56

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	98	39-137

Approved By: AS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW5
Date Sampled: 3/1/99
Date Analyzed: 3/5/99
Analyst: JR

ESS Project ID: 99030024
ESS Sample ID: 99030024-10
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	2
1,2-Dichlorobenzene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
1,2-Dibromo-3-Chloropropane	ND	2
1,2-Dibromoethane	ND	1
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichlorobenzene	ND	1
1,3,5-Trimethylbenzene	ND	1
1,3-Dichloropropane	ND	1
1,4-Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	20
2-Chlorotoluene	ND	1
2-Hexanone	ND	10
4-Chlorotoluene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-Pentanone	ND	10
Acetone	ND	20
Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	2
Bromomethane	ND	2
Carbon Disulfide	ND	1

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Project ID: Parcel 6A Taunton

Client Sample ID: ECE MW5

ESS Project ID: 99030024

ESS Sample ID: 99030024-10

Compound Name	Result	MRL
Carbon Tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2 Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	0.5
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	0.6
Isopropylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Napthalene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	1
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	0.5
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl Chloride	ND	2
Xylenes (Total)	ND	1

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: CAS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Polynuclear Aromatic Hydrocarbons by EPA Method 8270c (SIM Modified)

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW5
Date Sampled: 3/1/99
Date Extracted: 3/2/99
Date Analyzed: 3/11/99
Analyst: RS

ESS Project ID: 99030024
ESS Sample ID: 99030024-10
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 900 ml

Test Name	Result	MRL
2-Methylnaphthalene	ND	0.2
Acenaphthene	ND	0.2
Acenaphthylene	ND	0.2
Anthracene	ND	0.2
Benzo(a)anthracene	ND	0.2
Benzo(a)pyrene	ND	0.2
Benzo(b)fluoranthene	0.2	0.2
Benzo(g,h,i)perylene	0.2	0.2
Benzo(k)fluoranthene	ND	0.1
Chrysene	ND	0.2
Dibenzo(a,h)Anthracene	ND	0.2
Fluoranthene	ND	0.2
Fluorene	ND	0.2
Indeno(1,2,3-cd)Pyrene	0.2	0.2
Naphthalene	ND	0.2
Phenanthrene	ND	0.2
Pyrene	ND	0.2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: UAS

Date: 3/12/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: Trip Blank
Date Sampled: 3/1/99
Date Analyzed: 3/5/99
Analyst: JR

ESS Project ID: 99030024
ESS Sample ID: 99030024-11
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	2
1,2-Dichlorobenzene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
1,2-Dibromo-3-Chloropropane	ND	2
1,2-Dibromoethane	ND	1
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichlorobenzene	ND	1
1,3,5-Trimethylbenzene	ND	1
1,3-Dichloropropane	ND	1
1,4-Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	20
2-Chlorotoluene	ND	1
2-Hexanone	ND	10
4-Chlorotoluene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-Pentanone	ND	10
Acetone	ND	20
Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	2
Bromomethane	ND	2
Carbon Disulfide	ND	1

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Project ID: Parcel 6A Taunton
Client Sample ID: Trip Blank

ESS Project ID: 99030024
ESS Sample ID: 99030024-11

Compound Name	Result	MRL
Carbon Tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2 Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	0.5
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	0.6
Isopropylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Napthalene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	1
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	0.5
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl Chloride	ND	2
Xylenes (Total)	ND	1

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: LAB

Date: 3/11/99

QUALITY CONTROL SECTION

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Total Petroleum Hydrocarbon

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: Method Blank
Date Sampled: N/A
Extraction Date: 3/2/99
Date Analyzed: 3/3/99
Analyst: AS

ESS Project ID: 99030024
ESS Sample ID: SGC0302-B3
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL
Total Petroleum Hydrocarbons	ND	0.5

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	79	39-137

Approved By: AS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Hydrocarbon Fingerprint

Client Name: East Coast Engineering

Client Project ID: Parcel 6A Taunton

Client Sample ID: Method Blank

Date Sampled: N/A

Extraction Date: 3/4/99

Date Analyzed: 3/6/99

Analyst: AS

ESS Project ID: 99030024

ESS Sample ID: GC0304-B5

Units: mg/Kg

Dilution: 1

Percent Solid: N/A

Sample Amount: 1 g

Test Name	Result	MRL
Total Petroleum Hydrocarbons	ND	7500

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Qualitative ID

Sample below MRL therefore no qualitative identification can be made.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	100	70-130

Approved By: AS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Volatile Organics Surrogate Recovery

Client Name: East Coast Engineering

Client Project ID: Parcel 6A Taunton

ESS Project ID: 99030024

Lab ID (Dilution)	DCE	TOL	BFB
99030024-01 (1x)	98	95	95
99030024-02 (1x)	99	95	94
99030024-03 (1x)	97	95	98
99030024-05 (1x)	98	96	97
99030024-06 (1x)	94	96	98
99030024-07 (1x)	95	95	98
99030024-08 (1x)	97	95	95
99030024-09 (1x)	97	95	95
99030024-10 (1x)	98	97	97
99030024-11 (1x)	97	95	96
VMB030499B1 (1x)	97	96	95
VMB030599B1 (1x)	97	96	96

DCE = 1,2-Dichloroethane-d4

TOL = Toluene-d8

BFB = Bromofluorobenzene

Approved by: 1.28

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: Method Blank
Date Sampled: N/A
Date Analyzed: 3/4/99
Analyst: JR

ESS Project ID: 99030024
ESS Sample ID: VMB030499B1
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	1
1,2 Dichlorobenzene	ND	2
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
1,2-Dibromo-3-Chloropropane	ND	1
1,2-Dibromoethane	ND	2
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3 Dichlorobenzene	ND	1
1,3,5-Trimethylbenzene	ND	1
1,3-Dichloropropane	ND	1
1,4 Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	1
2-Chlorotoluene	ND	20
2-Hexanone	ND	1
4-Chlorotoluene	ND	10
4-Isopropyltoluene	ND	1
4-Methyl-2-Pentanone	ND	1
Acetone	ND	10
Benzene	ND	20
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	2
Carbon Disulfide	ND	2

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Project ID: Parcel 6A Taunton

Client Sample ID: Method Blank

ESS Project ID: 99030024

ESS Sample ID: VMB030499B1

Compound Name	Result	MRL
Carbon Tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2 Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	0.5
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	0.6
Isopropylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Napthalene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	1
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	0.5
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl Chloride	ND	2
Xylenes (Total)	ND	1

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: UAS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: Method Blank
Date Sampled: N/A
Date Analyzed: 3/5/99
Analyst: MD

ESS Project ID: 99030024
ESS Sample ID: VMB030599B1
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	2
1,2-Dichlorobenzene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
1,2-Dibromo-3-Chloropropane	ND	2
1,2-Dibromoethane	ND	1
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichlorobenzene	ND	1
1,3,5-Trimethylbenzene	ND	1
1,3-Dichloropropane	ND	1
1,4-Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	20
2-Chlorotoluene	ND	1
2-Hexanone	ND	10
4-Chlorotoluene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-Pentanone	ND	10
Acetone	ND	20
Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	2
Bromomethane	ND	2
Carbon Disulfide	ND	1

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Project ID: Parcel 6A Taunton
Client Sample ID: Method Blank

ESS Project ID: 99030024
ESS Sample ID: VMB030599B1

Compound Name	Result	MRL
Carbon Tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2 Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	0.5
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	0.6
Isopropylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Napthalene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	1
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	0.5
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl Chloride	ND	2
Xylenes (Total)	ND	1

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: 1.03

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

POLYNUCLEAR AROMATIC HYDROCARBONS AQUEOUS SURROGATE RECOVERY

Client: East Coast Engineering

Client Project ID: Parcel 6A Taunton

ESS Project ID: 99030024

Sample ID	(DCB) #	(NBZ) #	(FBP) #	(TPH) #
SGC0302-B3	80	116*	95	107
SGC0201-B3BS	80	44	104	108
99030024-01	76	112	96	64
99030024-02	47	69	63	32*
99030024-03	67	99	85	79
99030024-05	59	45	84	67
99030024-06	76	98	77	62
99030024-07	33	62	41*	41
99030024-08	67	99	82	62
99030024-09	66	103	83	72
99030024-10	66	101	78	88

* Column to be used to flag recovery values with an asterisk when outside QC Limits.

DCB = 1,2-DICHLOROBENZENE-D4 (16-110%)

NBZ = NITROBENZENE-D5 (35-114%)

FBP = 2-FLUOROBIPHENYL (43-116%)

TPH = P-TERPHENYL-D14 (33-141%)

Approved by: WDS

Date: 3/18/99

185 Frances Avenue, Cranston, RI 02910-2211

Tel: 401-461-7181

Fax: 401-461-4486

<http://www.thielsch.com>

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Polynuclear Aromatic Hydrocarbons by EPA Method 8270c (SIM Modified)

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: Method Blank
Date Sampled: N/A
Date Extracted: 3/2/99
Date Analyzed: 3/5/99
Analyst: AC

ESS Project ID: 99030024
ESS Sample ID: SGC0302-B3
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL
2-Methylnaphthalene	ND	0.2
Acenaphthene	ND	0.2
Acenaphthylene	ND	0.2
Anthracene	ND	0.2
Benzo(a)anthracene	ND	0.2
Benzo(a)pyrene	ND	0.2
Benzo(b)fluoranthene	ND	0.2
Benzo(g,h,i)perylene	ND	0.2
Benzo(k)fluoranthene	ND	0.1
Chrysene	ND	0.2
Dibenzo(a,h)Anthracene	ND	0.2
Fluoranthene	ND	0.2
Fluorene	ND	0.2
Indeno(1,2,3-cd)Pyrene	ND	0.2
Naphthalene	ND	0.2
Phenanthrene	ND	0.2
Pyrene	ND	0.2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: 1243

Date: 3/11/99

ESS LABORATORY CERTIFICATIONS

U.S. Army Corps of Engineers
Soil and Water

Rhode Island: 179

Connecticut: PH-0750

Maine: RI002

Massachusetts: M-RI002

New Hampshire:
Drinking Water: 242499-A
Wastewater: 242499-B

New Jersey: 78002

New York: 11313
Non Potable Water: 103991
Solid and Hazardous Waste: 104268

EST INC.

Environmental Sampling Technology
85 Franklin Street
Needham, MA 02194
Tel: (781) 455-0003 Fax: (781) 455-8336

CHAIN OF CUSTODY RECORD

99030024

LABORATORY: ESS LAB
CRANSTON, RI
(401) 461-7181

CLIENT: East Coast Engineering
ADDRESS: PO BOX 745 150 FRONT STREET
MARION, MA 02738
PHONE #: 508 748 2460
P.O. # _____
CLIENT CONTACT: Christine LeBlanc
DESCRIPTION: LOT 6A, Taunton MA wells

CONTAINER TYPE				ANALYSES												SPECIAL INSTRUCTIONS	
SAMPLE TYPE																	
1. Wastewater																<input type="checkbox"/> RUSH	
2. Groundwater																____ DAY TURNAROUND	
3. Drinking Water																<input type="checkbox"/> ROUTINE	
4. Soil																	
5. Surface Water																	
6. Other <u>DI</u>																	
TPH (8100)	PAHs (Method 8270)	VOCs (Method 8260)	Metals (As, Ba, Bi, Cr, Cu, Pb, Se, Ag)														
Cool 4°C PRESERVATIVE														COMMENTS			
WES MW3	2	See	03/01/99 1020	Sec. below	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	* METALS FILTERED to 0.45 MICRON CEST 3/2/99 AM TL
WES MW2	2	below	" 1115		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ECE MW4	2	"	" 1130		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
WES MW1	2	"	" 1145		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	* OIL MATRIX - FINGERPRINT ONLY
ECE MW3	2	"	" 1240		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ECE MW2	2	"	" 1310		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	* LAB TO FILTER METALS ASAP
ECE MW2 (OUP)	2	"	" 1310		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ECE MW1	2	"	" 1340		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
WES MW4	2	"	" 1410		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ECE MW5	2	V	" 1440		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Trip Blank	6	401 V	1	N/A	HCL												

Sampler's Signature	Date	Time	NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
<u>[Signature]</u>	<u>03/01/99</u>	<u>1440</u>	1	<u>[Signature]</u>	<u>[Signature]</u>	<u>3/2/99</u>	<u>10:48 AM</u>
ADDITIONAL COMMENTS: <u>Each sample gets:</u> <u>1 IL G Nonpres. (PAHs)</u> <u>1 IL G Nonpres (8100 TPH)</u> <u>1 250mL P Nonpres. (Metals)</u> <u>2 40mL V HCL (8100)</u>			2	<u>[Signature]</u>	<u>[Signature]</u>	<u>3/2/99</u>	<u>12:31 PM</u>
			3				
			4				

ESS LABORATORY

Environmental Analytical Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue
Cranston, Rhode Island 02910-2211

Telephone: (401) 461-7181
Fax: (401) 461-4486
www.thielsch.com

FAX TRANSMISSION COVER SHEET

Total Number of Pages (including this cover sheet): 10

Our certified laboratory provides a full range of services, including the following:

- Soil Characterization
- Petroleum Fingerprinting
- Priority Pollutant Analysis
- Groundwater/Wastewater/Drinking Water Analyses
- PCBs and Pesticides Analysis
- Trace Metals (ICAP/Furnace) Analysis
- Inorganic Analysis by Classic Methods, Flow Analyzer, and Ion Chromatography
- Organics by GC/Mass Spectroscopy
- Microbiology Analysis
- Massachusetts EPH/VPH Analysis
- Siloxanes
- Field Screening and Sample Technician Services

Date: 4/5/99

To: Bob C.

Company: East Coast Engineering

Fax No.: 508 748-2553

From: Eric Parnante

Comments: Sample ECE HW4 does not

resemble a waste oil. There are individual

unknown components in this sample.

This message is meant for the use of the individual or entity to which it is addressed. This fax may contain privileged or confidential information that is intended for the recipient only. Any copying or unauthorized distribution of the enclosed information is prohibited. If you have received this communication incorrectly, please notify us immediately. Thank you for your cooperation.

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Hydrocarbon Fingerprint

Client: East Coast Engineering

Client Project ID: Parcel 6A Taunton

Client Sample ID: ECE MW4

Date Sampled: 3/1/99

Date Extracted: 3/2/99

Date Analyzed: 3/4/99

Analyst: AS

ESS Project ID: 99030024

ESS Sample ID: 99030024-03

Units: mg/L

Dilution: 1

Percent Solid: N/A

Sample Amount: 1000 ml

Test Name	Result	MRL
Total Petroleum Hydrocarbon	13.7	0.5

MRL = Method Reporting Limit

Qualitative ID

This sample has the GC/FID characteristics that are similar to:
unidentified components in the fuel oil range.

SURROGATE	%RECOVERY	ADVISORY LIMITS
Ortho-terphenyl (OTP)	70	39% - 137%

Approved by: ECP

Date: 4/5/99

185 Frances Avenue, Cranston, RI 02910-2211

Tel.: 401-461-7181

Fax: 401-461-4486

<http://www.thielsch.com>

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ESS Laborator

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Hydrocarbon Fingerprint

Client: East Coast Engineering

ESS Project ID: 99030024

Client Project ID: Parcel 6A Taunton

ESS Sample ID: 99030024-03

Client Sample ID: ECE MW4

Units: mg/L

Date Sampled: 3/1/99

Dilution: 1

Date Extracted: 3/2/99

Percent Solid: N/A

Date Analyzed: 3/4/99

Sample Amount: 1000 ml

Analyst: AS

Test Name	Result	MRL
Total Petroleum Hydrocarbon	13.7	0.5

MRL = Method Reporting Limit

Qualitative ID

This sample has the GC/FID characteristics that are similar to:
unidentified components in the fuel oil range.

SURROGATE	%RECOVERY	ADVISORY LIMITS
ortho-terphenyl (OTP)	70	39% - 137%

Approved by: CFP

Date: 4/1/99

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.
Project: 3651031003 Taunton Parcel 6A
Lab Order: 0401069
Date Received: 1/15/04

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Collection Date
0401069-01A	MW 6	1/14/04
0401069-01B	MW 6	1/14/04
0401069-01C	MW 6	1/14/04
0401069-02A	MW 7	1/14/04
0401069-02B	MW 7	1/14/04
0401069-02C	MW 7	1/14/04
0401069-03A	MW 7-DUP	1/14/04
0401069-03B	MW 7-DUP	1/14/04
0401069-03C	MW 7-DUP	1/14/04
0401069-04A	MW 9	1/14/04
0401069-04B	MW 9	1/14/04
0401069-04C	MW 9	1/14/04
0401069-05A	Trip Blank	1/14/04

Lab Order: 0401069
 Client: Mactec E & C, Inc.
 Project: 3651031003 Taunton Parcel 6A

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Analytical Test Name Preparatory Test Name	Prep Date	Analysis Date Batch ID	TCLP Date
0401069-01A	MW 6	1/14/04	Groundwater	MCP VOCs 8260, EPA 5030B EPA 5030B	1/21/04	1/21/04 R22269	
0401069-01B				EPH, Water, Full List AQPREP SEP FUNNEL: EPH	1/21/04	1/22/04 10940	
0401069-01C				EPA 7041 ANTIMONY, Total EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	1/20/04 10936	
				EPA 7060 ARSENIC, Total	1/19/04	1/20/04 10932	
				EPA 7421 LEAD, Total	1/19/04	1/20/04 10933	
				EPA 7470 MERCURY, Total MERCURY PREP: EPA 245.1/7040	1/19/04	1/19/04 10922	
				EPA 7740 SELENIUM, Total EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	1/20/04 10934	
				EPA 7841 THALLIUM, Total	1/19/04	1/20/04 10935	
				ICP METALS, TOTAL	1/19/04	1/19/04 10924	
0401069-02A	MW 7			MCP VOCs 8260, EPA 5030B EPA 5030B	1/21/04	1/21/04 R22269	
0401069-02B				EPH, Water, Full List AQPREP SEP FUNNEL: EPH	1/21/04	1/22/04 10940	
0401069-02C				EPA 7041 ANTIMONY, Total EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	1/20/04 10936	

003

AMRO Environmental Laboratories Corp.

26-Jan-04

Lab Order: 0401069
 Client: Mactec E & C, Inc.
 Project: 3651031003 Taunton Parcel 6A

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Analytical Test Name Preparatory Test Name	Prep Date	Analysis Date Batch ID	TCLP Date
0401069-02C	MW 7	1/14/04	Groundwater	EPA 7060 ARSENIC, Total		1/20/04	
				EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	10932	
				EPA 7421 LEAD, Total		1/20/04	
					1/19/04	10933	
				EPA 7470 MERCURY, Total		1/19/04	
				MERCURY PREP: EPA 245.1/7040	1/19/04	10922	
				EPA 7740 SELENIUM, Total		1/20/04	
				EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	10934	
				EPA 7841 THALLIUM, Total		1/20/04	
					1/19/04	10935	
				ICP METALS, TOTAL		1/19/04	
					1/19/04	10924	
0401069-03A	MW 7-DUP			MCP VOCs 8260, EPA 5030B		1/21/04	
				EPA 5030B	1/21/04	R22269	
0401069-03B				EPH, Water, Full List		1/22/04	
				AQPREP SEP FUNNEL: EPH	1/21/04	10940	
0401069-03C				EPA 7041 ANTIMONY, Total		1/20/04	
				EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	10936	
				EPA 7060 ARSENIC, Total		1/20/04	
					1/19/04	10932	
				EPA 7421 LEAD, Total		1/20/04	
					1/19/04	10933	
				EPA 7470 MERCURY, Total		1/19/04	
				MERCURY PREP: EPA 245.1/7040	1/19/04	10922	

Lab Order: 0401069
 Client: Mactec E & C, Inc.
 Project: 3651031003 Taunton Parcel 6A

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Analytical Test Name	Prep Date	Analysis Date	TCLP Date
				Preparatory Test Name		Batch ID	
0401069-03C	MW 7-DUP	1/14/04	Groundwater	EPA 7740 SELENIUM, Total		1/20/04	
				EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	10934	
				EPA 7841 THALLIUM, Total		1/20/04	
					1/19/04	10935	
				ICP METALS, TOTAL		1/19/04	
					1/19/04	10924	
0401069-04A	MW 9			MCP VOCs 8260, EPA 5030B		1/21/04	
				EPA 5030B	1/21/04	R22269	
0401069-04B				EPH, Water, Full List		1/22/04	
				AQPREP SEP FUNNEL: EPH	1/21/04	10940	
0401069-04C				EPA 7041 ANTIMONY, Total		1/20/04	
				EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	10936	
				EPA 7060 ARSENIC, Total		1/20/04	
					1/19/04	10932	
				EPA 7421 LEAD, Total		1/20/04	
					1/19/04	10933	
				EPA 7470 MERCURY, Total		1/19/04	
				MERCURY PREP: EPA 245.1/7040	1/19/04	10922	
				EPA 7740 SELENIUM, Total		1/20/04	
				EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	10934	
				EPA 7841 THALLIUM, Total		1/20/04	
					1/19/04	10935	
				ICP METALS, TOTAL		1/19/04	
					1/19/04	10924	

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AMRO Environmental Laboratories Corp.

26-Jan-04

Lab Order: 0401069
Client: Mactec E & C, Inc.
Project: 3651031003 Taunton Parcel 6A

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Analytical Test Name		Analysis Date	
				Preparatory Test Name	Prep Date	Batch ID	TCLP Date
0401069-05A	Trip Blank	1/14/04	Aqueous	MCP VOCs 8260, EPA 5030B		1/21/04	
				EPA 5030B	1/21/04	R22269	

900

049001

Project No.: 3651031003		Project Name: Taunton Parcel 6A		Project Manager: M. Salvetti		Samplers (Signature): Mike Applebaum		AMRO Project No.: 0401069							
Project State:															
Sample ID	Date/Time Sampled	Matrix A= Air S= Soil GW= Ground W. WW= Waste W. DW= Drinking W. O= Oil Other= Specify	Total # of Cont. & Size	Comp	Grab	Analysis Required								Remarks	
	1/14/04		3 VOA 2 LC Amb 1 250 B4			8200 VOCs + MTBE	PAHs w/EPH	MCP CAM n.d.							
MW6	1025	GW			X	X	X	X							
MW7	1210	GW			X	X	X	X							
MW7-DUP	1210	GW			X	X	X	X							
MW9	1450	GW			X	X	X	X							
/															
Preservative: Cl-HCl, MeOH, N-HNO3, S-H2SO4, Na-NaOH, O- Other															
Container Type: P- Plastic, G-Glass, V-Vial, T- Teflon, O-Other															
Send Results To: Mark Salvetti		FAX No.: 781 246 5060		Seal Intact? Yes No N/A		P.O. No:		GW-1* GW-2 GW-3							
MARTEL Eng + Cons., Inc										MCP Level Needed:					
157 Audubon Rd, Suite 301										* May require additional cost					
Wakefield, MA 02155															
Relinquished By: [Signature]		Date/Time: 1/15/04 0800		Received By: [Signature]		PRIORITY TURNAROUND TIME AUTHORIZATION									
						Before submitting samples for expedited TAT, you must have requested in advance and received a coded AUTHORIZATION NUMBER.									
						Samples arriving after 12:00 noon will be tracked and billed as received on the following day.									
						AUTHORIZATION No. BY:									
Please print clearly, legibly and completely. Samples can not be logged in and the turnaround time clock will not start until any ambiguities are resolved.				NOTES: Preservatives, Special reporting limits, Known Contamination, etc; 2 AMRO Internal QC 1 LC Amb included				AMRO policy requires notification in writing to the laboratory in cases where the samples were collected from highly contaminated sites.							
White: Lab Copy		Yellow: Accompanies Report		Pink: Client Copy		SHEET 1		OF 1							

Client: MACTEC ENG. & CONS. INC
Project Name: TAUNTON PARCEL 6/A
Ship via: (circle one) Fed Ex., UPS AMRO Courier,
Hand Del., Other Courier, Other:

AMRO ID: 0401069
Date Rec.: 1-15-04
Date Due: 1-22-04

Items to be Checked Upon Receipt

1. Army Samples received in individual plastic bags?
2. Custody Seals present?
3. Custody Seals Intact?
4. Air Bill included in folder if received?
5. Is COC included with samples?
6. Is COC signed and dated by client?
7. Laboratory receipt temperature.

TEMP = 60

Samples rec. with ice ☒ ice packs ☐ neither

8. Were samples received the same day they were sampled?

Is client temperature $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$?

If no obtain authorization from the client for the analyses.

Client authorization from: _____ Date: _____ Obtained by: _____

9. Is the COC filled out correctly and completely?
10. Does the info on the COC match the samples?
11. Were samples rec. within holding time?
12. Were all samples properly labeled?
13. Were all samples properly preserved?
14. Were proper sample containers used?
15. Were all samples received intact? (none broken or leaking)
16. Were VOA vials rec. with no air bubbles?
17. Were the sample volumes sufficient for requested analysis?
18. Were all samples received?

Yes	No	NA	Comments
		✓	
		✓	
		✓	
		✓	
✓			
✓			
✓	✓		
✓			
✓			
✓			
✓			
✓	✓		1-EPH ADJUSTED
✓			
✓			
✓			
✓			
✓			
✓			
✓			
		✓	

19. VPH and VOA Soils only:

Sampling Method VPH (circle one): M=Methanol, E=EnCore (air-tight container)

Sampling Method VOA (circle one): M=Methanol, SB=Sodium Bisulfate, E=EnCore, B=Bulk

If M or SB:

Does preservative cover the soil?

If NO then client must be faxed.

Does preservation level come close to the fill line on the vial?

If NO then client must be faxed.

Were vials provided by AMRO?

If NO then weights MUST be obtained from client

Was dry weight aliquot provided?

If NO then fax client and inform the VOA lab ASAP.

20. Subcontracted Samples:

What samples sent:

Where sent:

Date:

Analysis:

TAT:

		✓	
✓		✓	
		✓	
		✓	
		✓	
		✓	

21. Information entered into:

Internal Tracking Log?

Dry Weight Log?

Client Log?

Composite Log?

Filtration Log?

Received By: GG	Date: 1-15-04	Logged in By: CC	Date: 1-16-04
Labeled By: CC	Date: 1-16-04	Checked By: MG	Date: 1-16-04

NA= Not Applicable

AMRO ID: 0401069

pH Checked By: CC

Date: 1-16-04 pH adjusted By: CC Date: 1-16-04
1115

R04864

CASE NARRATIVE

0401069

GC/MS-VOLATILES

WATER

1. Quadratic regression was utilized in the Initial Calibration performed on 11/15/03 on instrument V-1 for Vinyl acetate.
2. The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) for Batch ID: R22269 was performed on sample MW 6 (0401069-01A). 13 compounds and 2 RPD had recoveries outside the QC limits.
3. A Laboratory Control Sample (LCS-01/21/04) (Batch ID: R22269) was performed. 3 compounds recovered outside the laboratory control limits.

MADEP-EPH

WATER

1. The surrogate 1-Chlorooctadecane recovered below the QC limits (40-140%) at 36.3% in sample MW-7 (0401069-02B).

TRACE METALS

WATER

1. The %REC's for Arsenic in the Continuing Calibration Verification Standard (CCV) that bracketed the samples in this project (012004A GFAA analytical run) were 110.55% and 111.56% outside the MADEP-MCP acceptable limit (90-110%), however these %REC's were within the SW-846 7000series acceptable limits (80-120%). Arsenic was not detected in any sample.
2. The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) were performed on the sample MW 6 (0401069-01C). All %R's and %RPD's were within the laboratory QC limits with the exception of Thallium.

MADEP MCP Analytical Method Report Certification Form							
Laboratory Name: AMRO Environmental Laboratories, Inc.				Project Number: 0401069			
Project Location: 3651031003 Taunton Parcel 6A				MADEP RTN 1			
0401069-01	0401069-02	0401069-03	0401069-04	0401069-05			
Sample Matrices: Ground Water <input checked="" type="checkbox"/> Soil / Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Other Matrix <input type="checkbox"/>							
MCP SW-846 Methods Used As specified in MADEP Compendium of Analytical Methods (check all that apply)	8260B	<input checked="" type="checkbox"/>	8151A	<input type="checkbox"/>	8330	<input type="checkbox"/>	
	6010B	<input checked="" type="checkbox"/>	7470A/1A	<input checked="" type="checkbox"/>	8270C	<input type="checkbox"/>	
	8081A	<input type="checkbox"/>	VPH	<input type="checkbox"/>	6020	<input type="checkbox"/>	
	8082	<input type="checkbox"/>	8021B	<input type="checkbox"/>	EPH	<input checked="" type="checkbox"/>	
					7000S ³	<input checked="" type="checkbox"/>	
					Other	<input type="checkbox"/>	
1 List Release Tracking Number (RTN) if known 2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method 3 S - SW-846 Methods 7000 Series List individual method analyte							
An affirmative response to questions A, B, C and D is required for "Presumptive Certainty" status							
A	Were all samples received by the laboratory in a condition consistent with that described on the Chain of Custody documentation for the data set?					<input checked="" type="radio"/> Yes <input type="radio"/> No ¹	
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guide lines?					<input checked="" type="radio"/> Yes <input type="radio"/> No ¹	
C	Does the analytical data included in this report meet all the requirements for Presumptive Certainty, as described in Section 2.0 of the MADEP document CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?					<input checked="" type="radio"/> Yes <input type="radio"/> No ¹	
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?					<input type="radio"/> Yes <input checked="" type="radio"/> No ¹	
A response to questions E and F below is required for "Presumptive Certainty" status							
E	Were all QC performance standards and recommendations for the specified methods achieved?					<input type="radio"/> Yes <input checked="" type="radio"/> No ¹	
F	Were results for all analyte-list compounds / elements for the specified method(s) reported?					<input checked="" type="radio"/> Yes <input type="radio"/> No ¹	
¹ All NO answers 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: <u>Nancy Stewart</u>				Position: <u>Lab Director</u>			
Printed Name: <u>Nancy Stewart</u>				Date: <u>1-30-04</u>			

Volatile Petroleum Hydrocarbons (VPH)
Massachusetts Department of Environmental Protection (MADEP)
Method 1.0 - January 1998
AMRO Modifications

This modification is based on the use of a purge and trap gas chromatography mass spectrometer (GC/MS) system to analyze samples for VPH. The hydrocarbon ranges are quantified using predominant mass fragmentation ions that are characteristic for the range being measured. This approach eliminates potential false positives for the target analytes while providing accurate hydrocarbon range data and also eliminates the double counting of aromatics in the C9-C12 Aliphatic Range. The C5-C8 Aliphatic Range and C9-C12 Aliphatic Range are quantified using m/z 43 which is the largest ion in the spectra of most low molecular weight aliphatics and the C9-C10 Aromatic Range is quantified using m/z 91, the tropylium ion, which is characteristic of all alkyl benzene aromatics. AMRO has evaluated both "fresh" and "weathered" gasoline reference materials from different sources to validate the accuracy of this ion set. No significant negative or positive bias has been observed in the quantitation of fresh or weathered gasolines. Recoveries meet all method criteria. Validation data has been reviewed by MADEP and is available on request.

The chromatographic column is a HP-624 capillary column that has been validated by GC/MS analysis of a gasoline standard to correctly identify the marker compounds and elution order of specific gasoline components. Batch quality control includes, at a minimum, method blank, laboratory control sample, and duplicate analysis. A matrix spike and/or matrix spike duplicate is analyzed if sufficient sample is submitted to the laboratory.

The Reporting Limit (RL) of this method for each of the collective aliphatic and aromatic ranges is approximately 0.6-2.5 mg/kg in soil and 25-100 µg/L in water. The RL of this method for the target analytes ranges from approximately 0.05-0.12 mg/kg in soil and 2.0-5.0 µg/L for water samples.

Extractable Petroleum Hydrocarbons (EPH)
Massachusetts Department of Environmental Protection (MADEP)
Method 1.0 - January 1998
AMRO Modifications

This modification is based on a solvent extraction and gas chromatography mass spectrometer (GC/MS) analysis. The hydrocarbon ranges are quantified using predominant mass fragmentation ions which are characteristic for the range being measured. This approach eliminates the silica gel solid-phase fractionation step. False positives for targeted PAH analytes are eliminated by using GC/MS as the primary analysis technique and non-petroleum interferences can be identified and often eliminated. The hydrocarbon ranges are quantified using predominant mass fragmentation ions that are characteristic and selective for the range being measured. The C9-C18 and C19-C36 Aliphatic Ranges are quantified using the combined ions m/z 43, 57, 67 and 71. These are the dominant fragment ions in aliphatic alkane and cycloaliphatic hydrocarbons present in the common distillate petroleum products. The C11-C22 Aromatic Range is quantified using ions m/z 50, 63, and 74. These are the principal unique and characteristic aromatic ring fragment ions in semivolatile aromatic hydrocarbons present in distillate petroleum products. AMRO has evaluated quantitative recovery using these ion sets for a wide variety of semivolatile petroleum products including diesel fuels, jet fuels, and motor oils. Accuracy of the aliphatic vs. aromatic quantitation has been validated using an EPA/API reference material and silica gel separation. Recoveries meet all method criteria. Validation data has been reviewed by MADEP and is available on request.

The chromatographic column is a J&W Scientific DB-5ms capillary column. Internal standard calibration is performed using 5 α -Androstane at a concentration of 20 ng/µL. o-Terphenyl and 1-Chlorooctadecane are added as surrogate compounds at 20 ng/µL in the sample extract. These two surrogates monitor the effects of the sample matrix and extraction efficiency. Two additional surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, are added to the finished extract prior to analysis to monitor instrument performance. Batch quality control includes, at a minimum, a procedure blank, laboratory control sample and duplicate sample analysis. A matrix spike is analyzed if sufficient sample is submitted to the laboratory.

The Reporting Limit (RL) of this method for each of the collective aliphatic and aromatic ranges is approximately 50 mg/kg in soil and 100 µg/L in water. The RL of this method for the Target PAH analytes is approximately 0.25 mg/kg in soil; 1.0 µg/L for water when operating the GC/MS in full scan mode, and 0.1 µg/L when operating the GC/MS in SIM mode. For sites requiring the lowest levels cited in the Massachusetts Contingency Plan for water, GC/MS in the Selected Ion Monitoring (SIM) mode is used.

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.**Client Sample ID:** MW 6**Lab Order:** 0401069**Project:** 3651031003 Taunton Parcel 6A**Collection Date:** 1/14/04**Lab ID:** 0401069-01A**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY MCP MET SW8260B						Analyst: KT
Acetone	ND	10		µg/L	1	1/21/04 1:52:00 PM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Benzene	ND	1.0		µg/L	1	1/21/04 1:52:00 PM
Bromobenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Bromochloromethane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Bromoform	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Bromomethane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Carbon disulfide	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Chlorobenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Chloroethane	ND	5.0		µg/L	1	1/21/04 1:52:00 PM
Chloroform	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Chloromethane	ND	3.0		µg/L	1	1/21/04 1:52:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	1/21/04 1:52:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Dibromomethane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Dichlorodifluoromethane	ND	5.0		µg/L	1	1/21/04 1:52:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/21/04 1:52:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/21/04 1:52:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/21/04 1:52:00 PM
Diethyl ether	ND	5.0		µg/L	1	1/21/04 1:52:00 PM

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

A

CLIENT: Mactec E & C, Inc.**Client Sample ID:** MW 6**Lab Order:** 0401069**Project:** 3651031003 Taunton Parcel 6A**Collection Date:** 1/14/04**Lab ID:** 0401069-01A**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diisopropyl ether	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,4-Dioxane	ND	50		µg/L	1	1/21/04 1:52:00 PM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Ethylbenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
2-Hexanone	ND	10		µg/L	1	1/21/04 1:52:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
2-Butanone	ND	10		µg/L	1	1/21/04 1:52:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/21/04 1:52:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Methylene chloride	ND	5.0		µg/L	1	1/21/04 1:52:00 PM
Naphthalene	ND	5.0		µg/L	1	1/21/04 1:52:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Styrene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Tetrahydrofuran	ND	10		µg/L	1	1/21/04 1:52:00 PM
Toluene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Trichloroethene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Vinyl chloride	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
o-Xylene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
m,p-Xylene	ND	2.0		µg/L	1	1/21/04 1:52:00 PM
Surr: Dibromofluoromethane	99.6	85-120		%REC	1	1/21/04 1:52:00 PM
Surr: 1,2-Dichloroethane-d4	96.3	75-124		%REC	1	1/21/04 1:52:00 PM
Surr: Toluene-d8	101	82-112		%REC	1	1/21/04 1:52:00 PM
Surr: 4-Bromofluorobenzene	107	77-117		%REC	1	1/21/04 1:52:00 PM

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AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.

Client Sample ID: MW 7

Lab Order: 0401069

Project: 3651031003 Taunton Parcel 6A

Collection Date: 1/14/04

Lab ID: 0401069-02A

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY MCP MET SW8260B						Analyst: KT
Acetone	ND	10		µg/L	1	1/21/04 2:26:00 PM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Benzene	ND	1.0		µg/L	1	1/21/04 2:26:00 PM
Bromobenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Bromochloromethane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Bromoform	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Bromomethane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Carbon disulfide	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Chlorobenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Chloroethane	ND	5.0		µg/L	1	1/21/04 2:26:00 PM
Chloroform	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Chloromethane	ND	3.0		µg/L	1	1/21/04 2:26:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	1/21/04 2:26:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Dibromomethane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Dichlorodifluoromethane	ND	5.0		µg/L	1	1/21/04 2:26:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/21/04 2:26:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/21/04 2:26:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/21/04 2:26:00 PM
Diethyl ether	ND	5.0		µg/L	1	1/21/04 2:26:00 PM

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.**Client Sample ID:** MW 7**Lab Order:** 0401069**Project:** 3651031003 Taunton Parcel 6A**Collection Date:** 1/14/04**Lab ID:** 0401069-02A**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diisopropyl ether	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,4-Dioxane	ND	50		µg/L	1	1/21/04 2:26:00 PM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Ethylbenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
2-Hexanone	ND	10		µg/L	1	1/21/04 2:26:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
2-Butanone	ND	10		µg/L	1	1/21/04 2:26:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/21/04 2:26:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Methylene chloride	ND	5.0		µg/L	1	1/21/04 2:26:00 PM
Naphthalene	ND	5.0		µg/L	1	1/21/04 2:26:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Styrene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Tetrahydrofuran	ND	10		µg/L	1	1/21/04 2:26:00 PM
Toluene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Trichloroethene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Vinyl chloride	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
o-Xylene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
m,p-Xylene	ND	2.0		µg/L	1	1/21/04 2:26:00 PM
Surr: Dibromofluoromethane	99.4	85-120		%REC	1	1/21/04 2:26:00 PM
Surr: 1,2-Dichloroethane-d4	97.1	75-124		%REC	1	1/21/04 2:26:00 PM
Surr: Toluene-d8	102	82-112		%REC	1	1/21/04 2:26:00 PM
Surr: 4-Bromofluorobenzene	107	77-117		%REC	1	1/21/04 2:26:00 PM

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.**Client Sample ID:** MW 7-DUP**Lab Order:** 0401069**Project:** 3651031003 Taunton Parcel 6A**Collection Date:** 1/14/04**Lab ID:** 0401069-03A**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY MCP MET SW8260B						Analyst: KT
Acetone	ND	10		µg/L	1	1/21/04 3:00:00 PM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Benzene	ND	1.0		µg/L	1	1/21/04 3:00:00 PM
Bromobenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Bromochloromethane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Bromoform	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Bromomethane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Carbon disulfide	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Chlorobenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Chloroethane	ND	5.0		µg/L	1	1/21/04 3:00:00 PM
Chloroform	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Chloromethane	ND	3.0		µg/L	1	1/21/04 3:00:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	1/21/04 3:00:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Dibromomethane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Dichlorodifluoromethane	ND	5.0		µg/L	1	1/21/04 3:00:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/21/04 3:00:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/21/04 3:00:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/21/04 3:00:00 PM
Diethyl ether	ND	5.0		µg/L	1	1/21/04 3:00:00 PM

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.**Client Sample ID:** MW 7-DUP**Lab Order:** 0401069**Project:** 3651031003 Taunton Parcel 6A**Collection Date:** 1/14/04**Lab ID:** 0401069-03A**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diisopropyl ether	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,4-Dioxane	ND	50		µg/L	1	1/21/04 3:00:00 PM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Ethylbenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
2-Hexanone	ND	10		µg/L	1	1/21/04 3:00:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
2-Butanone	ND	10		µg/L	1	1/21/04 3:00:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/21/04 3:00:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Methylene chloride	ND	5.0		µg/L	1	1/21/04 3:00:00 PM
Naphthalene	ND	5.0		µg/L	1	1/21/04 3:00:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Styrene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Tetrahydrofuran	ND	10		µg/L	1	1/21/04 3:00:00 PM
Toluene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Trichloroethene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Vinyl chloride	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
o-Xylene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
m,p-Xylene	ND	2.0		µg/L	1	1/21/04 3:00:00 PM
Surr: Dibromofluoromethane	99.4	85-120		%REC	1	1/21/04 3:00:00 PM
Surr: 1,2-Dichloroethane-d4	99.6	75-124		%REC	1	1/21/04 3:00:00 PM
Surr: Toluene-d8	103	82-112		%REC	1	1/21/04 3:00:00 PM
Surr: 4-Bromofluorobenzene	107	77-117		%REC	1	1/21/04 3:00:00 PM

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.**Client Sample ID:** MW 9**Lab Order:** 0401069**Project:** 3651031003 Taunton Parcel 6A**Collection Date:** 1/14/04**Lab ID:** 0401069-04A**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY MCP MET SW8260B						Analyst: KT
Acetone	ND	10		µg/L	1	1/21/04 3:35:00 PM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Benzene	ND	1.0		µg/L	1	1/21/04 3:35:00 PM
Bromobenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Bromochloromethane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Bromoform	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Bromomethane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Carbon disulfide	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Chlorobenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Chloroethane	ND	5.0		µg/L	1	1/21/04 3:35:00 PM
Chloroform	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Chloromethane	ND	3.0		µg/L	1	1/21/04 3:35:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	1/21/04 3:35:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Dibromomethane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Dichlorodifluoromethane	ND	5.0		µg/L	1	1/21/04 3:35:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/21/04 3:35:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/21/04 3:35:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/21/04 3:35:00 PM
Diethyl ether	ND	5.0		µg/L	1	1/21/04 3:35:00 PM

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.**Client Sample ID:** MW 9**Lab Order:** 0401069**Project:** 3651031003 Taunton Parcel 6A**Collection Date:** 1/14/04**Lab ID:** 0401069-04A**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diisopropyl ether	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,4-Dioxane	ND	50		µg/L	1	1/21/04 3:35:00 PM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Ethylbenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
2-Hexanone	ND	10		µg/L	1	1/21/04 3:35:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
2-Butanone	ND	10		µg/L	1	1/21/04 3:35:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/21/04 3:35:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Methylene chloride	ND	5.0		µg/L	1	1/21/04 3:35:00 PM
Naphthalene	ND	5.0		µg/L	1	1/21/04 3:35:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Styrene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Tetrahydrofuran	ND	10		µg/L	1	1/21/04 3:35:00 PM
Toluene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Trichloroethene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Vinyl chloride	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
o-Xylene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
m,p-Xylene	ND	2.0		µg/L	1	1/21/04 3:35:00 PM
Surr: Dibromofluoromethane	99.9	85-120		%REC	1	1/21/04 3:35:00 PM
Surr: 1,2-Dichloroethane-d4	96.5	75-124		%REC	1	1/21/04 3:35:00 PM
Surr: Toluene-d8	103	82-112		%REC	1	1/21/04 3:35:00 PM
Surr: 4-Bromofluorobenzene	107	77-117		%REC	1	1/21/04 3:35:00 PM

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.**Client Sample ID:** Trip Blank**Lab Order:** 0401069**Project:** 3651031003 Taunton Parcel 6A**Collection Date:** 1/14/04**Lab ID:** 0401069-05A**Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY MCP MET SW8260B						Analyst: KT
Acetone	ND	10		µg/L	1	1/21/04 11:34:00 AM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Benzene	ND	1.0		µg/L	1	1/21/04 11:34:00 AM
Bromobenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Bromochloromethane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Bromodichloromethane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Bromoform	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Bromomethane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
sec-Butylbenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
n-Butylbenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
tert-Butylbenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Carbon disulfide	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Carbon tetrachloride	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Chlorobenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Dibromochloromethane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Chloroethane	ND	5.0		µg/L	1	1/21/04 11:34:00 AM
Chloroform	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Chloromethane	ND	3.0		µg/L	1	1/21/04 11:34:00 AM
2-Chlorotoluene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
4-Chlorotoluene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	1/21/04 11:34:00 AM
1,2-Dibromoethane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Dibromomethane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Dichlorodifluoromethane	ND	5.0		µg/L	1	1/21/04 11:34:00 AM
1,1-Dichloroethane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,2-Dichloroethane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/21/04 11:34:00 AM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,2-Dichloropropane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,3-Dichloropropane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,1-Dichloropropene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/21/04 11:34:00 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/21/04 11:34:00 AM
Diethyl ether	ND	5.0		µg/L	1	1/21/04 11:34:00 AM

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.

Work Order: 0401069

Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID	LCS-10940	Batch ID: 10940	Test Code: MAEPH	Units: µg/L	Analysis Date	1/22/04 1:24:00 PM	Prep Date	1/21/04				
Client ID:			Run ID: SV-2_040122A		SeqNo: 369712							
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
n-Eicosane	15.23	1.0	µg/L	25	0	60.9	40	140	0			
n-Nonadecane	14.81	1.0	µg/L	25	0	59.2	40	140	0			
n-Nonane	12.58	1.0	µg/L	25	0	50.3	40	140	0			
n-Octacosane	14.26	1.0	µg/L	25	0	57	40	140	0			
n-Tetradecane	12.62	1.0	µg/L	25	0	50.5	40	140	0			
Naphthalene	18.44	1.0	µg/L	25	0	73.8	40	140	0			
Acenaphthene	19.56	1.0	µg/L	25	0	78.2	40	140	0			
Anthracene	26.04	1.0	µg/L	25	0	104	40	140	0			
Pyrene	26.18	1.0	µg/L	25	0	105	40	140	0			
Chrysene	23.56	1.0	µg/L	25	0	94.2	40	140	0			
Surr: 1-Chlorooctadecane	10.44	1.0	µg/L	20	0	52.2	40	140	0			
Surr: 2-Bromonaphthalene	23.13	1.0	µg/L	20	0	116	40	140	0			
Surr: 2-Fluorobiphenyl	21.37	1.0	µg/L	20	0	107	40	140	0			
Surr: o-Terphenyl	19.24	1.0	µg/L	20	0	96.2	40	140	0			

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.
Project: 3651031003 Taunton Parcel 6A**Lab Order:** 0401069**Lab ID:** 0401069-01**Collection Date:** 1/14/04**Client Sample ID:** MW 6**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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ICP METALS TOTAL SW-846**SW6010B****Analyst: SJC**

Barium	ND	200		µg/L	1	1/19/04 7:01:43 PM
Beryllium	ND	4.0		µg/L	1	1/19/04 7:01:43 PM
Cadmium	ND	5.0		µg/L	1	1/19/04 7:01:43 PM
Chromium	ND	10		µg/L	1	1/19/04 7:01:43 PM
Copper	ND	25		µg/L	1	1/19/04 7:01:43 PM
Nickel	ND	40		µg/L	1	1/19/04 7:01:43 PM
Silver	ND	7.0		µg/L	1	1/19/04 7:01:43 PM
Vanadium	ND	50		µg/L	1	1/19/04 7:01:43 PM
Zinc	100	20		µg/L	1	1/19/04 7:01:43 PM

ARSENIC, TOTAL**SW7060A****Analyst: APL**

Arsenic	ND	5.0		µg/L	1	1/20/04 3:49:10 PM
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MERCURY, TOTAL**SW7470A****Analyst: RK**

Mercury	ND	0.20		µg/L	1	1/19/04 12:59:37 PM
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LEAD, TOTAL**SW7421****Analyst: APL**

Lead	ND	5.0		µg/L	1	1/20/04 3:49:10 PM
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ANTIMONY, TOTAL**SW7041****Analyst: APL**

Antimony	ND	5.0		µg/L	1	1/20/04 9:21:48 PM
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SELENIUM, TOTAL**SW7740****Analyst: APL**

Selenium	ND	5.0		µg/L	1	1/20/04 3:49:10 PM
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THALLIUM, TOTAL**SW7841****Analyst: APL**

Thallium	ND	5.0		µg/L	1	1/20/04 3:49:10 PM
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AMRO Environmental Laboratories Corp.

Date: 22-Jan-04

CLIENT: Mactec E & C, Inc.

Work Order: 0401069

Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID 0401069-01CMS Batch ID: 10924 Test Code: SW6010B Units: µg/L Analysis Date 1/19/04 7:29:05 PM Prep Date 1/19/04
Client ID: MW 6 Run ID: ICP-OPTIMA_040119B SeqNo: 368881

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Barium	4191	200	µg/L	4000	67.49	103	75	125	0			
Beryllium	777.9	4.0	µg/L	800	0.2256	97.2	75	125	0			
Cadmium	812.9	5.0	µg/L	800	0	102	75	125	0			
Chromium	3982	10	µg/L	4000	1.368	99.5	75	125	0			
Copper	1925	25	µg/L	2000	16.03	95.4	75	125	0			
Nickel	4034	40	µg/L	4000	7.352	101	75	125	0			
Silver	402.8	7.0	µg/L	400	0	101	75	125	0			
Vanadium	4009	50	µg/L	4000	0	100	75	125	0			
Zinc	4203	20	µg/L	4000	100.4	103	75	125	0			

Sample ID 0401069-01CMS Batch ID: 10924 Test Code: SW6010B Units: µg/L Analysis Date 1/19/04 7:35:23 PM Prep Date 1/19/04
Client ID: MW 6 Run ID: ICP-OPTIMA_040119B SeqNo: 368882

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Barium	4184	200	µg/L	4000	67.49	103	75	125	4191	0.154	20	
Beryllium	775.6	4.0	µg/L	800	0.2256	96.9	75	125	777.9	0.293	20	
Cadmium	809.5	5.0	µg/L	800	0	101	75	125	812.9	0.42	20	
Chromium	3968	10	µg/L	4000	1.368	99.2	75	125	3982	0.354	20	
Copper	1926	25	µg/L	2000	16.03	95.5	75	125	1925	0.097	20	
Nickel	4018	40	µg/L	4000	7.352	100	75	125	4034	0.386	20	
Silver	401.8	7.0	µg/L	400	0	100	75	125	402.8	0.259	20	
Vanadium	3999	50	µg/L	4000	0	100	75	125	4009	0.262	20	
Zinc	4192	20	µg/L	4000	100.4	102	75	125	4203	0.266	20	

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

B - Analyte detected in the associated Method Blank

AMRO Environmental Laboratories Corp.

Date: 22-Jan-04

CLIENT: Mactec E & C, Inc.

Work Order: 0401069

Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Method Blank

Sample ID	MB-10933	Batch ID: 10933	Test Code: SW7421	Units: µg/L	Analysis Date	1/20/04 3:33:19 PM	Prep Date	1/19/04		
Client ID:			Run ID: GFAA-6000_040120B		SeqNo:	369143				
Analyte	QC Sample	QC Sample Result	QC Spike Amount	Original Sample	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Lead		ND	5.0	µg/L						

Sample ID	MB-10936	Batch ID: 10936	Test Code: SW7041	Units: µg/L	Analysis Date	1/20/04 9:05:03 PM	Prep Date	1/19/04		
Client ID:			Run ID: GFAA-4100_040120B		SeqNo:	369210				
Analyte	QC Sample	QC Sample	QC Spike	Original Sample	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Antimony	ND	5.0	µg/L							

Sample ID	MB-10934	Batch ID: 10934	Test Code: SW7740	Units: µg/L	Analysis Date	1/20/04 3:33:19 PM	Prep Date	1/19/04		
Client ID:			Run ID: GFAA-6000_040120C		SeqNo:	369163				
Analyte	QC Sample	QC Sample	QC Spike	Original Sample	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Selenium	ND	5.0	µg/L							

Sample ID	MB-10935	Batch ID: 10935	Test Code: SW7841	Units: µg/L	Analysis Date	1/20/04 3:33:19 PM	Prep Date	1/19/04		
Client ID:			Run ID: GFAA-6000_040120D		SeqNo:	369183				
Analyte	QC Sample	QC Sample	QC Spike	Original Sample	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Thallium	ND	5.0	µg/L							

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 22-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401069
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Method Blank

Sample ID MB-10924 Batch ID: 10924 Test Code: SW6010B Units: µg/L Analysis Date 1/19/04 6:51:42 PM Prep Date 1/19/04
 Client ID: Run ID: ICP-OPTIMA_040119B SeqNo: 368874

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Barium	ND	200	µg/L									J
Beryllium	0.1329	4.0	µg/L									
Cadmium	ND	5.0	µg/L									
Chromium	ND	10	µg/L									
Copper	ND	25	µg/L									
Nickel	ND	40	µg/L									
Silver	ND	7.0	µg/L									
Vanadium	ND	50	µg/L									
Zinc	ND	20	µg/L									

Sample ID MB-10932 Batch ID: 10932 Test Code: SW7060A Units: µg/L Analysis Date 1/20/04 3:33:19 PM Prep Date 1/19/04
 Client ID: Run ID: GFAA-6000_040120A SeqNo: 369123

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Arsenic	ND	5.0	µg/L									
Sample ID MB-10922 Batch ID: 10922 Test Code: SW7470A Units: µg/L Analysis Date 1/19/04 12:51:41 PM Prep Date 1/19/04												
Client ID: Run ID: HG-FIMS_040119A SeqNo: 368786												
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Mercury	ND	0.20	µg/L									

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

A

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.
Project: 3651031003 Taunton Parcel 6A

Lab Order: 0401069**Lab ID:** 0401069-04**Collection Date:** 1/14/04**Client Sample ID:** MW 9**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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ICP METALS TOTAL SW-846**SW6010B****Analyst:** SJC

Barium	ND	200		µg/L	1	1/19/04 7:53:11 PM
Beryllium	ND	4.0		µg/L	1	1/19/04 7:53:11 PM
Cadmium	ND	5.0		µg/L	1	1/19/04 7:53:11 PM
Chromium	ND	10		µg/L	1	1/19/04 7:53:11 PM
Copper	ND	25		µg/L	1	1/19/04 7:53:11 PM
Nickel	ND	40		µg/L	1	1/19/04 7:53:11 PM
Silver	ND	7.0		µg/L	1	1/19/04 7:53:11 PM
Vanadium	ND	50		µg/L	1	1/19/04 7:53:11 PM
Zinc	78	20		µg/L	1	1/19/04 7:53:11 PM

ARSENIC, TOTAL**SW7060A****Analyst:** APL

Arsenic	ND	5.0		µg/L	1	1/20/04 4:57:09 PM
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MERCURY, TOTAL**SW7470A****Analyst:** RK

Mercury	ND	0.20		µg/L	1	1/19/04 1:35:29 PM
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LEAD, TOTAL**SW7421****Analyst:** APL

Lead	ND	5.0		µg/L	1	1/20/04 4:57:09 PM
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ANTIMONY, TOTAL**SW7041****Analyst:** APL

Antimony	ND	5.0		µg/L	1	1/20/04 10:29:39 PM
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SELENIUM, TOTAL**SW7740****Analyst:** APL

Selenium	ND	5.0		µg/L	1	1/20/04 4:57:09 PM
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THALLIUM, TOTAL**SW7841****Analyst:** APL

Thallium	ND	5.0		µg/L	1	1/20/04 4:57:09 PM
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AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.
Project: 3651031003 Taunton Parcel 6A**Lab Order:** 0401069**Lab ID:** 0401069-03**Collection Date:** 1/14/04**Client Sample ID:** MW 7-DUP**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ICP METALS TOTAL SW-846		SW6010B		Analyst: SJC		
Barium	ND	200		µg/L	1	1/19/04 7:47:25 PM
Beryllium	ND	4.0		µg/L	1	1/19/04 7:47:25 PM
Cadmium	ND	5.0		µg/L	1	1/19/04 7:47:25 PM
Chromium	ND	10		µg/L	1	1/19/04 7:47:25 PM
Copper	ND	25		µg/L	1	1/19/04 7:47:25 PM
Nickel	ND	40		µg/L	1	1/19/04 7:47:25 PM
Silver	ND	7.0		µg/L	1	1/19/04 7:47:25 PM
Vanadium	ND	50		µg/L	1	1/19/04 7:47:25 PM
Zinc	330	20		µg/L	1	1/19/04 7:47:25 PM
ARSENIC, TOTAL		SW7060A		Analyst: APL		
Arsenic	ND	5.0		µg/L	1	1/20/04 4:48:39 PM
MERCURY, TOTAL		SW7470A		Analyst: RK		
Mercury	ND	0.20		µg/L	1	1/19/04 1:31:34 PM
LEAD, TOTAL		SW7421		Analyst: APL		
Lead	ND	5.0		µg/L	1	1/20/04 4:48:39 PM
ANTIMONY, TOTAL		SW7041		Analyst: APL		
Antimony	ND	5.0		µg/L	1	1/20/04 10:21:07 PM
SELENIUM, TOTAL		SW7740		Analyst: APL		
Selenium	ND	5.0		µg/L	1	1/20/04 4:48:39 PM
THALLIUM, TOTAL		SW7841		Analyst: APL		
Thallium	ND	5.0		µg/L	1	1/20/04 4:48:39 PM

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.
Project: 3651031003 Taunton Parcel 6A**Lab Order:** 0401069**Lab ID:** 0401069-02**Collection Date:** 1/14/04**Client Sample ID:** MW 7**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ICP METALS TOTAL SW-846		SW6010B		Analyst: SJC		
Barium	ND	200		µg/L	1	1/19/04 7:41:39 PM
Beryllium	ND	4.0		µg/L	1	1/19/04 7:41:39 PM
Cadmium	ND	5.0		µg/L	1	1/19/04 7:41:39 PM
Chromium	ND	10		µg/L	1	1/19/04 7:41:39 PM
Copper	ND	25		µg/L	1	1/19/04 7:41:39 PM
Nickel	ND	40		µg/L	1	1/19/04 7:41:39 PM
Silver	ND	7.0		µg/L	1	1/19/04 7:41:39 PM
Vanadium	ND	50		µg/L	1	1/19/04 7:41:39 PM
Zinc	340	20		µg/L	1	1/19/04 7:41:39 PM
ARSENIC, TOTAL		SW7060A		Analyst: APL		
Arsenic	ND	5.0		µg/L	1	1/20/04 4:40:38 PM
MERCURY, TOTAL		SW7470A		Analyst: RK		
Mercury	ND	0.20		µg/L	1	1/19/04 1:27:36 PM
LEAD, TOTAL		SW7421		Analyst: APL		
Lead	ND	5.0		µg/L	1	1/20/04 4:40:38 PM
ANTIMONY, TOTAL		SW7041		Analyst: APL		
Antimony	ND	5.0		µg/L	1	1/20/04 10:12:36 PM
SELENIUM, TOTAL		SW7740		Analyst: APL		
Selenium	ND	5.0		µg/L	1	1/20/04 4:40:38 PM
THALLIUM, TOTAL		SW7841		Analyst: APL		
Thallium	ND	5.0		µg/L	1	1/20/04 4:40:38 PM

Lot A

AMRO Environmental Laboratories Corp.

Date: 07-Nov-03

CLIENT:	Mactec E & C, Inc.	Client Sample ID:	WES MW3
Lab Order:	0310133		
Project:	3651031003/03 Taunton - Parcel GA	Collection Date:	10/16/03
Lab ID:	0310133-05C	Matrix:	GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ICP METALS TOTAL SW-846						
	SW6010B					Analyst: SJC
Barium	ND	200		µg/L	1	10/22/03 7:40:40 PM
Beryllium	ND	5.0		µg/L	1	10/22/03 7:40:40 PM
Cadmium	ND	5.0		µg/L	1	10/22/03 7:40:40 PM
Chromium	30	10		µg/L	1	10/22/03 7:40:40 PM
Nickel	41	40		µg/L	1	10/22/03 7:40:40 PM
Silver	ND	7.0		µg/L	1	10/22/03 7:40:40 PM
Vanadium	ND	50		µg/L	1	10/22/03 7:40:40 PM
Zinc	590	20		µg/L	1	10/22/03 7:40:40 PM
ARSENIC, TOTAL						
	SW7060A					Analyst: APL
Arsenic	40	15		µg/L	3	10/24/03 10:39:54 PM
MERCURY, TOTAL						
	SW7470A					Analyst: RK
Mercury	0.58	0.20		µg/L	1	10/21/03 1:50:48 PM
LEAD, TOTAL						
	SW7421					Analyst: APL
Lead	890	500		µg/L	100	10/24/03 4:35:31 PM
ANTIMONY, TOTAL						
	SW7041					Analyst: APL
Antimony	27	5.0		µg/L	1	10/28/03 12:23:38 AM
SELENIUM, TOTAL						
	SW7740					Analyst: APL
Selenium	ND	5.0		µg/L	1	10/24/03 7:45:03 PM
THALLIUM, TOTAL						
	SW7841					Analyst: APL
Thallium	ND	5.0		µg/L	1	10/24/03 7:45:03 PM

Lot A

AMRO Environmental Laboratories Corp.

Date: 30-Oct-03

CLIENT: Mactec E & C, Inc.
Project: 3651031003 Taunton - Parcel GA

Lab Order: 0310105

Lab ID: 0310105-03

Collection Date: 10/14/03

Client Sample ID: WES MW4

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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ICP METALS TOTAL SW-846

SW6010B

Analyst: SJC

Barium	ND	200		µg/L	1	10/22/03 8:26:51 PM
Beryllium	ND	4.0		µg/L	1	10/22/03 8:26:51 PM
Cadmium	ND	5.0		µg/L	1	10/22/03 8:26:51 PM
Chromium	ND	10		µg/L	1	10/22/03 8:26:51 PM
Nickel	ND	40		µg/L	1	10/22/03 8:26:51 PM
Silver	ND	7.0		µg/L	1	10/22/03 8:26:51 PM
Vanadium	ND	50		µg/L	1	10/22/03 8:26:51 PM
Zinc	120	20		µg/L	1	10/22/03 8:26:51 PM

ARSENIC, TOTAL

SW7060A

Analyst: APL

Arsenic	ND	5.0		µg/L	1	10/24/03 5:52:57 PM
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MERCURY, TOTAL

SW7470A

Analyst: RK

Mercury	ND	0.20		µg/L	1	10/21/03 12:47:10 PM
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LEAD, TOTAL

SW7421

Analyst: APL

Lead	ND	5.0		µg/L	1	10/24/03 5:52:57 PM
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ANTIMONY, TOTAL

SW7041

Analyst: APL

Antimony	ND	5.0		µg/L	1	10/28/03 1:34:56 AM
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SELENIUM, TOTAL

SW7740

Analyst: APL

Selenium	ND	5.0		µg/L	1	10/24/03 5:52:57 PM
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THALLIUM, TOTAL

SW7841

Analyst: APL

Thallium	ND	5.0		µg/L	1	10/24/03 5:52:57 PM
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AMRO Environmental Laboratories Corp.

Date: 22-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401069
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID 0401069-01CMS		Batch ID: 10934		Test Code: SW7740		Units: µg/L		Analysis Date 1/20/04 4:23:34 PM		Prep Date 1/19/04		
Client ID: MW 6				Run ID: GFAA-6000_040120C				SeqNo: 369168				
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Selenium	35.78	5.0	µg/L	40	0	89.5	75	125	0			

Sample ID 0401069-01CMSD		Batch ID: 10934		Test Code: SW7740		Units: µg/L		Analysis Date 1/20/04 4:32:16 PM		Prep Date 1/19/04		
Client ID: MW 6				Run ID: GFAA-6000_040120C				SeqNo: 369169				
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Selenium	34.65	5.0	µg/L	40	0	86.6	75	125	35.78	3.22	20	

Sample ID 0401069-01CMS		Batch ID: 10935		Test Code: SW7841		Units: µg/L		Analysis Date 1/20/04 4:23:34 PM		Prep Date 1/19/04		
Client ID: MW 6				Run ID: GFAA-6000_040120D				SeqNo: 369188				
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Thallium	26.59	5.0	µg/L	40	0	66.5	75	125	0			S

Sample ID 0401069-01CMSD		Batch ID: 10935		Test Code: SW7841		Units: µg/L		Analysis Date 1/20/04 4:32:16 PM		Prep Date 1/19/04		
Client ID: MW 6				Run ID: GFAA-6000_040120D				SeqNo: 369189				
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Thallium	25.78	5.0	µg/L	40	0	64.5	75	125	26.59	3.1	20	S

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

052

AMRO Environmental Laboratories Corp.

Date: 22-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401069
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID	LCS-10924	Batch ID: 10924	Test Code: SW6010B	Units: µg/L	Analysis Date	1/19/04 6:55:30 PM	Prep Date	1/19/04				
Client ID:		Run ID: ICP-OPTIMA_040119B	SeqNo:	368875								
	QC Sample		QC Spike	Original Sample				Original Sample				
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Barium	4177	200	µg/L	4000	0	104	80	120	0			
Beryllium	781.6	4.0	µg/L	800	0	97.7	80	120	0			
Cadmium	826.3	5.0	µg/L	800	0	103	80	120	0			
Chromium	4037	10	µg/L	4000	0	101	80	120	0			
Copper	1913	25	µg/L	2000	0	95.6	80	120	0			
Nickel	4086	40	µg/L	4000	0	102	80	120	0			
Silver	404.2	7.0	µg/L	400	0	101	80	120	0			
Vanadium	4055	50	µg/L	4000	0	101	80	120	0			
Zinc	4183	20	µg/L	4000	0	105	80	120	0			

Sample ID	LCS-10932	Batch ID:	10932	Test Code:	SW7060A	Units:	µg/L	Analysis Date	1/20/04 3:41:18 PM	Prep Date	1/19/04	
Client ID:		Run ID:	GFAA-6000_040120A	SeqNo:	369124							
	QC Sample			QC Spike	Original Sample				Original Sample			
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Arsenic	47.7	5.0	µg/L	50	0	95.4	80	120	0			

Sample ID	LCS-10922	Batch ID:	10922	Test Code:	SW7470A	Units:	µg/L	Analysis Date	1/19/04 12:55:39 PM	Prep Date	1/19/04	
Client ID:		Run ID:	HG-FIMS_040119A	SeqNo:	368787							
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Mercury	4.084	0.20	µg/L	4	0	102	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

058

Lot A

AMRO Environmental Laboratories Corp.

Date: 30-Oct-03

CLIENT: Mactec E & C, Inc.
Project: 3651031003 Taunton - Parcel GA

Lab Order: 0310105

Lab ID: 0310105-02

Collection Date: 10/14/03

Client Sample ID: ECE MW4

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ICP METALS TOTAL SW-846		SW6010B		Analyst: SJC		
Barium	470	200		µg/L	1	10/22/03 8:13:04 PM
Beryllium	ND	4.0		µg/L	1	10/22/03 8:13:04 PM
Cadmium	ND	5.0		µg/L	1	10/22/03 8:13:04 PM
Chromium	ND	10		µg/L	1	10/22/03 8:13:04 PM
Nickel	ND	40		µg/L	1	10/22/03 8:13:04 PM
Silver	ND	7.0		µg/L	1	10/22/03 8:13:04 PM
Vanadium	ND	50		µg/L	1	10/22/03 8:13:04 PM
Zinc	90	20		µg/L	1	10/22/03 8:13:04 PM
ARSENIC, TOTAL		SW7060A		Analyst: APL		
Arsenic	ND	5.0		µg/L	1	10/24/03 5:44:01 PM
MERCURY, TOTAL		SW7470A		Analyst: RK		
Mercury	0.21	0.20		µg/L	1	10/21/03 12:43:15 PM
LEAD, TOTAL		SW7421		Analyst: APL		
Lead	63	5.0		µg/L	1	10/24/03 5:44:01 PM
ANTIMONY, TOTAL		SW7041		Analyst: APL		
Antimony	ND	5.0		µg/L	1	10/28/03 1:26:09 AM
SELENIUM, TOTAL		SW7740		Analyst: APL		
Selenium	ND	5.0		µg/L	1	10/24/03 5:44:01 PM
THALLIUM, TOTAL		SW7841		Analyst: APL		
Thallium	ND	5.0		µg/L	1	10/24/03 5:44:01 PM



January 28, 2004

ANALYTICAL TEST RESULTS

Mark Salvetti
Mactec E & C, Inc.
107 Audubon Rd.
Suite 301
Wakefield, MA 01880
TEL: 781-245-6606
FAX: (781) 249-5060

Subject: 3651031003 Taunton Parcel 6A

Workorder No.: 0401069

Dear Mark Salvetti:

AMRO Environmental Laboratories Corp. received 5 samples on 1/15/04 for the analyses presented in the following report.

AMRO operates a Quality Assurance Program which meets or exceeds National Environmental Laboratory Accreditation Conference (NELAC), state, and EPA requirements.

The enclosed Sample Receipt Checklist details the condition of your sample(s) upon receipt. Please be advised that any unused sample volume and sample extracts will be stored for a period of 60 days from sample receipt date (90 days for samples from New York). After this time, AMRO will properly dispose of the remaining sample(s). If you require further analysis, or need the samples held for a longer period, please contact us immediately.

This report consists of a total of 54 pages. This letter is an integral part of your data report. All results in this project relate only to the sample(s) as received by the laboratory and documented in the Chain-of-Custody. This report shall not be reproduced except in full, without the written approval of the laboratory. If you have any questions regarding this project in the future, please refer to the Workorder Number above.

Sincerely,

Nancy Stewart
Vice President/LabDirector

State Certifications: NH (NELAC): 1001, MA: M-NH012, CT: PH-0758, NY: 11278 (NELAC), ME: NH012 and 1001, NJ: NH125, RI: 00105, U.S. Army Corps of Engineers (USACE), Naval Facilities Engineering Service Center (NFESC).

Hard copy of the State Certification is available upon request.

AMRO Environmental Laboratories Corp.

Date: 07-Nov-03

CLIENT: Mactec E & C, Inc.
Work Order: 0310133
Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID	LCS-10388	Batch ID: 10388	Test Code: SW7421	Units: µg/L	Analysis Date 10/23/03 8:04:39 PM				Prep Date 10/22/03				
Client ID:			Run ID: GFAA-6000_031023B		SeqNo: 352315								
Analyte		QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Lead		51.9	5.0	µg/L	50	0	104	80	120	0			

Sample ID	LCS-10391	Batch ID: 10391	Test Code: SW7041	Units: µg/L	Analysis Date 10/27/03 9:41:55 PM				Prep Date 10/22/03				
Client ID:			Run ID: GFAA-4100_031027B		SeqNo: 352774								
Analyte		QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Antimony		51.02	5.0	µg/L	50.1	0	102	80	120	0			

Sample ID	LCS-10389	Batch ID: 10389	Test Code: SW7740	Units: µg/L	Analysis Date 10/23/03 8:04:39 PM				Prep Date 10/22/03				
Client ID:			Run ID: GFAA-6000_031023C		SeqNo: 352387								
Analyte		QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Selenium		37.28	5.0	µg/L	40	0	93.2	80	120	0			

Sample ID	LCS-10390	Batch ID: 10390	Test Code: SW7841	Units: µg/L	Analysis Date 10/23/03 8:04:39 PM				Prep Date 10/22/03				
Client ID:			Run ID: GFAA-6000_031023D		SeqNo: 352414								
Analyte		QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Thallium		40.06	5.0	µg/L	40	0	100	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 07-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310133
 Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID	LCS-10353	Batch ID: 10353	Test Code: SW6010B	Units: µg/L	Analysis Date	10/22/03 5:42:51 PM	Prep Date	10/22/03				
Client ID:			Run ID: ICP-OPTIMA_031022C		SeqNo:	351219						
	QC Sample		QC Spike	Original Sample				Original Sample				
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Barium	4288	200	µg/L	4000	0	107	80	120	0			
Beryllium	829.7	4.0	µg/L	800	0	104	80	120	0			
Cadmium	858.4	5.0	µg/L	800	0	107	80	120	0			
Chromium	4169	10	µg/L	4000	0	104	80	120	0			
Nickel	4268	40	µg/L	4000	0	107	80	120	0			
Silver	414.9	7.0	µg/L	400	0	104	80	120	0			
Vanadium	4169	50	µg/L	4000	0	104	80	120	0			
Zinc	4314	20	µg/L	4000	0	108	80	120	0			

Sample ID		LCS-10387		Batch ID: 10387		Test Code: SW7060A		Units: µg/L		Analysis Date 10/23/03 8:04:39 PM		Prep Date 10/22/03	
Client ID:				Run ID:		GFAA-6000_031023A		SeqNo:		352279			
		QC Sample		QC Spike		Original Sample				Original Sample			
Analyte		Result		RL		Units		Amount		Result		%REC	
										LowLimit		HighLimit	
										or MS Result		%RPD	
										RPDLimit		Qua	
Arsenic		49.76		5.0		µg/L		50		0		99.5	
										80		120	
										0			

Sample ID	LCS-10341	Batch ID: 10341	Test Code: SW7470A	Units: µg/L	Analysis Date	10/21/03 1:06:59 PM	Prep Date	10/21/03				
Client ID:			Run ID: HG-FIMS_031021A		SeqNo:	350808						
	QC Sample		QC Spike	Original Sample				Original Sample				
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Mercury	3.884	0.20	µg/L	4	0	97.1	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

CLIENT: Mactec E & C, Inc.
 Work Order: 0310133
 Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID	0310133-01CMS	Batch ID: 10389	Test Code: SW7740	Units: µg/L	Analysis Date	10/23/03 10:37:41 PM	Prep Date	10/22/03				
Client ID:	ECE MW3		Run ID: GFAA-6000_031023C		SeqNo:	352403						
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Selenium	39.69	5.0	µg/L	40	0	99.2	75	125	0			

Sample ID	0310133-01CMSD	Batch ID: 10389	Test Code: SW7740	Units: µg/L	Analysis Date	10/23/03 10:46:33 PM	Prep Date	10/22/03				
Client ID:	ECE MW3		Run ID: GFAA-6000_031023C		SeqNo:	352404						
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Selenium	39.79	5.0	µg/L	40	0	99.5	75	125	39.69	0.244	20	

Sample ID	0310133-01CMS	Batch ID: 10390	Test Code: SW7841	Units: µg/L	Analysis Date	10/23/03 10:37:41 PM	Prep Date	10/22/03				
Client ID:	ECE MW3		Run ID: GFAA-6000_031023D		SeqNo:	352430						
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Thallium	10.38	5.0	µg/L	40	0	26	75	125	0			S

Sample ID	0310133-01CMSD	Batch ID: 10390	Test Code: SW7841	Units: µg/L	Analysis Date	10/23/03 10:46:33 PM	Prep Date	10/22/03				
Client ID:	ECE MW3		Run ID: GFAA-6000_031023D		SeqNo:	352431						
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Thallium	11.5	5.0	µg/L	40	0	28.7	75	125	10.38	10.2	20	S

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.**Client Sample ID:** Trip Blank**Lab Order:** 0401069**Project:** 3651031003 Taunton Parcel 6A**Collection Date:** 1/14/04**Lab ID:** 0401069-05A**Matrix:** AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diisopropyl ether	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,4-Dioxane	ND	50		µg/L	1	1/21/04 11:34:00 AM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Ethylbenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Hexachlorobutadiene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
2-Hexanone	ND	10		µg/L	1	1/21/04 11:34:00 AM
Isopropylbenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
4-Isopropyltoluene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
2-Butanone	ND	10		µg/L	1	1/21/04 11:34:00 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/21/04 11:34:00 AM
Methyl tert-butyl ether	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Methylene chloride	ND	5.0		µg/L	1	1/21/04 11:34:00 AM
Naphthalene	ND	5.0		µg/L	1	1/21/04 11:34:00 AM
n-Propylbenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Styrene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Tetrachloroethene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Tetrahydrofuran	ND	10		µg/L	1	1/21/04 11:34:00 AM
Toluene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Trichloroethene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Trichlorofluoromethane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Vinyl chloride	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
o-Xylene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
m,p-Xylene	ND	2.0		µg/L	1	1/21/04 11:34:00 AM
Surr: Dibromofluoromethane	99.2	85-120		%REC	1	1/21/04 11:34:00 AM
Surr: 1,2-Dichloroethane-d4	102	75-124		%REC	1	1/21/04 11:34:00 AM
Surr: Toluene-d8	105	82-112		%REC	1	1/21/04 11:34:00 AM
Surr: 4-Bromofluorobenzene	109	77-117		%REC	1	1/21/04 11:34:00 AM

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401069
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Method Blank

Sample ID	mb-01/21/04	Batch ID: R22269	Test Code: SW8260B	Units: µg/L	Analysis Date	1/21/04 10:59:00 AM	Prep Date	1/21/04				
Client ID:		Run ID:	V-1_040121A		SeqNo:	369312						
	QC Sample		QC Spike	Original Sample				Original Sample				
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Acetone	ND	10	µg/L									
Tertiary Amyl Methyl Ether	ND	2.0	µg/L									
Benzene	ND	1.0	µg/L									
Bromobenzene	ND	2.0	µg/L									
Bromochloromethane	ND	2.0	µg/L									
Bromodichloromethane	ND	2.0	µg/L									
Bromoform	ND	2.0	µg/L									
Bromomethane	ND	2.0	µg/L									
sec-Butylbenzene	ND	2.0	µg/L									
n-Butylbenzene	ND	2.0	µg/L									
tert-Butylbenzene	ND	2.0	µg/L									
Carbon disulfide	ND	2.0	µg/L									
Carbon tetrachloride	ND	2.0	µg/L									
Chlorobenzene	ND	2.0	µg/L									
Dibromochloromethane	ND	2.0	µg/L									
Chloroethane	ND	5.0	µg/L									
Chloroform	ND	2.0	µg/L									
Chloromethane	ND	3.0	µg/L									
2-Chlorotoluene	ND	2.0	µg/L									
4-Chlorotoluene	ND	2.0	µg/L									
1,2-Dibromo-3-chloropropane	ND	5.0	µg/L									
1,2-Dibromoethane	ND	2.0	µg/L									
Dibromomethane	ND	2.0	µg/L									
1,3-Dichlorobenzene	ND	2.0	µg/L									
1,2-Dichlorobenzene	ND	2.0	µg/L									

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

023

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401069
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Method Blank

1,4-Dichlorobenzene	ND	2.0	µg/L
Dichlorodifluoromethane	ND	5.0	µg/L
1,1-Dichloroethane	ND	2.0	µg/L
1,2-Dichloroethane	ND	2.0	µg/L
1,1-Dichloroethene	ND	1.0	µg/L
cis-1,2-Dichloroethene	ND	2.0	µg/L
trans-1,2-Dichloroethene	ND	2.0	µg/L
1,2-Dichloropropane	ND	2.0	µg/L
1,3-Dichloropropane	ND	2.0	µg/L
2,2-Dichloropropane	ND	2.0	µg/L
1,1-Dichloropropene	ND	2.0	µg/L
cis-1,3-Dichloropropene	ND	1.0	µg/L
trans-1,3-Dichloropropene	ND	1.0	µg/L
Diethyl ether	ND	5.0	µg/L
Diisopropyl ether	ND	2.0	µg/L
1,4-Dioxane	ND	50	µg/L
Ethyl Tertiary Butyl Ether	ND	2.0	µg/L
Ethylbenzene	ND	2.0	µg/L
Hexachlorobutadiene	ND	2.0	µg/L
2-Hexanone	ND	10	µg/L
Isopropylbenzene	ND	2.0	µg/L
4-Isopropyltoluene	ND	2.0	µg/L
2-Butanone	ND	10	µg/L
4-Methyl-2-pentanone	ND	10	µg/L
Methyl tert-butyl ether	ND	2.0	µg/L
Methylene chloride	ND	5.0	µg/L
Naphthalene	ND	5.0	µg/L
n-Propylbenzene	ND	2.0	µg/L
Styrene	ND	2.0	µg/L
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401069
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Method Blank

Tetrachloroethene	ND	2.0	µg/L						
Tetrahydrofuran	ND	10	µg/L						
Toluene	ND	2.0	µg/L						
1,2,4-Trichlorobenzene	ND	2.0	µg/L						
1,2,3-Trichlorobenzene	ND	2.0	µg/L						
1,1,1-Trichloroethane	ND	2.0	µg/L						
1,1,2-Trichloroethane	ND	2.0	µg/L						
Trichloroethene	ND	2.0	µg/L						
Trichlorofluoromethane	ND	2.0	µg/L						
1,2,3-Trichloropropane	ND	2.0	µg/L						
1,2,4-Trimethylbenzene	ND	2.0	µg/L						
1,3,5-Trimethylbenzene	ND	2.0	µg/L						
Vinyl chloride	ND	2.0	µg/L						
o-Xylene	ND	2.0	µg/L						
m,p-Xylene	ND	2.0	µg/L						
Surr: Dibromofluoromethane	25.7	2.0	µg/L	25	0	103	85	120	0
Surr: 1,2-Dichloroethane-d4	26.2	2.0	µg/L	25	0	105	75	124	0
Surr: Toluene-d8	26.51	2.0	µg/L	25	0	106	82	112	0
Surr: 4-Bromofluorobenzene	26.97	2.0	µg/L	25	0	108	77	117	0

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

025

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401069
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Matrix Spike - Full List

Sample ID 0401069-01Amsf Batch ID: R22269 Test Code: SW8260B Units: µg/L Analysis Date 1/21/04 7:37:00 PM Prep Date 1/21/04
 Client ID: MW 6 Run ID: V-1_040121A SeqNo: 369310

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Acetone	48.05	50	µg/L	100	0	48	70	130	0			JS
Tertiary Amyl Methyl Ether	85.2	10	µg/L	100	0	85.2	70	130	0			
Benzene	90.1	5.0	µg/L	100	0	90.1	81	115	0			
Bromobenzene	85.25	10	µg/L	100	0	85.2	83	118	0			
Bromochloromethane	91.7	10	µg/L	100	0	91.7	70	126	0			
Bromodichloromethane	79.9	10	µg/L	100	0	79.9	72	119	0			
Bromoform	66.15	10	µg/L	100	0	66.2	70	127	0			S
Bromomethane	88.8	10	µg/L	100	0	88.8	70	130	0			
sec-Butylbenzene	92.6	10	µg/L	100	0	92.6	70	130	0			
n-Butylbenzene	83.45	10	µg/L	100	0	83.4	70	130	0			
tert-Butylbenzene	89.55	10	µg/L	100	0	89.6	70	130	0			
Carbon disulfide	77.45	10	µg/L	100	0	77.4	70	130	0			
Carbon tetrachloride	94.35	10	µg/L	100	0	94.4	78	124	0			
Chlorobenzene	89	10	µg/L	100	0	89	80	115	0			
Dibromochloromethane	72.45	10	µg/L	100	0	72.4	70	127	0			
Chloroethane	91.45	25	µg/L	100	0	91.5	70	130	0			
Chloroform	87.4	10	µg/L	100	0	87.4	80	119	0			
Chloromethane	64.9	15	µg/L	100	0	64.9	70	130	0			S
2-Chlorotoluene	87.6	10	µg/L	100	0	87.6	70	130	0			
4-Chlorotoluene	84.9	10	µg/L	100	0	84.9	78	130	0			
1,2-Dibromo-3-chloropropane	62.7	25	µg/L	100	0	62.7	70	130	0			S
1,2-Dibromoethane	93	10	µg/L	100	0	93	70	130	0			
Dibromomethane	91.45	10	µg/L	100	0	91.5	70	129	0			
1,3-Dichlorobenzene	89.45	10	µg/L	100	0	89.4	81	130	0			
1,2-Dichlorobenzene	87.3	10	µg/L	100	0	87.3	80	124	0			

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

026

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.

Work Order: 0401069

Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Matrix Spike - Full List

1,4-Dichlorobenzene	88.45	10	µg/L	100	0	88.4	74	130	0	
Dichlorodifluoromethane	40.95	25	µg/L	100	0	41	70	130	0	S
1,1-Dichloroethane	89.85	10	µg/L	100	0	89.8	83	130	0	
1,2-Dichloroethane	85.2	10	µg/L	100	0	85.2	70	125	0	
1,1-Dichloroethene	100	5.0	µg/L	100	0	100	72	130	0	
cis-1,2-Dichloroethene	85.5	10	µg/L	100	0	85.5	76	125	0	
trans-1,2-Dichloroethene	95.6	10	µg/L	100	0	95.6	77	128	0	
1,2-Dichloropropane	85.65	10	µg/L	100	0	85.7	78	122	0	
1,3-Dichloropropane	78.75	10	µg/L	100	0	78.8	70	124	0	
2,2-Dichloropropane	92.1	10	µg/L	100	0	92.1	73	130	0	
1,1-Dichloropropene	87.1	10	µg/L	100	0	87.1	70	107	0	
cis-1,3-Dichloropropene	79.25	5.0	µg/L	100	0	79.2	70	115	0	
trans-1,3-Dichloropropene	81.05	5.0	µg/L	100	0	81	70	129	0	
Diethyl ether	97.35	25	µg/L	100	0	97.4	70	130	0	
Diisopropyl ether	88.7	10	µg/L	100	0	88.7	70	130	0	
1,4-Dioxane	199.6	250	µg/L	500	0	39.9	70	130	0	JS
Ethyl Tertiary Butyl Ether	93	10	µg/L	100	0	93	70	130	0	
Ethylbenzene	94.8	10	µg/L	100	0	94.8	82	119	0	
Hexachlorobutadiene	86.4	10	µg/L	100	0	86.4	70	130	0	
2-Hexanone	16	50	µg/L	100	0	16	70	130	0	JS
Isopropylbenzene	87.9	10	µg/L	100	0	87.9	72	130	0	
4-Isopropyltoluene	85.85	10	µg/L	100	0	85.8	74	130	0	
2-Butanone	69.45	50	µg/L	100	0	69.4	70	130	0	S
4-Methyl-2-pentanone	86.25	50	µg/L	100	0	86.2	70	130	0	
Methyl tert-butyl ether	122.9	10	µg/L	100	0	123	70	130	0	
Methylene chloride	91.25	25	µg/L	100	0	91.2	70	130	0	
Naphthalene	85.7	25	µg/L	100	0	85.7	70	140	0	
n-Propylbenzene	88.7	10	µg/L	100	0	88.7	71	130	0	
Styrene	89.35	10	µg/L	100	0	89.4	72	123	0	
1,1,1,2-Tetrachloroethane	85.5	10	µg/L	100	0	85.5	83	118	0	
1,1,2,2-Tetrachloroethane	74.8	10	µg/L	100	0	74.8	70	130	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

027

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.

Work Order: 0401069

Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Matrix Spike - Full List

Tetrachloroethene	103.4	10	µg/L	100	0	103	77	123	0
Tetrahydrofuran	75.35	50	µg/L	100	0	75.4	70	130	0
Toluene	95.95	10	µg/L	100	0	96	86	112	0
1,2,4-Trichlorobenzene	81.35	10	µg/L	100	0	81.4	70	133	0
1,2,3-Trichlorobenzene	88.75	10	µg/L	100	0	88.8	70	130	0
1,1,1-Trichloroethane	96.3	10	µg/L	100	0	96.3	78	124	0
1,1,2-Trichloroethane	91.7	10	µg/L	100	0	91.7	70	130	0
Trichloroethene	90.1	10	µg/L	100	0	90.1	83	112	0
Trichlorofluoromethane	101.2	10	µg/L	100	0	101	70	130	0
1,2,3-Trichloropropane	75	10	µg/L	100	0	75	70	130	0
1,2,4-Trimethylbenzene	91	10	µg/L	100	0	91	78	129	0
1,3,5-Trimethylbenzene	90.65	10	µg/L	100	0	90.7	77	132	0
Vinyl chloride	88.65	10	µg/L	100	0	88.6	70	130	0
o-Xylene	100.2	10	µg/L	100	0	100	80	119	0
m,p-Xylene	198.4	10	µg/L	200	0	99.2	70	130	0
Surr: Dibromofluoromethane	123.8	10	µg/L	125	0	99	85	120	0
Surr: 1,2-Dichloroethane-d4	117.1	10	µg/L	125	0	93.6	80	124	0
Surr: Toluene-d8	136.4	10	µg/L	125	0	109	82	112	0
Surr: 4-Bromofluorobenzene	132.9	10	µg/L	125	0	106	77	117	0

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401069
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Matrix Spike Duplicate - Full List

Sample ID 0401069-01Amsdf		Batch ID: R22269		Test Code: SW8260B		Units: µg/L		Analysis Date 1/21/04 8:11:00 PM		Prep Date 1/21/04		
Client ID: MW 6		Run ID: V-1_040121A				SeqNo: 369311						
	QC Sample			QC Spike	Original Sample			Original Sample				
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qual
Acetone	55.55	50	µg/L	100	0	55.6	70	173	48.05	14.5	20	S
Tertiary Amyl Methyl Ether	86.8	10	µg/L	100	0	86.8	70	130	85.2	1.86	20	
Benzene	88.25	5.0	µg/L	100	0	88.2	81	115	90.1	2.07	20	
Bromobenzene	89	10	µg/L	100	0	89	83	118	85.25	4.3	20	
Bromochloromethane	96.2	10	µg/L	100	0	96.2	70	126	91.7	4.79	20	
Bromodichloromethane	80.2	10	µg/L	100	0	80.2	72	119	79.9	0.375	20	
Bromoform	70.7	10	µg/L	100	0	70.7	70	127	66.15	6.65	20	
Bromomethane	83.75	10	µg/L	100	0	83.8	70	141	88.8	5.85	20	
sec-Butylbenzene	91.45	10	µg/L	100	0	91.5	70	130	92.6	1.25	20	
n-Butylbenzene	84.2	10	µg/L	100	0	84.2	70	144	83.45	0.895	20	
tert-Butylbenzene	91.3	10	µg/L	100	0	91.3	70	130	89.55	1.94	20	
Carbon disulfide	74.45	10	µg/L	100	0	74.4	70	141	77.45	3.95	20	
Carbon tetrachloride	91.1	10	µg/L	100	0	91.1	78	124	94.35	3.5	20	
Chlorobenzene	87.95	10	µg/L	100	0	88	80	115	89	1.19	20	
Dibromochloromethane	75.95	10	µg/L	100	0	76	70	127	72.45	4.72	20	
Chloroethane	84.5	25	µg/L	100	0	84.5	70	157	91.45	7.9	20	
Chloroform	88.3	10	µg/L	100	0	88.3	80	119	87.4	1.02	20	
Chloromethane	64.05	15	µg/L	100	0	64	70	158	64.9	1.32	20	S
2-Chlorotoluene	87.25	10	µg/L	100	0	87.2	70	130	87.6	0.4	20	
4-Chlorotoluene	85.2	10	µg/L	100	0	85.2	78	130	84.9	0.353	20	
1,2-Dibromo-3-chloropropane	76.55	25	µg/L	100	0	76.6	70	130	62.7	19.9	20	
1,2-Dibromoethane	93.35	10	µg/L	100	0	93.4	70	130	93	0.376	20	
Dibromomethane	94	10	µg/L	100	0	94	70	129	91.45	2.75	20	
1,3-Dichlorobenzene	91	10	µg/L	100	0	91	81	130	89.45	1.72	20	
1,2-Dichlorobenzene	90.45	10	µg/L	100	0	90.4	80	124	87.3	3.54	20	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

029

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401069
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Matrix Spike Duplicate - Full List

1,4-Dichlorobenzene	88.5	10	µg/L	100	0	88.5	74	130	88.45	0.0565	20	
Dichlorodifluoromethane	35.9	25	µg/L	100	0	35.9	70	183	40.95	13.1	20	S
1,1-Dichloroethane	89.4	10	µg/L	100	0	89.4	83	130	89.85	0.502	20	
1,2-Dichloroethane	87.9	10	µg/L	100	0	87.9	70	125	85.2	3.12	20	
1,1-Dichloroethene	100.9	5.0	µg/L	100	0	101	72	130	100	0.846	20	
cis-1,2-Dichloroethene	87.05	10	µg/L	100	0	87	76	125	85.5	1.8	20	
trans-1,2-Dichloroethene	96.05	10	µg/L	100	0	96	77	128	95.6	0.47	20	
1,2-Dichloropropane	85.5	10	µg/L	100	0	85.5	78	122	85.65	0.175	20	
1,3-Dichloropropane	80.1	10	µg/L	100	0	80.1	40	124	78.75	1.7	20	
2,2-Dichloropropane	82.35	10	µg/L	100	0	82.4	73	150	92.1	11.2	20	
1,1-Dichloropropene	86.95	10	µg/L	100	0	87	70	107	87.1	0.172	20	
cis-1,3-Dichloropropene	79.95	5.0	µg/L	100	0	80	70	115	79.25	0.879	20	
trans-1,3-Dichloropropene	84.95	5.0	µg/L	100	0	85	70	129	81.05	4.7	20	
Diethyl ether	107.2	25	µg/L	100	0	107	70	130	97.35	9.63	20	
Diisopropyl ether	88.55	10	µg/L	100	0	88.6	70	130	88.7	0.169	20	
1,4-Dioxane	589	250	µg/L	500	0	118	70	130	199.6	98.8	20	R
Ethyl Tertiary Butyl Ether	92.1	10	µg/L	100	0	92.1	70	130	93	0.972	20	
Ethylbenzene	93.15	10	µg/L	100	0	93.2	82	119	94.8	1.76	20	
Hexachlorobutadiene	94.25	10	µg/L	100	0	94.2	70	149	86.4	8.69	20	
2-Hexanone	25.1	50	µg/L	100	0	25.1	70	130	16	44.3	20	JS R
Isopropylbenzene	89.25	10	µg/L	100	0	89.2	72	134	87.9	1.52	20	
4-Isopropyltoluene	86.7	10	µg/L	100	0	86.7	74	130	85.85	0.985	20	
2-Butanone	72.65	50	µg/L	100	0	72.7	70	130	69.45	4.5	20	
4-Methyl-2-pentanone	85.4	50	µg/L	100	0	85.4	70	130	86.25	0.99	20	
Methyl tert-butyl ether	122.4	10	µg/L	100	0	122	70	141	122.9	0.367	20	
Methylene chloride	88.25	25	µg/L	100	0	88.2	70	141	91.25	3.34	20	
Naphthalene	88.7	25	µg/L	100	0	88.7	70	140	85.7	3.44	20	
n-Propylbenzene	89.55	10	µg/L	100	0	89.6	71	136	88.7	0.954	20	
Styrene	88.8	10	µg/L	100	0	88.8	72	123	89.35	0.617	20	
1,1,1,2-Tetrachloroethane	82.7	10	µg/L	100	0	82.7	83	118	85.5	3.33	20	S
1,1,2,2-Tetrachloroethane	78.65	10	µg/L	100	0	78.6	70	130	74.8	5.02	20	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

030

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.

Work Order: 0401069

Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Matrix Spike Duplicate - Full List

Tetrachloroethene	100.7	10	µg/L	100	0	101	77	123	103.4	2.74	20
Tetrahydrofuran	89.8	50	µg/L	100	0	89.8	70	130	75.35	17.5	20
Toluene	95.3	10	µg/L	100	0	95.3	86	112	95.95	0.68	20
1,2,4-Trichlorobenzene	95.55	10	µg/L	100	0	95.6	70	130	81.35	16.1	20
1,2,3-Trichlorobenzene	93.85	10	µg/L	100	0	93.8	70	130	88.75	5.59	20
1,1,1-Trichloroethane	94.7	10	µg/L	100	0	94.7	78	124	96.3	1.68	20
1,1,2-Trichloroethane	95.55	10	µg/L	100	0	95.6	70	130	91.7	4.11	20
Trichloroethene	87.2	10	µg/L	100	0	87.2	83	112	90.1	3.27	20
Trichlorofluoromethane	98.2	10	µg/L	100	0	98.2	70	130	101.2	3.01	20
1,2,3-Trichloropropane	79.4	10	µg/L	100	0	79.4	70	130	75	5.7	20
1,2,4-Trimethylbenzene	89.25	10	µg/L	100	0	89.2	78	129	91	1.94	20
1,3,5-Trimethylbenzene	90.8	10	µg/L	100	0	90.8	77	130	90.65	0.165	20
Vinyl chloride	86.05	10	µg/L	100	0	86	70	130	88.65	2.98	20
o-Xylene	93.65	10	µg/L	100	0	93.6	80	119	100.2	6.71	20
m,p-Xylene	194.1	10	µg/L	200	0	97	70	143	198.4	2.19	20
Surr: Dibromofluoromethane	121.3	10	µg/L	125	0	97	85	120	0	0	0
Surr: 1,2-Dichloroethane-d4	120	10	µg/L	125	0	96	80	124	0	0	0
Surr: Toluene-d8	129.4	10	µg/L	125	0	104	82	112	0	0	0
Surr: 4-Bromofluorobenzene	129.8	10	µg/L	125	0	104	77	117	0	0	0

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

031

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401069
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Laboratory Control Spike - Full List

Sample ID	Icsf-01/21/04	Batch ID: R22269	Test Code: SW8260B	Units: µg/L	Analysis Date	1/21/04 9:49:00 AM	Prep Date	1/21/04				
Client ID:		Run ID: V-1_040121A			SeqNo:	369319						
	QC Sample		QC Spike	Original Sample				Original Sample				
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Acetone	14.11	10	µg/L	20	0	70.6	70	130	0			
Tertiary Amyl Methyl Ether	20.08	2.0	µg/L	20	0	100	70	130	0			
Benzene	18.7	1.0	µg/L	20	0	93.5	81	115	0			
Bromobenzene	17.99	2.0	µg/L	20	0	90	83	118	0			
Bromochloromethane	20.84	2.0	µg/L	20	0	104	70	126	0			
Bromodichloromethane	18.16	2.0	µg/L	20	0	90.8	72	119	0			
Bromoform	19.45	2.0	µg/L	20	0	97.3	70	127	0			
Bromomethane	17.64	2.0	µg/L	20	0	88.2	70	130	0			
sec-Butylbenzene	17.75	2.0	µg/L	20	0	88.8	70	130	0			
n-Butylbenzene	16.5	2.0	µg/L	20	0	82.5	70	130	0			
tert-Butylbenzene	17.27	2.0	µg/L	20	0	86.4	70	130	0			
Carbon disulfide	15.51	2.0	µg/L	20	0	77.6	70	130	0			
Carbon tetrachloride	19.62	2.0	µg/L	20	0	98.1	78	124	0			
Chlorobenzene	18.73	2.0	µg/L	20	0	93.6	80	115	0			
Dibromochloromethane	17.88	2.0	µg/L	20	0	89.4	70	127	0			
Chloroethane	16.69	5.0	µg/L	20	0	83.4	70	130	0			
Chloroform	18.95	2.0	µg/L	20	0	94.8	80	119	0			
Chloromethane	13.99	3.0	µg/L	20	0	70	70	130	0			S
2-Chlorotoluene	17.07	2.0	µg/L	20	0	85.4	70	130	0			
4-Chlorotoluene	16.86	2.0	µg/L	20	0	84.3	78	130	0			
1,2-Dibromo-3-chloropropane	18.76	5.0	µg/L	20	0	93.8	70	130	0			
1,2-Dibromoethane	22.04	2.0	µg/L	20	0	110	70	130	0			
Dibromomethane	21.5	2.0	µg/L	20	0	108	70	129	0			
1,3-Dichlorobenzene	18.49	2.0	µg/L	20	0	92.5	81	130	0			
1,2-Dichlorobenzene	18.66	2.0	µg/L	20	0	93.3	80	124	0			

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

032

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.

Work Order: 0401069

Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Laboratory Control Spike - Full List

1,4-Dichlorobenzene	18.16	2.0	µg/L	20	0	90.8	74	130	0	
Dichlorodifluoromethane	9.6	5.0	µg/L	20	0	48	10	130	0	
1,1-Dichloroethane	18.68	2.0	µg/L	20	0	93.4	83	134	0	
1,2-Dichloroethane	20.35	2.0	µg/L	20	0	102	70	125	0	
1,1-Dichloroethene	20.25	1.0	µg/L	20	0	101	72	130	0	
cis-1,2-Dichloroethene	18.68	2.0	µg/L	20	0	93.4	76	125	0	
trans-1,2-Dichloroethene	19.07	2.0	µg/L	20	0	95.4	77	128	0	
1,2-Dichloropropane	18.41	2.0	µg/L	20	0	92	78	122	0	
1,3-Dichloropropane	17.71	2.0	µg/L	20	0	88.6	70	124	0	
2,2-Dichloropropane	21.26	2.0	µg/L	20	0	106	73	130	0	
1,1-Dichloropropene	17.41	2.0	µg/L	20	0	87	70	107	0	
cis-1,3-Dichloropropene	17.9	1.0	µg/L	20	0	89.5	70	115	0	
trans-1,3-Dichloropropene	18.83	1.0	µg/L	20	0	94.2	70	129	0	
Diethyl ether	23.49	5.0	µg/L	20	0	117	70	130	0	
Diisopropyl ether	18.31	2.0	µg/L	20	0	91.6	70	130	0	
1,4-Dioxane	129.5	50	µg/L	100	0	130	70	130	0	
Ethyl Tertiary Butyl Ether	20.55	2.0	µg/L	20	0	103	70	130	0	
Ethylbenzene	18.94	2.0	µg/L	20	0	94.7	82	119	0	
Hexachlorobutadiene	20.09	2.0	µg/L	20	0	100	70	130	0	
2-Hexanone	9.58	10	µg/L	20	0	47.9	70	130	0	JS
Isopropylbenzene	17.24	2.0	µg/L	20	0	86.2	72	130	0	
4-Isopropyltoluene	17.02	2.0	µg/L	20	0	85.1	74	130	0	
2-Butanone	20.7	10	µg/L	20	0	104	70	130	0	
4-Methyl-2-pentanone	21.52	10	µg/L	20	0	108	70	130	0	
Methyl tert-butyl ether	26.14	2.0	µg/L	20	0	131	70	130	0	S
Methylene chloride	18.6	5.0	µg/L	20	0	93	70	141	0	
Naphthalene	19.55	5.0	µg/L	20	0	97.8	70	130	0	
n-Propylbenzene	17.05	2.0	µg/L	20	0	85.2	71	130	0	
Styrene	18.6	2.0	µg/L	20	0	93	72	123	0	
1,1,1,2-Tetrachloroethane	18.88	2.0	µg/L	20	0	94.4	83	118	0	
1,1,2,2-Tetrachloroethane	18.1	2.0	µg/L	20	0	90.5	70	130	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

033

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

A

CLIENT: Mactec E & C, Inc. Client Sample ID: MW 6
 Lab Order: 0401069 Tag Number:
 Project: 3651031003 Taunton Parcel 6A Collection Date: 1/14/04
 Lab ID: 0401069-01B Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EXTRACTABLE PETROLEUM HYDROCARBONS MAEPH						Analyst: RKK
C9-C18 Aliphatic Hydrocarbons	ND	110		µg/L	1	1/22/04 2:27:00 PM
C19-C36 Aliphatic Hydrocarbons	ND	110		µg/L	1	1/22/04 2:27:00 PM
C11-C22 Aromatic Hydrocarbons	280	110		µg/L	1	1/22/04 2:27:00 PM
Naphthalene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
2-Methylnaphthalene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Acenaphthylene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Acenaphthene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Fluorene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Phenanthrene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Anthracene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Fluoranthene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Pyrene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Benz(a)anthracene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Chrysene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Benzo(b)fluoranthene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Benzo(k)fluoranthene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Benzo(a)pyrene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Dibenz(a,h)anthracene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Indeno(1,2,3-cd)pyrene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Benzo(g,h,i)perylene	ND	1.1		µg/L	1	1/22/04 2:27:00 PM
Surr: 1-Chlorooctadecane	48.3	40-140		%REC	1	1/22/04 2:27:00 PM
Surr: 2-Bromonaphthalene	116	40-140		%REC	1	1/22/04 2:27:00 PM
Surr: 2-Fluorobiphenyl	107	40-140		%REC	1	1/22/04 2:27:00 PM
Surr: o-Terphenyl	107	40-140		%REC	1	1/22/04 2:27:00 PM

Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. EPH: C11-C22 Aromatic Hydrocarbons exclude the concentration of target PAH analytes. VPH: C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range. C9-C12 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range and concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION

Were all QA/QC procedures required by the VPH or EPH method followed: ☒ Yes ☐ No - If No, See Case Narrative
 Were all performance/acceptance standards for required QA/QC procedures achieved: ☒ Yes ☐ No - If No, See Case Narrative
 Were any significant modifications made to the method as specified in section 11.3: ☐ No ☒ Yes - Details enclosed

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

SIGNATURE: Nancy Stewart
 PRINTED NAME: Nancy Stewart

DATE: 1-30-04
 POSITION: Laboratory Director (or designee)

Qualifiers: RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits E - Value above quantitation range
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits # - See Case Narrative
 B - Analyte detected in the associated Method Blank H - Method prescribed holding time exceeded

CLIENT: Mactec E & C, Inc.
 Work Order: 0401069
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT
 Laboratory Control Spike - Full List

Tetrachloroethene	22.24	2.0	µg/L	20	0	111	77	123	0
Tetrahydrofuran	22.16	10	µg/L	20	0	111	70	130	0
Toluene	19.73	2.0	µg/L	20	0	98.6	86	112	0
1,2,4-Trichlorobenzene	21.4	2.0	µg/L	20	0	107	70	130	0
1,2,3-Trichlorobenzene	19.7	2.0	µg/L	20	0	98.5	70	130	0
1,1,1-Trichloroethane	19.94	2.0	µg/L	20	0	99.7	78	124	0
1,1,2-Trichloroethane	20.9	2.0	µg/L	20	0	104	70	133	0
Trichloroethene	18.56	2.0	µg/L	20	0	92.8	83	112	0
Trichlorofluoromethane	21.28	2.0	µg/L	20	0	106	70	130	0
1,2,3-Trichloropropane	18.31	2.0	µg/L	20	0	91.6	70	130	0
1,2,4-Trimethylbenzene	17.68	2.0	µg/L	20	0	88.4	78	129	0
1,3,5-Trimethylbenzene	17.39	2.0	µg/L	20	0	87	77	130	0
Vinyl chloride	17.53	2.0	µg/L	20	0	87.6	70	130	0
o-Xylene	19.26	2.0	µg/L	20	0	96.3	80	119	0
m,p-Xylene	39.76	2.0	µg/L	40	0	99.4	70	130	0
Surr: Dibromofluoromethane	25.9	2.0	µg/L	25	0	104	85	120	0
Surr: 1,2-Dichloroethane-d4	26.85	2.0	µg/L	25	0	107	80	124	0
Surr: Toluene-d8	26.02	2.0	µg/L	25	0	104	82	112	0
Surr: 4-Bromofluorobenzene	28.3	2.0	µg/L	25	0	113	77	117	0

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.
Lab Order: 0401069
Project: 3651031003 Taunton Parcel 6A
Lab ID: 0401069-02B

Client Sample ID: MW 7
Tag Number:
Collection Date: 1/14/04
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EXTRACTABLE PETROLEUM HYDROCARBONS MAEPH						Analyst: RKK
C9-C18 Aliphatic Hydrocarbons	ND	140		µg/L-dry	1	1/22/04 2:58:00 PM
C19-C36 Aliphatic Hydrocarbons	ND	140		µg/L-dry	1	1/22/04 2:58:00 PM
C11-C22 Aromatic Hydrocarbons	ND	140		µg/L-dry	1	1/22/04 2:58:00 PM
Naphthalene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
2-Methylnaphthalene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Acenaphthylene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Acenaphthene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Fluorene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Phenanthrene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Anthracene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Fluoranthene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Pyrene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Benz(a)anthracene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Chrysene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Benzo(b)fluoranthene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Benzo(k)fluoranthene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Benzo(a)pyrene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Dibenz(a,h)anthracene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Indeno(1,2,3-cd)pyrene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Benzo(g,h,i)perylene	ND	1.4		µg/L-dry	1	1/22/04 2:58:00 PM
Surr: 1-Chlorooctadecane	36.3	40-140	S	%REC	1	1/22/04 2:58:00 PM
Surr: 2-Bromonaphthalene	108	40-140		%REC	1	1/22/04 2:58:00 PM
Surr: 2-Fluorobiphenyl	99.4	40-140		%REC	1	1/22/04 2:58:00 PM
Surr: o-Terphenyl	63.5	40-140		%REC	1	1/22/04 2:58:00 PM

Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. EPH: C11-C22 Aromatic Hydrocarbons exclude the concentration of target PAH analytes. VPH: C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range. C9-C12 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range and concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION

Were all QA/QC procedures required by the VPH or EPH method followed:

☒ Yes ☐ No - If No, See Case Narrative

Were all performance/acceptance standards for required QA/QC procedures achieved:

☐ Yes ☒ No - If No, See Case Narrative

Were any significant modifications made to the method as specified in section 11.3:

☐ No ☒ Yes - Details enclosed

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

SIGNATURE: Nancy Stewart
PRINTED NAME: Nancy Stewart

DATE: 1-30-04
POSITION: Laboratory Director (or designee)

Qualifiers: RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits E - Value above quantitation range

J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits # - See Case Narrative

B - Analyte detected in the associated Method Blank H - Method prescribed holding time exceeded

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.
 Lab Order: 0401069
 Project: 3651031003 Taunton Parcel 6A
 Lab ID: 0401069-03B

Client Sample ID: MW 7-DUP
 Tag Number:
 Collection Date: 1/14/04
 Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EXTRACTABLE PETROLEUM HYDROCARBONS MAEPH						Analyst: RKK
C9-C18 Aliphatic Hydrocarbons	ND	110		µg/L	1	1/22/04 3:35:00 PM
C19-C36 Aliphatic Hydrocarbons	ND	110		µg/L	1	1/22/04 3:35:00 PM
C11-C22 Aromatic Hydrocarbons	ND	110		µg/L	1	1/22/04 3:35:00 PM
Naphthalene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
2-Methylnaphthalene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Acenaphthylene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Acenaphthene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Fluorene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Phenanthrene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Anthracene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Fluoranthene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Pyrene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Benz(a)anthracene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Chrysene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Benzo(b)fluoranthene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Benzo(k)fluoranthene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Benzo(a)pyrene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Dibenz(a,h)anthracene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Indeno(1,2,3-cd)pyrene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Benzo(g,h,i)perylene	ND	1.1		µg/L	1	1/22/04 3:35:00 PM
Surr: 1-Chlorooctadecane	47.5	40-140		%REC	1	1/22/04 3:35:00 PM
Surr: 2-Bromonaphthalene	112	40-140		%REC	1	1/22/04 3:35:00 PM
Surr: 2-Fluorobiphenyl	104	40-140		%REC	1	1/22/04 3:35:00 PM
Surr: o-Terphenyl	95.6	40-140		%REC	1	1/22/04 3:35:00 PM

Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. EPH: C11-C22 Aromatic Hydrocarbons exclude the concentration of target PAH analytes. VPH: C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range. C9-C12 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range and concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION

Were all QA/QC procedures required by the VPH or EPH method followed:

☒ Yes ☐ No - If No, See Case Narrative

Were all performance/acceptance standards for required QA/QC procedures achieved:

☒ Yes ☐ No - If No, See Case Narrative

Were any significant modifications made to the method as specified in section 11.3:

☐ No ☒ Yes - Details enclosed

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

SIGNATURE:



DATE:

1-30-04

PRINTED NAME: Nancy Stewart

POSITION: Laboratory Director (or designee)

Qualifiers: RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

E - Value above quantitation range

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

- See Case Narrative

B - Analyte detected in the associated Method Blank

H - Method prescribed holding time exceeded

AMRO Environmental Laboratories Corp.

Date: 26-Jan-04

CLIENT: Mactec E & C, Inc.
Lab Order: 0401069
Project: 3651031003 Taunton Parcel 6A
Lab ID: 0401069-04B

Client Sample ID: MW 9
Tag Number:
Collection Date: 1/14/04
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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EXTRACTABLE PETROLEUM HYDROCARBONS MAEPH

Analyst: RKK

C9-C18 Aliphatic Hydrocarbons	ND	110		µg/L	1	1/22/04 4:06:00 PM
C19-C36 Aliphatic Hydrocarbons	ND	110		µg/L	1	1/22/04 4:06:00 PM
C11-C22 Aromatic Hydrocarbons	ND	110		µg/L	1	1/22/04 4:06:00 PM
Naphthalene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
2-Methylnaphthalene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Acenaphthylene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Acenaphthene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Fluorene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Phenanthrene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Anthracene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Fluoranthene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Pyrene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Benz(a)anthracene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Chrysene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Benzo(b)fluoranthene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Benzo(k)fluoranthene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Benzo(a)pyrene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Dibenz(a,h)anthracene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Indeno(1,2,3-cd)pyrene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Benzo(g,h,i)perylene	ND	1.1		µg/L	1	1/22/04 4:06:00 PM
Surr: 1-Chlorooctadecane	56.1	40-140		%REC	1	1/22/04 4:06:00 PM
Surr: 2-Bromonaphthalene	105	40-140		%REC	1	1/22/04 4:06:00 PM
Surr: 2-Fluorobiphenyl	98.2	40-140		%REC	1	1/22/04 4:06:00 PM
Surr: o-Terphenyl	105	40-140		%REC	1	1/22/04 4:06:00 PM

Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. EPH: C11-C22 Aromatic Hydrocarbons exclude the concentration of target PAH analytes. VPH: C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range. C9-C12 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range and concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION

Were all QA/QC procedures required by the VPH or EPH method followed: ☒ Yes ☐ No - If No, See Case Narrative
Were all performance/acceptance standards for required QA/QC procedures achieved: ☒ Yes ☐ No - If No, See Case Narrative
Were any significant modifications made to the method as specified in section 11.3: ☐ No ☒ Yes - Details enclosed

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

SIGNATURE: Nancy Stewart
PRINTED NAME: Nancy Stewart

DATE: 1-30-04
POSITION: Laboratory Director (or designee)

Qualifiers: RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits E - Value above quantitation range
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits # - See Case Narrative
B - Analyte detected in the associated Method Blank H - Method prescribed holding time exceeded

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401069
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Method Blank

Sample ID	MB-10940	Batch ID: 10940	Test Code: MAEPH	Units: µg/L	Analysis Date	1/22/04 12:53:00 PM	Prep Date	1/21/04				
Client ID:		Run ID: SV-2_040122A	SeqNo: 369711									
	QC Sample		QC Spike	Original Sample				Original Sample				
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
C9-C18 Aliphatic Hydrocarbons	ND	100	µg/L									
C19-C36 Aliphatic Hydrocarbons	ND	100	µg/L									
C11-C22 Aromatic Hydrocarbons	ND	100	µg/L									
Naphthalene	ND	1.0	µg/L									
2-Methylnaphthalene	ND	1.0	µg/L									
Acenaphthylene	ND	1.0	µg/L									
Acenaphthene	ND	1.0	µg/L									
Fluorene	ND	1.0	µg/L									
Phenanthrene	ND	1.0	µg/L									
Anthracene	ND	1.0	µg/L									
Fluoranthene	ND	1.0	µg/L									
Pyrene	ND	1.0	µg/L									
Benz(a)anthracene	ND	1.0	µg/L									
Chrysene	ND	1.0	µg/L									
Benzo(b)fluoranthene	ND	1.0	µg/L									
Benzo(k)fluoranthene	ND	1.0	µg/L									
Benzo(a)pyrene	ND	1.0	µg/L									
Dibenz(a,h)anthracene	ND	1.0	µg/L									
Indeno(1,2,3-cd)pyrene	ND	1.0	µg/L									
Benzo(g,h,i)perylene	ND	1.0	µg/L									
Surr: 1-Chlorooctadecane	11.03	1.0	µg/L	20	0	55.2	40	140	0			
Surr: 2-Bromonaphthalene	22.72	1.0	µg/L	20	0	114	40	140	0			
Surr: 2-Fluorobiphenyl	20.42	1.0	µg/L	20	0	102	40	140	0			
Surr: o-Terphenyl	22.46	1.0	µg/L	20	0	112	40	140	0			

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

039

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401069
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Sample Duplicate

Sample ID	0401069-04BDUP	Batch ID:	10940	Test Code:	MAEPH	Units:	µg/L	Analysis Date	1/22/04 5:09:00 PM	Prep Date	1/21/04	
Client ID:	MW 9	Run ID:	SV-2_040122A	SeqNo:	369719							
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
C9-C18 Aliphatic Hydrocarbons	ND	110	µg/L	0	0	0	0	0	0	0	50	
C19-C36 Aliphatic Hydrocarbons	ND	110	µg/L	0	0	0	0	0	0	0	50	
C11-C22 Aromatic Hydrocarbons	ND	110	µg/L	0	0	0	0	0	0	0	50	
Naphthalene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
2-Methylnaphthalene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Acenaphthylene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Acenaphthene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Fluorene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Phenanthrene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Anthracene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Fluoranthene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Pyrene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Benz(a)anthracene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Chrysene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Benzo(b)fluoranthene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Benzo(k)fluoranthene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Benzo(a)pyrene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Dibenz(a,h)anthracene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Indeno(1,2,3-cd)pyrene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Benzo(g,h,i)perylene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Surr: 1-Chlorooctadecane	19.34	1.1	µg/L	21.28	0	90.9	40	140	0	0	0	
Surr: 2-Bromonaphthalene	24.81	1.1	µg/L	21.28	0	117	40	140	0	0	0	
Surr: 2-Fluorobiphenyl	22.31	1.1	µg/L	21.28	0	105	40	140	0	0	0	
Surr: o-Terphenyl	24.9	1.1	µg/L	21.28	0	117	40	140	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

040

AMRO Environmental Laboratories Corp.

Date: 28-Jan-04

CLIENT: Mactec E & C, Inc.
Work Order: 0401069
Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID	0401069-04BMS	Batch ID:	10940	Test Code:	MAEPH	Units:	µg/L	Analysis Date	1/22/04 4:38:00 PM	Prep Date	1/21/04	
Client ID:	MW 9	Run ID:	SV-2_040122A	SeqNo:	369718							
	QC Sample			QC Spike	Original Sample				Original Sample			
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qual
n-Eicosane	20.96	1.1	µg/L	27.78	0	75.4	40	140	0			
n-Nonadecane	21.47	1.1	µg/L	27.78	0	77.3	40	140	0			
n-Nonane	16.29	1.1	µg/L	27.78	0	58.6	40	140	0			
n-Octacosane	19.64	1.1	µg/L	27.78	0	70.7	40	140	0			
n-Tetradecane	18.42	1.1	µg/L	27.78	0	66.3	40	140	0			
Naphthalene	26.02	1.1	µg/L	27.78	0	93.7	40	140	0			
Acenaphthene	28.79	1.1	µg/L	27.78	0	104	40	140	0			
Anthracene	33.02	1.1	µg/L	27.78	0	119	40	140	0			
Pyrene	33.36	1.1	µg/L	27.78	0	120	40	140	0			
Chrysene	31.46	1.1	µg/L	27.78	0	113	40	140	0			
Surr: 1-Chlorooctadecane	14.34	1.1	µg/L	22.22	0	64.5	40	140	0			
Surr: 2-Bromonaphthalene	28.13	1.1	µg/L	22.22	0	127	40	140	0			
Surr: 2-Fluorobiphenyl	25.29	1.1	µg/L	22.22	0	114	40	140	0			
Surr: o-Terphenyl	25.92	1.1	µg/L	22.22	0	117	40	140	0			

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

041

AMRO Environmental Laboratories Corp.

Date: 07-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310133
 Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID	0310133-01CMS	Batch ID:	10388	Test Code:	SW7421	Units:	µg/L	Analysis Date	10/23/03 10:37:41 PM	Prep Date	10/22/03	
Client ID:	ECE MW3			Run ID:	GFAA-6000_031023B			SeqNo:	352331			
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Lead	46.27	5.0	µg/L	50	2.834	86.9	75	125	0			

Sample ID	0310133-01CMSD	Batch ID:	10388	Test Code:	SW7421	Units:	µg/L	Analysis Date	10/23/03 10:46:33 PM	Prep Date	10/22/03	
Client ID:	ECE MW3			Run ID:	GFAA-6000_031023B			SeqNo:	352332			
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Lead	46.02	5.0	µg/L	50	2.834	86.4	75	125	46.27	0.535	20	

Sample ID	0310133-01CMS	Batch ID:	10391	Test Code:	SW7041	Units:	µg/L	Analysis Date	10/27/03 11:39:02 PM	Prep Date	10/22/03	
Client ID:	ECE MW3			Run ID:	GFAA-4100_031027B			SeqNo:	352785			
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Antimony	52.54	5.0	µg/L	50.1	0	105	75	125	0			

Sample ID	0310133-01CMSD	Batch ID:	10391	Test Code:	SW7041	Units:	µg/L	Analysis Date	10/27/03 11:47:59 PM	Prep Date	10/22/03	
Client ID:	ECE MW3			Run ID:	GFAA-4100_031027B			SeqNo:	352786			
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Antimony	53.33	5.0	µg/L	50.1	0	106	75	125	52.54	1.5	20	

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
 NA - Not applicable where J values or ND results occur

AMRO Environmental Laboratories Corp.

Date: 07-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310133
 Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID	0310133-01CMS	Batch ID:	10387	Test Code:	SW7060A	Units:	µg/L	Analysis Date	10/23/03 10:37:41 PM	Prep Date	10/22/03	
Client ID:	ECE MW3			Run ID:	GFAA-6000_031023A			SeqNo:	352294			
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Arsenic	62.23	5.0	µg/L	50	3.238	118	75	125	0			

Sample ID	0310133-01CMSD	Batch ID:	10387	Test Code:	SW7060A	Units:	µg/L	Analysis Date	10/23/03 10:46:33 PM	Prep Date	10/22/03	
Client ID:	ECE MW3			Run ID:	GFAA-6000_031023A			SeqNo:	352295			
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Arsenic	61.68	5.0	µg/L	50	3.238	117	75	125	62.23	0.886	20	

Sample ID	0310133-01CMS	Batch ID:	10341	Test Code:	SW7470A	Units:	µg/L	Analysis Date	10/21/03 1:22:52 PM	Prep Date	10/21/03	
Client ID:	ECE MW3			Run ID:	HG-FIMS_031021A			SeqNo:	350812			
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Mercury	4.059	0.20	µg/L	4	0	101	75	125	0			

Sample ID	0310133-01CMSD	Batch ID:	10341	Test Code:	SW7470A	Units:	µg/L	Analysis Date	10/21/03 1:26:50 PM	Prep Date	10/21/03	
Client ID:	ECE MW3			Run ID:	HG-FIMS_031021A			SeqNo:	350813			
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Mercury	4.237	0.20	µg/L	4	0	106	75	125	4.059	4.28	20	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 07-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310133
 Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID	0310133-01CMS	Batch ID:	10353	Test Code:	SW6010B	Units:	µg/L	Analysis Date	10/22/03 7:05:33 PM	Prep Date	10/22/03	
Client ID:	ECE MW3	Run ID:	ICP-OPTIMA_031022C	SeqNo:	351235							
	QC Sample			QC Spike	Original Sample				Original Sample			
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Barium	4272	200	µg/L	4000	21.83	106	75	125	0			
Beryllium	812.6	4.0	µg/L	800	0	102	75	125	0			
Cadmium	843.8	5.0	µg/L	800	0	105	75	125	0			
Chromium	4077	10	µg/L	4000	2.456	102	75	125	0			
Nickel	4230	40	µg/L	4000	0	106	75	125	0			
Silver	411.1	7.0	µg/L	400	2.849	102	75	125	0			
Vanadium	4089	50	µg/L	4000	4.549	102	75	125	0			
Zinc	4270	20	µg/L	4000	14.16	106	75	125	0			

Sample ID	0310133-01CMSD	Batch ID:	10353	Test Code:	SW6010B	Units:	µg/L	Analysis Date	10/22/03 7:11:02 PM	Prep Date	10/22/03	
Client ID:	ECE MW3	Run ID:	ICP-OPTIMA_031022C	SeqNo:	351236							
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Barium	4294	200	µg/L	4000	21.83	107	75	125	4272	0.523	20	
Beryllium	819.5	4.0	µg/L	800	0	102	75	125	812.6	0.848	20	
Cadmium	848.6	5.0	µg/L	800	0	106	75	125	843.8	0.575	20	
Chromium	4092	10	µg/L	4000	2.456	102	75	125	4077	0.364	20	
Nickel	4256	40	µg/L	4000	0	106	75	125	4230	0.613	20	
Silver	412.7	7.0	µg/L	400	2.849	102	75	125	411.1	0.377	20	
Vanadium	4116	50	µg/L	4000	4.549	103	75	125	4089	0.663	20	
Zinc	4292	20	µg/L	4000	14.16	107	75	125	4270	0.5	20	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 07-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310133
 Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Method Blank

Sample ID MB-10388	Batch ID: 10388	Test Code: SW7421	Units: µg/L	Analysis Date 10/23/03 7:56:00 PM	Prep Date 10/22/03
Client ID:		Run ID: GFAA-6000_031023B		SeqNo: 352314	
Analyte	QC Sample Result	RL	Units	QC Spike Original Sample Amount Result %REC	Original Sample or MS Result %RPD RPDLimit Qua
Lead	ND	5.0	µg/L		
Sample ID MB-10391	Batch ID: 10391	Test Code: SW7041	Units: µg/L	Analysis Date 10/27/03 9:33:02 PM	Prep Date 10/22/03
Client ID:		Run ID: GFAA-4100_031027B		SeqNo: 352773	
Analyte	QC Sample Result	RL	Units	QC Spike Original Sample Amount Result %REC	Original Sample or MS Result %RPD RPDLimit Qua
Antimony	ND	5.0	µg/L		
Sample ID MB-10389	Batch ID: 10389	Test Code: SW7740	Units: µg/L	Analysis Date 10/23/03 7:56:00 PM	Prep Date 10/22/03
Client ID:		Run ID: GFAA-6000_031023C		SeqNo: 352386	
Analyte	QC Sample Result	RL	Units	QC Spike Original Sample Amount Result %REC	Original Sample or MS Result %RPD RPDLimit Qua
Selenium	ND	5.0	µg/L		
Sample ID MB-10390	Batch ID: 10390	Test Code: SW7841	Units: µg/L	Analysis Date 10/23/03 7:56:00 PM	Prep Date 10/22/03
Client ID:		Run ID: GFAA-6000_031023D		SeqNo: 352413	
Analyte	QC Sample Result	RL	Units	QC Spike Original Sample Amount Result %REC	Original Sample or MS Result %RPD RPDLimit Qua
Thallium	ND	5.0	µg/L		

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 07-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310133
 Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Method Blank

Sample ID	MB-10353	Batch ID: 10353	Test Code: SW6010B	Units: µg/L	Analysis Date	10/22/03 5:39:41 PM	Prep Date	10/22/03				
Client ID:			Run ID: ICP-OPTIMA_031022C		SeqNo:	351218						
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Barium	ND	200	µg/L									
Beryllium	ND	4.0	µg/L									
Cadmium	ND	5.0	µg/L									
Chromium	1.356	10	µg/L									J
Nickel	ND	40	µg/L									
Silver	3.336	7.0	µg/L									J
Vanadium	1.003	50	µg/L									J
Zinc	5.084	20	µg/L									J

Sample ID	MB-10387	Batch ID: 10387	Test Code: SW7060A	Units: µg/L	Analysis Date	10/23/03 7:56:00 PM	Prep Date	10/22/03				
Client ID:			Run ID: GFAA-6000_031023A		SeqNo:	352278						
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Arsenic	ND	5.0	µg/L									

Sample ID	MB-10341	Batch ID: 10341	Test Code: SW7470A	Units: µg/L	Analysis Date	10/21/03 1:03:02 PM	Prep Date	10/21/03				
Client ID:			Run ID: HG-FIMS_031021A		SeqNo:	350807						
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Mercury	ND	0.20	µg/L									

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 07-Nov-03

CLIENT: Mactec E & C, Inc.**Client Sample ID:** WES MW3**Lab Order:** 0310133**Project:** 3651031003/03 Taunton - Parcel GA**Collection Date:** 10/16/03**Lab ID:** 0310133-05C**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ICP METALS TOTAL SW-846						
	SW6010B					Analyst: SJC
Barium	ND	200		µg/L	1	10/22/03 7:40:40 PM
Beryllium	ND	5.0		µg/L	1	10/22/03 7:40:40 PM
Cadmium	ND	5.0		µg/L	1	10/22/03 7:40:40 PM
Chromium	30	10		µg/L	1	10/22/03 7:40:40 PM
Nickel	41	40		µg/L	1	10/22/03 7:40:40 PM
Silver	ND	7.0		µg/L	1	10/22/03 7:40:40 PM
Vanadium	ND	50		µg/L	1	10/22/03 7:40:40 PM
Zinc	590	20		µg/L	1	10/22/03 7:40:40 PM
ARSENIC, TOTAL						
	SW7060A					Analyst: APL
Arsenic	40	15		µg/L	3	10/24/03 10:39:54 PM
MERCURY, TOTAL						
	SW7470A					Analyst: RK
Mercury	0.58	0.20		µg/L	1	10/21/03 1:50:48 PM
LEAD, TOTAL						
	SW7421					Analyst: APL
Lead	890	500		µg/L	100	10/24/03 4:35:31 PM
ANTIMONY, TOTAL						
	SW7041					Analyst: APL
Antimony	27	5.0		µg/L	1	10/28/03 12:23:38 AM
SELENIUM, TOTAL						
	SW7740					Analyst: APL
Selenium	ND	5.0		µg/L	1	10/24/03 7:45:03 PM
THALLIUM, TOTAL						
	SW7841					Analyst: APL
Thallium	ND	5.0		µg/L	1	10/24/03 7:45:03 PM

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.
Work Order: 0310133
Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Laboratory Control Spike

Recovery Limit Summary

Sample ID : LCS-10402

RPD: 0	out of 10	outside limits
Spike Recovery : 0	out of 10	outside limits

56

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310133
 Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Sample Matrix Spike Duplicate

Sample ID	0310133-01BMSD	Batch ID:	10402	Test Code:	MAEPH	Units:	µg/L	Analysis Date	10/28/03 1:45:00 PM	Prep Date	10/27/03	
Client ID:	ECE MW3	Run ID:	SV-2_031028A	SeqNo:	352984							
	QC Sample			QC Spike	Original Sample				Original Sample			
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
n-Eicosane	15.77	1.0	µg/L	25	0	63.1	40	140	14.94	5.41	50	
n-Nonadecane	15.69	1.0	µg/L	25	0	62.8	40	140	14.64	6.92	50	
n-Nonane	16.34	1.0	µg/L	25	0	65.4	40	140	16.28	0.368	50	
n-Octacosane	13.96	1.0	µg/L	25	0	55.8	40	140	12.86	8.17	50	
n-Tetradecane	14.74	1.0	µg/L	25	0	58.9	40	140	13.48	8.93	50	
Naphthalene	26.75	1.0	µg/L	25	4.011	91	40	140	26.66	0.337	50	
Acenaphthene	29.21	1.0	µg/L	25	3.033	105	40	140	28.44	2.67	50	
Anthracene	26.11	1.0	µg/L	25	0	104	40	140	26.27	0.611	50	
Pyrene	25.01	1.0	µg/L	25	0	100	40	140	25.52	2	50	
Chrysene	21.32	1.0	µg/L	25	0	85.3	40	140	20.9	1.97	50	
Surr: 1-Chlorooctadecane	13.73	1.0	µg/L	20	0	68.6	40	140	0	0	0	
Surr: 2-Bromonaphthalene	21.72	1.0	µg/L	20	0	109	40	140	0	0	0	
Surr: 2-Fluorobiphenyl	21.33	1.0	µg/L	20	0	107	40	140	0	0	0	
Surr: o-Terphenyl	16.9	1.0	µg/L	20	0	84.5	40	140	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310133
 Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID 0310133-01BMS Batch ID: 10402 Test Code: MAEPH Units: µg/L Analysis Date 10/28/03 1:14:00 PM Prep Date 10/27/03
 Client ID: ECE MW3 Run ID: SV-2_031028A SeqNo: 352983

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
n-Eicosane	14.94	1.0	µg/L	25	0	59.8	40	140	0			
n-Nonadecane	14.64	1.0	µg/L	25	0	58.6	40	140	0			
n-Nonane	16.28	1.0	µg/L	25	0	65.1	40	140	0			
n-Octacosane	12.86	1.0	µg/L	25	0	51.4	40	140	0			
n-Tetradecane	13.48	1.0	µg/L	25	0	53.9	40	140	0			
Naphthalene	26.66	1.0	µg/L	25	4.011	90.6	40	140	0			
Acenaphthene	28.44	1.0	µg/L	25	3.033	102	40	140	0			
Anthracene	26.27	1.0	µg/L	25	0	105	40	140	0			
Pyrene	25.52	1.0	µg/L	25	0	102	40	140	0			
Chrysene	20.9	1.0	µg/L	25	0	83.6	40	140	0			
Surr: 1-Chlorooctadecane	10.34	1.0	µg/L	20	0	51.7	40	140	0			
Surr: 2-Bromonaphthalene	20.57	1.0	µg/L	20	0	103	40	140	0			
Surr: 2-Fluorobiphenyl	19.87	1.0	µg/L	20	0	99.3	40	140	0			
Surr: o-Terphenyl	16.32	1.0	µg/L	20	0	81.6	40	140	0			

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.
Work Order: 0310133
Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Sample Matrix Spike Duplicate

Recovery Limit Summary

Sample ID : 0310133-01BMDS

RPD: 0	out of 10	outside limits
Spike Recovery : 0	out of 20	outside limits

53

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310133
 Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Method Blank

Sample ID	MB-10402	Batch ID: 10402	Test Code: MAEPH	Units: µg/L	Analysis Date	10/28/03 11:40:00 AM	Prep Date	10/27/03				
Client ID:		Run ID:	SV-2_031028A		SeqNo:	352980						
	QC Sample		QC Spike	Original Sample				Original Sample				
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qual
C9-C18 Aliphatic Hydrocarbons	ND	100	µg/L									
C19-C36 Aliphatic Hydrocarbons	178.3	100	µg/L									
C11-C22 Aromatic Hydrocarbons	ND	100	µg/L									
Naphthalene	ND	1.0	µg/L									
2-Methylnaphthalene	ND	1.0	µg/L									
Acenaphthylene	ND	1.0	µg/L									
Acenaphthene	ND	1.0	µg/L									
Fluorene	ND	1.0	µg/L									
Phenanthrene	ND	1.0	µg/L									
Anthracene	ND	1.0	µg/L									
Fluoranthene	ND	1.0	µg/L									
Pyrene	ND	1.0	µg/L									
Benz(a)anthracene	ND	1.0	µg/L									
Chrysene	ND	1.0	µg/L									
Benzo(b)fluoranthene	ND	1.0	µg/L									
Benzo(k)fluoranthene	ND	1.0	µg/L									
Benzo(a)pyrene	ND	1.0	µg/L									
Dibenz(a,h)anthracene	ND	1.0	µg/L									
Indeno(1,2,3-cd)pyrene	ND	1.0	µg/L									
Benzo(g,h,i)perylene	ND	1.0	µg/L									
Surr: 1-Chlorooctadecane	16.42	1.0	µg/L	20	0	82.1	40	140	0			
Surr: 2-Bromonaphthalene	21.9	1.0	µg/L	20	0	109	40	140	0			
Surr: 2-Fluorobiphenyl	22.14	1.0	µg/L	20	0	111	40	140	0			
Surr: o-Terphenyl	22.09	1.0	µg/L	20	0	110	40	140	0			

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

A

CLIENT: Mactec E & C, Inc.
Lab Order: 0310133
Project: 3651031003/03 Taunton - Parcel GA
Lab ID: 0310133-05B

Client Sample ID: WES MW3
Tag Number:
Collection Date: 10/16/03
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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EXTRACTABLE PETROLEUM HYDROCARBONS MAEPH

Analyst: GG

C9-C18 Aliphatic Hydrocarbons	ND	120		µg/L	1	10/28/03 3:51:00 PM
C19-C36 Aliphatic Hydrocarbons	230	120	B	µg/L	1	10/28/03 3:51:00 PM
C11-C22 Aromatic Hydrocarbons	210	120		µg/L	1	10/28/03 3:51:00 PM
Naphthalene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
2-Methylnaphthalene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Acenaphthylene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Acenaphthene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Fluorene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Phenanthrene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Anthracene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Fluoranthene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Pyrene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Benz(a)anthracene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Chrysene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Benzo(b)fluoranthene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Benzo(k)fluoranthene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Benzo(a)pyrene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Dibenz(a,h)anthracene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Indeno(1,2,3-cd)pyrene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Benzo(g,h,i)perylene	ND	1.2		µg/L	1	10/28/03 3:51:00 PM
Surr: 1-Chlorooctadecane	53.1	40-140		%REC	1	10/28/03 3:51:00 PM
Surr: 2-Bromonaphthalene	106	40-140		%REC	1	10/28/03 3:51:00 PM
Surr: 2-Fluorobiphenyl	108	40-140		%REC	1	10/28/03 3:51:00 PM
Surr: o-Terphenyl	65.1	40-140		%REC	1	10/28/03 3:51:00 PM

Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. EPH: C11-C22
Aromatic Hydrocarbons exclude the concentration of target PAH analytes. VPH: C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range and concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION

Were all QA/QC procedures required by the VPH or EPH method followed:

Yes ☒ No ☐ If No, See Case Narrative

Were all performance/acceptance standards for required QA/QC procedures achieved:

Yes ☒ No ☐ If No, See Case Narrative

Were any significant modifications made to the method as specified in section 11.3: Yes ☐ No ☒ Details enclosed
I attest under the pains and penalties of perjury that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

SIGNATURE: 
PRINTED NAME: Nancy Stewart
DATE: 11/11/03
POSITION: Laboratory Director (or designee)

Qualifiers: RL - Reporting Limit, defined as the lowest concentration the laboratory can accurately quantitate.

ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits E - Value above quantitation range

J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits # - See Case Narrative

B - Analyte detected in the associated Method Blank H - Method prescribed holding time exceeded

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.

Work Order: 0310133

Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Method Blank

1,4-Dichlorobenzene	ND	2.0	µg/L
Dichlorodifluoromethane	ND	5.0	µg/L
1,1-Dichloroethane	ND	2.0	µg/L
1,2-Dichloroethane	ND	2.0	µg/L
1,1-Dichloroethene	ND	1.0	µg/L
cis-1,2-Dichloroethene	ND	2.0	µg/L
trans-1,2-Dichloroethene	ND	2.0	µg/L
1,2-Dichloropropane	ND	2.0	µg/L
1,3-Dichloropropane	ND	2.0	µg/L
2,2-Dichloropropane	ND	2.0	µg/L
1,1-Dichloropropene	ND	2.0	µg/L
cis-1,3-Dichloropropene	ND	1.0	µg/L
trans-1,3-Dichloropropene	ND	1.0	µg/L
Diethyl ether	ND	5.0	µg/L
Diisopropyl ether	ND	2.0	µg/L
1,4-Dioxane	ND	50	µg/L
Ethyl Tertiary Butyl Ether	ND	2.0	µg/L
Ethylbenzene	ND	2.0	µg/L
Hexachlorobutadiene	ND	2.0	µg/L
2-Hexanone	ND	10	µg/L
Isopropylbenzene	ND	2.0	µg/L
4-Isopropyltoluene	ND	2.0	µg/L
2-Butanone	ND	10	µg/L
4-Methyl-2-pentanone	ND	10	µg/L
Methyl tert-butyl ether	ND	2.0	µg/L
Methylene chloride	ND	5.0	µg/L
Naphthalene	ND	5.0	µg/L
n-Propylbenzene	ND	2.0	µg/L
Styrene	ND	2.0	µg/L
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310133
 Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Method Blank

Sample ID	mb-10/27/03	Batch ID: R21240	Test Code: SW8260B	Units: µg/L	Analysis Date	10/27/03 4:13:00 PM	Prep Date	10/27/03				
Client ID:		Run ID: V-3_031027A	SeqNo: 352230									
	QC Sample		QC Spike	Original Sample			Original Sample					
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Acetone	ND	10	µg/L									
Tertiary Amyl Methyl Ether	ND	2.0	µg/L									
Benzene	ND	1.0	µg/L									
Bromobenzene	ND	2.0	µg/L									
Bromochloromethane	ND	2.0	µg/L									
Bromodichloromethane	ND	2.0	µg/L									
Bromoform	ND	2.0	µg/L									
Bromomethane	ND	2.0	µg/L									
sec-Butylbenzene	ND	2.0	µg/L									
n-Butylbenzene	ND	2.0	µg/L									
tert-Butylbenzene	ND	2.0	µg/L									
Carbon disulfide	ND	2.0	µg/L									
Carbon tetrachloride	ND	2.0	µg/L									
Chlorobenzene	ND	2.0	µg/L									
Dibromochloromethane	ND	2.0	µg/L									
Chloroethane	ND	5.0	µg/L									
Chloroform	ND	2.0	µg/L									
Chloromethane	ND	3.0	µg/L									
2-Chlorotoluene	ND	2.0	µg/L									
4-Chlorotoluene	ND	2.0	µg/L									
1,2-Dibromo-3-chloropropane	ND	5.0	µg/L									
1,2-Dibromoethane	ND	2.0	µg/L									
Dibromomethane	ND	2.0	µg/L									
1,3-Dichlorobenzene	ND	2.0	µg/L									
1,2-Dichlorobenzene	ND	2.0	µg/L									

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.

Work Order: 0310133

Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Method Blank

Tetrachloroethene	ND	2.0	µg/L						
Tetrahydrofuran	ND	10	µg/L						
Toluene	ND	2.0	µg/L						
1,2,4-Trichlorobenzene	ND	2.0	µg/L						
1,2,3-Trichlorobenzene	ND	2.0	µg/L						
1,1,1-Trichloroethane	ND	2.0	µg/L						
1,1,2-Trichloroethane	ND	2.0	µg/L						
Trichloroethene	ND	2.0	µg/L						
Trichlorofluoromethane	ND	2.0	µg/L						
1,2,3-Trichloropropane	ND	2.0	µg/L						
1,2,4-Trimethylbenzene	ND	2.0	µg/L						
1,3,5-Trimethylbenzene	ND	2.0	µg/L						
Vinyl chloride	ND	2.0	µg/L						
o-Xylene	ND	2.0	µg/L						
m,p-Xylene	ND	2.0	µg/L						
Surr: Dibromofluoromethane	25.01	2.0	µg/L	25	0	100	85	120	0
Surr: 1,2-Dichloroethane-d4	24.55	2.0	µg/L	25	0	98.2	75	124	0
Surr: Toluene-d8	24.31	2.0	µg/L	25	0	97.2	82	112	0
Surr: 4-Bromofluorobenzene	23.11	2.0	µg/L	25	0	92.4	77	117	0

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

CLIENT: Mactec E & C, Inc.

Work Order: 0310133

Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Method Blank

1,4-Dichlorobenzene	ND	2.0	µg/L
Dichlorodifluoromethane	ND	5.0	µg/L
1,1-Dichloroethane	ND	2.0	µg/L
1,2-Dichloroethane	ND	2.0	µg/L
1,1-Dichloroethene	ND	1.0	µg/L
cis-1,2-Dichloroethene	ND	2.0	µg/L
trans-1,2-Dichloroethene	ND	2.0	µg/L
1,2-Dichloropropane	ND	2.0	µg/L
1,3-Dichloropropane	ND	2.0	µg/L
2,2-Dichloropropane	ND	2.0	µg/L
1,1-Dichloropropene	ND	2.0	µg/L
cis-1,3-Dichloropropene	ND	1.0	µg/L
trans-1,3-Dichloropropene	ND	1.0	µg/L
Diethyl ether	ND	5.0	µg/L
Diisopropyl ether	ND	2.0	µg/L
1,4-Dioxane	ND	50	µg/L
Ethyl Tertiary Butyl Ether	ND	2.0	µg/L
Ethylbenzene	ND	2.0	µg/L
Hexachlorobutadiene	ND	2.0	µg/L
2-Hexanone	ND	10	µg/L
Isopropylbenzene	ND	2.0	µg/L
4-Isopropyltoluene	ND	2.0	µg/L
2-Butanone	ND	10	µg/L
4-Methyl-2-pentanone	ND	10	µg/L
Methyl tert-butyl ether	ND	2.0	µg/L
Methylene chloride	ND	5.0	µg/L
Naphthalene	ND	5.0	µg/L
n-Propylbenzene	ND	2.0	µg/L
Styrene	ND	2.0	µg/L
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310133
 Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Method Blank

Sample ID mb-10/25/03 Batch ID: R21231 Test Code: SW8260B Units: µg/L Analysis Date 10/25/03 8:53:00 AM Prep Date 10/25/03
 Client ID: Run ID: V-3_031025A SeqNo: 352009

Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
Acetone	ND	10	µg/L									
Tertiary Amyl Methyl Ether	ND	2.0	µg/L									
Benzene	ND	1.0	µg/L									
Bromobenzene	ND	2.0	µg/L									
Bromochloromethane	ND	2.0	µg/L									
Bromodichloromethane	ND	2.0	µg/L									
Bromoform	ND	2.0	µg/L									
Bromomethane	ND	2.0	µg/L									
sec-Butylbenzene	ND	2.0	µg/L									
n-Butylbenzene	ND	2.0	µg/L									
tert-Butylbenzene	ND	2.0	µg/L									
Carbon disulfide	ND	2.0	µg/L									
Carbon tetrachloride	ND	2.0	µg/L									
Chlorobenzene	ND	2.0	µg/L									
Dibromochloromethane	ND	2.0	µg/L									
Chloroethane	ND	5.0	µg/L									
Chloroform	ND	2.0	µg/L									
Chloromethane	ND	3.0	µg/L									
2-Chlorotoluene	ND	2.0	µg/L									
4-Chlorotoluene	ND	2.0	µg/L									
1,2-Dibromo-3-chloropropane	ND	5.0	µg/L									
1,2-Dibromoethane	ND	2.0	µg/L									
Dibromomethane	ND	2.0	µg/L									
1,3-Dichlorobenzene	ND	2.0	µg/L									
1,2-Dichlorobenzene	ND	2.0	µg/L									

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

A

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.

Client Sample ID: WES MW3

Lab Order: 0310133

Project: 3651031003/03 Taunton - Parcel GA

Collection Date: 10/16/03

Lab ID: 0310133-05A

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diisopropyl ether	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,4-Dioxane	ND	50		µg/L	1	10/27/03 8:20:00 PM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Ethylbenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
2-Hexanone	ND	10		µg/L	1	10/27/03 8:20:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
2-Butanone	ND	10		µg/L	1	10/27/03 8:20:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/27/03 8:20:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/27/03 8:20:00 PM
Naphthalene	ND	5.0		µg/L	1	10/27/03 8:20:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Styrene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Tetrahydrofuran	ND	10		µg/L	1	10/27/03 8:20:00 PM
Toluene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Trichloroethene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Vinyl chloride	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
o-Xylene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
m,p-Xylene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Surr: Dibromofluoromethane	102	85-120		%REC	1	10/27/03 8:20:00 PM
Surr: 1,2-Dichloroethane-d4	93.2	75-124		%REC	1	10/27/03 8:20:00 PM
Surr: Toluene-d8	82.4	82-112		%REC	1	10/27/03 8:20:00 PM
Surr: 4-Bromofluorobenzene	90.0	77-117		%REC	1	10/27/03 8:20:00 PM

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.

Client Sample ID: WES MW3

Lab Order: 0310133

Project: 3651031003/03 Taunton - Parcel GA

Collection Date: 10/16/03

Lab ID: 0310133-05A

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY MCP MET SW8260B						Analyst: SK
Acetone	ND	10		µg/L	1	10/27/03 8:20:00 PM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Benzene	ND	1.0		µg/L	1	10/27/03 8:20:00 PM
Bromobenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Bromochloromethane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Bromoform	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Bromomethane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Carbon disulfide	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Chlorobenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Chloroethane	ND	5.0		µg/L	1	10/27/03 8:20:00 PM
Chloroform	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Chloromethane	ND	3.0		µg/L	1	10/27/03 8:20:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	10/27/03 8:20:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Dibromomethane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
Dichlorodifluoromethane	ND	5.0		µg/L	1	10/27/03 8:20:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/27/03 8:20:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	10/27/03 8:20:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/27/03 8:20:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/27/03 8:20:00 PM
Diethyl ether	ND	5.0		µg/L	1	10/27/03 8:20:00 PM

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.**Client Sample ID:** ECE MW1**Lab Order:** 0310133**Project:** 3651031003/03 Taunton - Parcel GA**Collection Date:** 10/16/03**Lab ID:** 0310133-04A**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diisopropyl ether	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,4-Dioxane	110	50		µg/L	1	10/27/03 7:45:00 PM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Ethylbenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
2-Hexanone	ND	10		µg/L	1	10/27/03 7:45:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
2-Butanone	ND	10		µg/L	1	10/27/03 7:45:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/27/03 7:45:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/27/03 7:45:00 PM
Naphthalene	ND	5.0		µg/L	1	10/27/03 7:45:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Styrene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Tetrahydrofuran	ND	10		µg/L	1	10/27/03 7:45:00 PM
Toluene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Trichloroethene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Vinyl chloride	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
o-Xylene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
m,p-Xylene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Surr: Dibromofluoromethane	102	85-120		%REC	1	10/27/03 7:45:00 PM
Surr: 1,2-Dichloroethane-d4	94.6	75-124		%REC	1	10/27/03 7:45:00 PM
Surr: Toluene-d8	89.2	82-112		%REC	1	10/27/03 7:45:00 PM
Surr: 4-Bromofluorobenzene	90.6	77-117		%REC	1	10/27/03 7:45:00 PM

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310105
 Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID	LCSD-10362	Batch ID: 10362	Test Code: MAEPH	Units: µg/L	Analysis Date 10/24/03 12:56:00 AM				Prep Date 10/22/03			
Client ID:			Run ID: SV-2_031023E		SeqNo: 351704							
	QC Sample			QC Spike	Original Sample				Original Sample			
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
n-Eicosane	4.81	1.0	µg/L	25	0	19.2	40	140	2.09	78.8	50	SR
n-Nonadecane	4.765	1.0	µg/L	25	0	19.1	40	140	2.21	73.3	50	SR
n-Nonane	20.52	1.0	µg/L	25	0	82.1	40	140	14.36	35.3	50	
n-Octacosane	4.09	1.0	µg/L	25	0	16.4	40	140	1.83	76.4	50	SR
n-Tetradecane	3.745	1.0	µg/L	25	0	15	40	140	1.88	66.3	50	SR
Naphthalene	26.64	1.0	µg/L	25	0	107	40	140	18.08	38.3	50	
Acenaphthene	26.45	1.0	µg/L	25	0	106	40	140	18.07	37.6	50	
Anthracene	29.52	1.0	µg/L	25	0	118	40	140	20.1	38	50	
Pyrene	29.17	1.0	µg/L	25	0	117	40	140	20.16	36.6	50	
Chrysene	20.43	1.0	µg/L	25	0	81.7	40	140	16.27	22.7	50	
Surr: 1-Chlorooctadecane	3.94	1.0	µg/L	20	0	19.7	40	140	0	0	0	S
Surr: 2-Bromonaphthalene	19.8	1.0	µg/L	20	0	99	40	140	0	0	0	
Surr: 2-Fluorobiphenyl	19.34	1.0	µg/L	20	0	96.7	40	140	0	0	0	
Surr: o-Terphenyl	18.23	1.0	µg/L	20	0	91.2	40	140	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310105
 Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID	LCS-10362	Batch ID:	10362	Test Code:	MAEPH	Units:	µg/L	Analysis Date	10/24/03 12:24:00 AM	Prep Date	10/22/03	
Client ID:		Run ID:	SV-2_031023E	SeqNo:	351703							
	QC Sample			QC Spike	Original Sample				Original Sample			
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qual
n-Eicosane	2.09	1.0	µg/L	25	0	8.36	40	140	0			S
n-Nonadecane	2.21	1.0	µg/L	25	0	8.84	40	140	0			S
n-Nonane	14.36	1.0	µg/L	25	0	57.5	40	140	0			
n-Octacosane	1.83	1.0	µg/L	25	0	7.32	40	140	0			S
n-Tetradecane	1.88	1.0	µg/L	25	0	7.52	40	140	0			S
Naphthalene	18.08	1.0	µg/L	25	0	72.3	40	140	0			
Acenaphthene	18.07	1.0	µg/L	25	0	72.3	40	140	0			
Anthracene	20.1	1.0	µg/L	25	0	80.4	40	140	0			
Pyrene	20.16	1.0	µg/L	25	0	80.6	40	140	0			
Chrysene	16.27	1.0	µg/L	25	0	65.1	40	140	0			
Surr: 1-Chlorooctadecane	1.95	1.0	µg/L	20	0	9.75	40	140	0			S
Surr: 2-Bromonaphthalene	19.24	1.0	µg/L	20	0	96.2	40	140	0			
Surr: 2-Fluorobiphenyl	18.68	1.0	µg/L	20	0	93.4	40	140	0			
Surr: o-Terphenyl	17.46	1.0	µg/L	20	0	87.3	40	140	0			

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310105
 Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Sample Duplicate

Sample ID	0310105-02BDUP	Batch ID: 10362	Test Code: MAEPH	Units: µg/L	Analysis Date	10/24/03 2:29:00 AM	Prep Date	10/22/03				
Client ID:	ECE MW4	Run ID: SV-2_031023E	SeqNo: 351707									
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
C9-C18 Aliphatic Hydrocarbons	283.7	120	µg/L	0	0	0	0	0	204.2	32.6	50	
C19-C36 Aliphatic Hydrocarbons	291.5	120	µg/L	0	0	0	0	0	229.2	23.9	50	
C11-C22 Aromatic Hydrocarbons	546.8	120	µg/L	0	0	0	0	0	470	15.1	50	
Naphthalene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
2-Methylnaphthalene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Acenaphthylene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Acenaphthene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Fluorene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Phenanthrene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Anthracene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Fluoranthene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Pyrene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Benz(a)anthracene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Chrysene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Benzo(b)fluoranthene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Benzo(k)fluoranthene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Benzo(a)pyrene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Dibenz(a,h)anthracene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Indeno(1,2,3-cd)pyrene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Benzo(g,h,i)perylene	ND	1.2	µg/L	0	0	0	0	0	0	0	50	
Surr: 1-Chlorooctadecane	10.55	1.2	µg/L	25	0	42.2	40	140	0	0	0	
Surr: 2-Bromonaphthalene	24.05	1.2	µg/L	25	0	96.2	40	140	0	0	0	
Surr: 2-Fluorobiphenyl	23.91	1.2	µg/L	25	0	95.6	40	140	0	0	0	
Surr: o-Terphenyl	20.84	1.2	µg/L	25	0	83.4	40	140	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310105
 Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Method Blank

Sample ID	MB-10362	Batch ID: 10362	Test Code: MAEPH	Units: µg/L	Analysis Date	10/23/03 11:53:00 PM	Prep Date	10/22/03				
Client ID:		Run ID:	SV-2_031023E		SeqNo:	351702						
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qual
C9-C18 Aliphatic Hydrocarbons	ND	100	µg/L									
C19-C36 Aliphatic Hydrocarbons	ND	100	µg/L									
C11-C22 Aromatic Hydrocarbons	ND	100	µg/L									
Naphthalene	ND	1.0	µg/L									
2-Methylnaphthalene	ND	1.0	µg/L									
Acenaphthylene	ND	1.0	µg/L									
Acenaphthene	ND	1.0	µg/L									
Fluorene	ND	1.0	µg/L									
Phenanthrene	ND	1.0	µg/L									
Anthracene	ND	1.0	µg/L									
Fluoranthene	ND	1.0	µg/L									
Pyrene	ND	1.0	µg/L									
Benz(a)anthracene	ND	1.0	µg/L									
Chrysene	ND	1.0	µg/L									
Benzo(b)fluoranthene	ND	1.0	µg/L									
Benzo(k)fluoranthene	ND	1.0	µg/L									
Benzo(a)pyrene	ND	1.0	µg/L									
Dibenz(a,h)anthracene	ND	1.0	µg/L									
Indeno(1,2,3-cd)pyrene	ND	1.0	µg/L									
Benzo(g,h,i)perylene	ND	1.0	µg/L									
Surr: 1-Chlorooctadecane	1.895	1.0	µg/L	20	0	9.48	40	140	0			S
Surr: 2-Bromonaphthalene	17.76	1.0	µg/L	20	0	88.8	40	140	0			
Surr: 2-Fluorobiphenyl	17.68	1.0	µg/L	20	0	88.4	40	140	0			
Surr: o-Terphenyl	15	1.0	µg/L	20	0	75	40	140	0			

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 30-Oct-03

CLIENT: Mactec E & C, Inc.

Client Sample ID: WES MW4

Lab Order: 0310105

Tag Number:

Project: 3651031003 Taunton - Parcel GA

Collection Date: 10/14/03

Lab ID: 0310105-03B

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EXTRACTABLE PETROLEUM HYDROCARBONS MAEPH						Analyst: RKK
C9-C18 Aliphatic Hydrocarbons	ND	100		µg/L	1	10/24/03 3:01:00 AM
C19-C36 Aliphatic Hydrocarbons	ND	100		µg/L	1	10/24/03 3:01:00 AM
C11-C22 Aromatic Hydrocarbons	ND	100		µg/L	1	10/24/03 3:01:00 AM
Naphthalene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
2-Methylnaphthalene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Acenaphthylene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Acenaphthene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Fluorene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Phenanthrene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Anthracene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Fluoranthene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Pyrene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Benz(a)anthracene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Chrysene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Benzo(b)fluoranthene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Benzo(k)fluoranthene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Benzo(a)pyrene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Dibenz(a,h)anthracene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Indeno(1,2,3-cd)pyrene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Benzo(g,h,i)perylene	ND	1.0		µg/L	1	10/24/03 3:01:00 AM
Surr: 1-Chlorooctadecane	32.6	40-140	S	%REC	1	10/24/03 3:01:00 AM
Surr: 2-Bromonaphthalene	92.4	40-140		%REC	1	10/24/03 3:01:00 AM
Surr: 2-Fluorobiphenyl	90.6	40-140		%REC	1	10/24/03 3:01:00 AM
Surr: o-Terphenyl	52.2	40-140		%REC	1	10/24/03 3:01:00 AM

Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. EPH: C11-C22 Aromatic Hydrocarbons exclude the concentration of target PAH analytes. VPH: C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range. C9-C12 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range and concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION

Were all QA/QC procedures required by the VPH or EPH method followed: ☒ Yes ☐ No - If No, See Case Narrative

Were all performance/acceptance standards for required QA/QC procedures achieved: ☐ Yes ☒ No - If No, See Case Narrative

Were any significant modifications made to the method as specified in section 11.3: ☐ No ☒ Yes - Details enclosed

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

SIGNATURE: 
PRINTED NAME: Nancy Stewart

DATE: 11/07/03
POSITION: Laboratory Director (or designee)

Qualifiers: RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits E - Value above quantitation range
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits # - See Case Narrative
B - Analyte detected in the associated Method Blank H - Method prescribed holding time exceeded

A

AMRO Environmental Laboratories Corp.

Date: 30-Oct-03

CLIENT:	Mactec E & C, Inc.	Client Sample ID:	ECE MW4
Lab Order:	0310105	Tag Number:	
Project:	3651031003 Taunton - Parcel GA	Collection Date:	10/14/03
Lab ID:	0310105-02B	Matrix:	GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EXTRACTABLE PETROLEUM HYDROCARBONS MAEPH						Analyst: RKK
C9-C18 Aliphatic Hydrocarbons	200	110		µg/L	1	10/24/03 1:58:00 AM
C19-C36 Aliphatic Hydrocarbons	230	110		µg/L	1	10/24/03 1:58:00 AM
C11-C22 Aromatic Hydrocarbons	470	110		µg/L	1	10/24/03 1:58:00 AM
Naphthalene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
2-Methylnaphthalene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Acenaphthylene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Acenaphthene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Fluorene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Phenanthrene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Anthracene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Fluoranthene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Pyrene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Benz(a)anthracene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Chrysene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Benzo(b)fluoranthene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Benzo(k)fluoranthene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Benzo(a)pyrene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Dibenz(a,h)anthracene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Indeno(1,2,3-cd)pyrene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Benzo(g,h,i)perylene	ND	1.1		µg/L	1	10/24/03 1:58:00 AM
Surr: 1-Chlorooctadecane	57.2	40-140		%REC	1	10/24/03 1:58:00 AM
Surr: 2-Bromonaphthalene	93.4	40-140		%REC	1	10/24/03 1:58:00 AM
Surr: 2-Fluorobiphenyl	93.0	40-140		%REC	1	10/24/03 1:58:00 AM
Surr: o-Terphenyl	90.2	40-140		%REC	1	10/24/03 1:58:00 AM

Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. EPH: C11-C22 Aromatic Hydrocarbons exclude the concentration of target PAH analytes. VPH: C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range. C9-C12 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range and concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION

Were all QA/QC procedures required by the VPH or EPH method followed: ☒ Yes ☐ No - If No, See Case Narrative

Were all performance/acceptance standards for required QA/QC procedures achieved: ☐ Yes ☒ No - If No, See Case Narrative

Were any significant modifications made to the method as specified in section 11.3: ☐ No ☒ Yes - Details enclosed

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

SIGNATURE: 
 PRINTED NAME: Nancy Stewart

DATE: 11/07/03
 POSITION: Laboratory Director (or designee)

Qualifiers: RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits E - Value above quantitation range
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits # - See Case Narrative
 B - Analyte detected in the associated Method Blank H - Method prescribed holding time exceeded

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.

Work Order: 0310105

Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Laboratory Control Spike - Full List

Tetrachloroethene	21.74	2.0	µg/L	20	0	109	77	123	0
Tetrahydrofuran	17.86	10	µg/L	20	0	89.3	70	130	0
Toluene	20.77	2.0	µg/L	20	0	104	86	112	0
1,2,4-Trichlorobenzene	14.46	2.0	µg/L	20	0	72.3	70	130	0
1,2,3-Trichlorobenzene	24.84	2.0	µg/L	20	0	124	70	130	0
1,1,1-Trichloroethane	23.41	2.0	µg/L	20	0	117	78	124	0
1,1,2-Trichloroethane	18.77	2.0	µg/L	20	0	93.8	70	133	0
Trichloroethene	19.28	2.0	µg/L	20	0	96.4	83	112	0
Trichlorofluoromethane	18.8	2.0	µg/L	20	0	94	70	130	0
1,2,3-Trichloropropane	18.99	2.0	µg/L	20	0	95	70	130	0
1,2,4-Trimethylbenzene	22.29	2.0	µg/L	20	0	111	78	129	0
1,3,5-Trimethylbenzene	23.52	2.0	µg/L	20	0	118	77	130	0
Vinyl chloride	20.51	2.0	µg/L	20	0	103	70	130	0
o-Xylene	20.82	2.0	µg/L	20	0	104	80	119	0
m,p-Xylene	43.44	2.0	µg/L	40	0	109	70	130	0
Surr: Dibromofluoromethane	25.58	2.0	µg/L	25	0	102	85	120	0
Surr: 1,2-Dichloroethane-d4	24.35	2.0	µg/L	25	0	97.4	80	124	0
Surr: Toluene-d8	24.81	2.0	µg/L	25	0	99.2	82	112	0
Surr: 4-Bromofluorobenzene	22.65	2.0	µg/L	25	0	90.6	77	117	0

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

CLIENT: Mactec E & C, Inc.

Work Order: 0310105

Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Laboratory Control Spike - Full List

1,4-Dichlorobenzene	20.83	2.0	µg/L	20	0	104	74	130	0	
Dichlorodifluoromethane	19.87	5.0	µg/L	20	0	99.4	10	130	0	
1,1-Dichloroethane	21.01	2.0	µg/L	20	0	105	83	134	0	
1,2-Dichloroethane	20.89	2.0	µg/L	20	0	104	70	125	0	
1,1-Dichloroethene	19.95	1.0	µg/L	20	0	99.8	72	130	0	
cis-1,2-Dichloroethene	19.95	2.0	µg/L	20	0	99.8	76	125	0	
trans-1,2-Dichloroethene	22.92	2.0	µg/L	20	0	115	77	128	0	
1,2-Dichloropropane	20.3	2.0	µg/L	20	0	102	78	122	0	
1,3-Dichloropropane	19.01	2.0	µg/L	20	0	95	70	124	0	
2,2-Dichloropropane	21.85	2.0	µg/L	20	0	109	73	130	0	
1,1-Dichloropropene	21.08	2.0	µg/L	20	0	105	70	107	0	
cis-1,3-Dichloropropene	19.01	1.0	µg/L	20	0	95	70	115	0	
trans-1,3-Dichloropropene	18.84	1.0	µg/L	20	0	94.2	70	129	0	
Diethyl ether	19.79	5.0	µg/L	20	0	99	70	130	0	
Diisopropyl ether	20.8	2.0	µg/L	20	0	104	70	130	0	
1,4-Dioxane	67.4	50	µg/L	50	0	135	70	130	0	S
Ethyl Tertiary Butyl Ether	26.55	2.0	µg/L	20	0	133	70	130	0	S
Ethylbenzene	21.53	2.0	µg/L	20	0	108	82	119	0	
Hexachlorobutadiene	17.74	2.0	µg/L	20	0	88.7	70	130	0	
2-Hexanone	19.97	10	µg/L	20	0	99.8	70	130	0	
Isopropylbenzene	24.55	2.0	µg/L	20	0	123	72	130	0	
4-Isopropyltoluene	23.22	2.0	µg/L	20	0	116	74	130	0	
2-Butanone	19.27	10	µg/L	20	0	96.4	70	130	0	
4-Methyl-2-pentanone	18.29	10	µg/L	20	0	91.4	70	130	0	
Methyl tert-butyl ether	31.61	2.0	µg/L	20	0	158	70	130	0	S
Methylene chloride	21.86	5.0	µg/L	20	0	109	70	141	0	
Naphthalene	17.07	5.0	µg/L	20	0	85.4	70	130	0	
n-Propylbenzene	24.14	2.0	µg/L	20	0	121	71	130	0	
Styrene	21.34	2.0	µg/L	20	0	107	72	123	0	
1,1,1,2-Tetrachloroethane	21	2.0	µg/L	20	0	105	83	118	0	
1,1,2,2-Tetrachloroethane	19.08	2.0	µg/L	20	0	95.4	70	130	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310105
 Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Laboratory Control Spike - Full List

Sample ID	lcsf-10/20/03	Batch ID: R21130	Test Code: SW8260B	Units: µg/L	Analysis Date	10/20/03 12:11:00 PM	Prep Date	10/20/03				
Client ID:		Run ID: V-3_031020A	SeqNo: 350510									
	QC Sample		QC Spike	Original Sample				Original Sample				
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Acetone	18.98	10	µg/L	20	0	94.9	70	130	0			
Tertiary Amyl Methyl Ether	22.05	2.0	µg/L	20	0	110	70	130	0			
Benzene	19.97	1.0	µg/L	20	0	99.8	81	115	0			
Bromobenzene	22.67	2.0	µg/L	20	0	113	83	118	0			
Bromochloromethane	20.65	2.0	µg/L	20	0	103	70	126	0			
Bromodichloromethane	17.92	2.0	µg/L	20	0	89.6	72	119	0			
Bromoform	18.66	2.0	µg/L	20	0	93.3	70	127	0			
Bromomethane	12.66	2.0	µg/L	20	0	63.3	70	130	0			S
sec-Butylbenzene	24.06	2.0	µg/L	20	0	120	70	130	0			
n-Butylbenzene	22.72	2.0	µg/L	20	0	114	70	130	0			
tert-Butylbenzene	22.61	2.0	µg/L	20	0	113	70	130	0			
Carbon disulfide	16.59	2.0	µg/L	20	0	83	70	130	0			
Carbon tetrachloride	22.04	2.0	µg/L	20	0	110	78	124	0			
Chlorobenzene	20.58	2.0	µg/L	20	0	103	80	115	0			
Dibromochloromethane	20.54	2.0	µg/L	20	0	103	70	127	0			
Chloroethane	19.67	5.0	µg/L	20	0	98.4	70	130	0			
Chloroform	20.28	2.0	µg/L	20	0	101	80	119	0			
Chloromethane	24.09	3.0	µg/L	20	0	120	70	130	0			
2-Chlorotoluene	22.09	2.0	µg/L	20	0	110	70	130	0			
4-Chlorotoluene	22.15	2.0	µg/L	20	0	111	78	130	0			
1,2-Dibromo-3-chloropropane	15.19	5.0	µg/L	20	0	76	70	130	0			
1,2-Dibromoethane	19.29	2.0	µg/L	20	0	96.5	70	130	0			
Dibromomethane	19.38	2.0	µg/L	20	0	96.9	70	129	0			
1,3-Dichlorobenzene	21.19	2.0	µg/L	20	0	106	81	130	0			
1,2-Dichlorobenzene	20.71	2.0	µg/L	20	0	104	80	124	0			

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.
Work Order: 0310105
Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT
Matrix Spike Duplicate - Full List

Recovery Limit Summary

Sample ID : 0310105-01Amsdf

RPD: 0	out of 71	outside limits
Spike Recovery : 10	out of 142	outside limits

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Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310105
 Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Matrix Spike Duplicate - Full List

Tetrachloroethene	102.3	10	µg/L	100	0	102	77	123	101.3	0.982	20	
Tetrahydrofuran	90.2	50	µg/L	100	0	90.2	70	130	91.95	1.92	20	
Toluene	96.45	10	µg/L	100	0	96.5	86	112	97.7	1.29	20	
1,2,4-Trichlorobenzene	65.85	10	µg/L	100	0	65.8	70	130	61.25	7.24	20	S
1,2,3-Trichlorobenzene	154.4	10	µg/L	100	0	154	70	130	150	2.86	20	S
1,1,1-Trichloroethane	103.6	10	µg/L	100	0	104	78	124	109.8	5.81	20	
1,1,2-Trichloroethane	85.05	10	µg/L	100	0	85	70	130	90.75	6.48	20	
Trichloroethene	93.35	10	µg/L	100	0	93.4	83	112	92.5	0.915	20	
Trichlorofluoromethane	81.35	10	µg/L	100	0	81.4	70	130	84.7	4.03	20	
1,2,3-Trichloropropane	96.9	10	µg/L	100	0	96.9	70	130	92.65	4.48	20	
1,2,4-Trimethylbenzene	109.8	10	µg/L	100	0	110	78	129	107.4	2.21	20	
1,3,5-Trimethylbenzene	115.4	10	µg/L	100	0	115	77	130	112	2.9	20	
Vinyl chloride	87	10	µg/L	100	0	87	70	0	90.95	4.44	20	S
o-Xylene	97.15	10	µg/L	100	0	97.2	80	119	98.75	1.63	20	
m,p-Xylene	204.1	10	µg/L	200	0	102	70	143	203.2	0.442	20	
Surr: Dibromofluoromethane	126.4	10	µg/L	125	0	101	85	120	0	0	0	
Surr: 1,2-Dichloroethane-d4	120.8	10	µg/L	125	0	96.6	80	124	0	0	0	
Surr: Toluene-d8	119.1	10	µg/L	125	0	95.3	82	112	0	0	0	
Surr: 4-Bromofluorobenzene	107.7	10	µg/L	125	0	86.2	77	117	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.

Work Order: 0310105

Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Matrix Spike Duplicate - Full List

1,4-Dichlorobenzene	101.7	10	µg/L	100	0	102	74	130	97.2	4.48	20
Dichlorodifluoromethane	88.6	25	µg/L	100	0	88.6	70	183	91.8	3.55	20
1,1-Dichloroethane	93.8	10	µg/L	100	0	93.8	83	130	98.4	4.79	20
1,2-Dichloroethane	93.85	10	µg/L	100	0	93.8	70	125	95.9	2.16	20
1,1-Dichloroethene	73.15	5.0	µg/L	100	0	73.2	72	130	83.9	13.7	20
cis-1,2-Dichloroethene	91.5	10	µg/L	100	0	91.5	76	125	96.3	5.11	20
trans-1,2-Dichloroethene	105	10	µg/L	100	0	105	77	128	109.4	4.2	20
1,2-Dichloropropane	92.75	10	µg/L	100	0	92.8	78	122	94.3	1.66	20
1,3-Dichloropropane	92.5	10	µg/L	100	0	92.5	40	124	91.75	0.814	20
2,2-Dichloropropane	90.45	10	µg/L	100	0	90.4	73	150	97.1	7.09	20
1,1-Dichloropropene	97.55	10	µg/L	100	0	97.6	70	107	100.2	2.73	20
cis-1,3-Dichloropropene	81.8	5.0	µg/L	100	0	81.8	70	115	84.5	3.25	20
trans-1,3-Dichloropropene	80.95	5.0	µg/L	100	0	81	70	129	84.05	3.76	20
Diethyl ether	90.4	25	µg/L	100	0	90.4	70	130	91.45	1.15	20
Diisopropyl ether	90	10	µg/L	100	0	90	70	130	93.45	3.76	20
1,4-Dioxane	297.4	250	µg/L	250	0	119	70	130	176.6	51	0
Ethyl Tertiary Butyl Ether	102.8	10	µg/L	100	0	103	70	130	103.8	0.92	20
Ethylbenzene	103	10	µg/L	100	0	103	82	119	103.1	0.097	20
Hexachlorobutadiene	83.4	10	µg/L	100	0	83.4	70	149	81.55	2.24	20
2-Hexanone	105.8	50	µg/L	100	0	106	70	130	103	2.68	20
Isopropylbenzene	123.6	10	µg/L	100	0	124	72	134	122.4	0.935	20
4-Isopropyltoluene	110	10	µg/L	100	0	110	74	130	107	2.86	20
2-Butanone	90.3	50	µg/L	100	0	90.3	70	130	88.15	2.41	20
4-Methyl-2-pentanone	93.5	50	µg/L	100	0	93.5	70	130	93.45	0.0535	20
Methyl tert-butyl ether	100.1	10	µg/L	100	0	100	70	141	102.8	2.61	20
Methylene chloride	91	25	µg/L	100	0	91	70	141	94.05	3.3	20
Naphthalene	83.45	25	µg/L	100	0	83.4	70	140	80.5	3.6	20
n-Propylbenzene	120.6	10	µg/L	100	0	121	71	136	118.8	1.55	20
Styrene	93.85	10	µg/L	100	0	93.8	72	123	95.45	1.69	20
1,1,1,2-Tetrachloroethane	96.35	10	µg/L	100	0	96.4	83	118	98.05	1.75	20
1,1,2,2-Tetrachloroethane	101.9	10	µg/L	100	0	102	70	130	98.7	3.19	20

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310105
 Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Matrix Spike Duplicate - Full List

Sample ID	0310105-01Amsdf	Batch ID:	R21130	Test Code:	SW8260B	Units:	µg/L	Analysis Date	10/20/03 6:00:00 PM	Prep Date	10/20/03	
Client ID:	WES MW2	Run ID:	V-3_031020A	SeqNo:	350365							
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qual
Acetone	94.05	50	µg/L	100	0	94	70	173	95.4	1.43	20	
Tertiary Amyl Methyl Ether	89.25	10	µg/L	100	0	89.2	70	130	92.65	3.74	20	
Benzene	93.3	5.0	µg/L	100	0	93.3	81	115	96.2	3.06	20	
Bromobenzene	106.5	10	µg/L	100	0	106	83	118	105.8	0.612	20	
Bromochloromethane	95.25	10	µg/L	100	0	95.2	70	126	95.85	0.628	20	
Bromodichloromethane	78.9	10	µg/L	100	0	78.9	72	119	82.45	4.4	20	
Bromoform	75.55	10	µg/L	100	0	75.6	70	127	76.1	0.725	20	
Bromomethane	20.8	10	µg/L	100	0	20.8	70	141	22.3	6.96	20	S
sec-Butylbenzene	121	10	µg/L	100	0	121	70	130	118.6	2.09	20	
n-Butylbenzene	111.7	10	µg/L	100	0	112	70	144	109.3	2.17	20	
tert-Butylbenzene	113.4	10	µg/L	100	0	113	70	130	110.1	2.95	20	
Carbon disulfide	69.15	10	µg/L	100	0	69.2	70	141	73.35	5.89	20	S
Carbon tetrachloride	97.25	10	µg/L	100	0	97.2	78	124	105.9	8.52	20	
Chlorobenzene	95.95	10	µg/L	100	0	96	80	115	95.8	0.156	20	
Dibromochloromethane	90.55	10	µg/L	100	0	90.6	70	127	89.25	1.45	20	
Chloroethane	83.1	25	µg/L	100	0	83.1	70	157	88.45	6.24	20	
Chloroform	93.2	10	µg/L	100	0	93.2	80	119	93.75	0.588	20	
Chloromethane	155.4	15	µg/L	100	0	155	70	158	160.4	3.1	20	
2-Chlorotoluene	108.4	10	µg/L	100	0	108	70	130	108.2	0.0923	20	
4-Chlorotoluene	109.6	10	µg/L	100	0	110	78	130	106.6	2.78	20	
1,2-Dibromo-3-chloropropane	80.7	25	µg/L	100	0	80.7	70	30	81.35	0.802	20	S
1,2-Dibromoethane	85.65	10	µg/L	100	0	85.7	70	130	88.7	3.5	20	
Dibromomethane	92.9	10	µg/L	100	0	92.9	70	129	96.85	4.16	20	
1,3-Dichlorobenzene	103.3	10	µg/L	100	0	103	81	130	99.55	3.7	20	
1,2-Dichlorobenzene	98.85	10	µg/L	100	0	98.8	80	124	94.35	4.66	20	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310105
 Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Matrix Spike - Full List

Tetrachloroethene	101.3	10	µg/L	100	0	101	77	123	0	
Tetrahydrofuran	91.95	50	µg/L	100	0	92	70	130	0	
Toluene	97.7	10	µg/L	100	0	97.7	86	112	0	
1,2,4-Trichlorobenzene	61.25	10	µg/L	100	0	61.2	70	133	0	S
1,2,3-Trichlorobenzene	150	10	µg/L	100	0	150	70	130	0	S
1,1,1-Trichloroethane	109.8	10	µg/L	100	0	110	78	124	0	
1,1,2-Trichloroethane	90.75	10	µg/L	100	0	90.8	70	130	0	
Trichloroethene	92.5	10	µg/L	100	0	92.5	83	112	0	
Trichlorofluoromethane	84.7	10	µg/L	100	0	84.7	70	130	0	
1,2,3-Trichloropropane	92.65	10	µg/L	100	0	92.6	70	130	0	
1,2,4-Trimethylbenzene	107.4	10	µg/L	100	0	107	78	129	0	
1,3,5-Trimethylbenzene	112	10	µg/L	100	0	112	77	132	0	
Vinyl chloride	90.95	10	µg/L	100	0	91	70	130	0	
o-Xylene	98.75	10	µg/L	100	0	98.8	80	119	0	
m,p-Xylene	203.2	10	µg/L	200	0	102	70	130	0	
Surr: Dibromofluoromethane	128.1	10	µg/L	125	0	102	85	120	0	
Surr: 1,2-Dichloroethane-d4	116.8	10	µg/L	125	0	93.4	80	124	0	
Surr: Toluene-d8	123.2	10	µg/L	125	0	98.6	82	112	0	
Surr: 4-Bromofluorobenzene	109.6	10	µg/L	125	0	87.7	77	117	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.

Work Order: 0310105

Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Matrix Spike - Full List

1,4-Dichlorobenzene	97.2	10	µg/L	100	0	97.2	74	130	0
Dichlorodifluoromethane	91.8	25	µg/L	100	0	91.8	70	130	0
1,1-Dichloroethane	98.4	10	µg/L	100	0	98.4	83	130	0
1,2-Dichloroethane	95.9	10	µg/L	100	0	95.9	70	125	0
1,1-Dichloroethene	83.9	5.0	µg/L	100	0	83.9	72	130	0
cis-1,2-Dichloroethene	96.3	10	µg/L	100	0	96.3	76	125	0
trans-1,2-Dichloroethene	109.4	10	µg/L	100	0	109	77	128	0
1,2-Dichloropropane	94.3	10	µg/L	100	0	94.3	78	122	0
1,3-Dichloropropane	91.75	10	µg/L	100	0	91.8	70	124	0
2,2-Dichloropropane	97.1	10	µg/L	100	0	97.1	73	130	0
1,1-Dichloropropene	100.2	10	µg/L	100	0	100	70	107	0
cis-1,3-Dichloropropene	84.5	5.0	µg/L	100	0	84.5	70	115	0
trans-1,3-Dichloropropene	84.05	5.0	µg/L	100	0	84	70	129	0
Diethyl ether	91.45	25	µg/L	100	0	91.5	70	130	0
Diisopropyl ether	93.45	10	µg/L	100	0	93.4	70	130	0
1,4-Dioxane	176.6	250	µg/L	250	0	70.6	70	130	0
Ethyl Tertiary Butyl Ether	103.8	10	µg/L	100	0	104	70	130	0
Ethylbenzene	103.1	10	µg/L	100	0	103	82	119	0
Hexachlorobutadiene	81.55	10	µg/L	100	0	81.6	70	130	0
2-Hexanone	103	50	µg/L	100	0	103	70	130	0
Isopropylbenzene	122.4	10	µg/L	100	0	122	72	130	0
4-Isopropyltoluene	107	10	µg/L	100	0	107	74	130	0
2-Butanone	88.15	50	µg/L	100	0	88.2	70	130	0
4-Methyl-2-pentanone	93.45	50	µg/L	100	0	93.4	70	130	0
Methyl tert-butyl ether	102.8	10	µg/L	100	0	103	70	130	0
Methylene chloride	94.05	25	µg/L	100	0	94	70	130	0
Naphthalene	80.5	25	µg/L	100	0	80.5	70	140	0
n-Propylbenzene	118.8	10	µg/L	100	0	119	71	130	0
Styrene	95.45	10	µg/L	100	0	95.4	72	123	0
1,1,1,2-Tetrachloroethane	98.05	10	µg/L	100	0	98	83	118	0
1,1,2,2-Tetrachloroethane	98.7	10	µg/L	100	0	98.7	70	130	0

J

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310105
 Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Matrix Spike - Full List

Sample ID 0310105-01Amsf		Batch ID: R21130		Test Code: SW8260B		Units: µg/L		Analysis Date 10/20/03 5:24:00 PM		Prep Date 10/20/03			
Client ID: WES MW2		Run ID: V-3_031020A		SeqNo: 350364									
Analyte	QC Sample	RL	Units	QC Spike	Original Sample				Original Sample		%RPD	RPDLimit	Qua
	Result			Amount	Result	%REC	LowLimit	HighLimit	or MS Result				
Acetone	95.4	50	µg/L	100	0	95.4	70	130	0				
Tertiary Amyl Methyl Ether	92.65	10	µg/L	100	0	92.6	70	130	0				
Benzene	96.2	5.0	µg/L	100	0	96.2	81	115	0				
Bromobenzene	105.8	10	µg/L	100	0	106	83	118	0				
Bromochloromethane	95.85	10	µg/L	100	0	95.8	70	126	0				
Bromodichloromethane	82.45	10	µg/L	100	0	82.5	72	119	0				
Bromoform	76.1	10	µg/L	100	0	76.1	70	127	0				
Bromomethane	22.3	10	µg/L	100	0	22.3	70	130	0			S	
sec-Butylbenzene	118.6	10	µg/L	100	0	119	70	130	0				
n-Butylbenzene	109.3	10	µg/L	100	0	109	70	130	0				
tert-Butylbenzene	110.1	10	µg/L	100	0	110	70	130	0				
Carbon disulfide	73.35	10	µg/L	100	0	73.4	70	130	0				
Carbon tetrachloride	105.9	10	µg/L	100	0	106	78	124	0				
Chlorobenzene	95.8	10	µg/L	100	0	95.8	80	115	0				
Dibromochloromethane	89.25	10	µg/L	100	0	89.2	70	127	0				
Chloroethane	88.45	25	µg/L	100	0	88.4	70	130	0				
Chloroform	93.75	10	µg/L	100	0	93.8	80	119	0				
Chloromethane	160.4	15	µg/L	100	0	160	70	130	0			S	
2-Chlorotoluene	108.2	10	µg/L	100	0	108	70	130	0				
4-Chlorotoluene	106.6	10	µg/L	100	0	107	78	130	0				
1,2-Dibromo-3-chloropropane	81.35	25	µg/L	100	0	81.4	70	130	0				
1,2-Dibromoethane	88.7	10	µg/L	100	0	88.7	70	130	0				
Dibromomethane	96.85	10	µg/L	100	0	96.8	70	129	0				
1,3-Dichlorobenzene	99.55	10	µg/L	100	0	99.6	81	130	0				
1,2-Dichlorobenzene	94.35	10	µg/L	100	0	94.4	80	124	0				

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.

Work Order: 0310105

Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Method Blank

Tetrachloroethene	ND	2.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	2.0	µg/L							
1,2,4-Trichlorobenzene	ND	2.0	µg/L							
1,2,3-Trichlorobenzene	ND	2.0	µg/L							
1,1,1-Trichloroethane	ND	2.0	µg/L							
1,1,2-Trichloroethane	ND	2.0	µg/L							
Trichloroethene	ND	2.0	µg/L							
Trichlorofluoromethane	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,2,4-Trimethylbenzene	ND	2.0	µg/L							
1,3,5-Trimethylbenzene	ND	2.0	µg/L							
Vinyl chloride	ND	2.0	µg/L							
o-Xylene	ND	2.0	µg/L							
m,p-Xylene	ND	2.0	µg/L							
Surr: Dibromofluoromethane	25.14	2.0	µg/L	25	0	101	85	120	0	
Surr: 1,2-Dichloroethane-d4	24.28	2.0	µg/L	25	0	97.1	75	124	0	
Surr: Toluene-d8	24.51	2.0	µg/L	25	0	98	82	112	0	
Surr: 4-Bromofluorobenzene	23.14	2.0	µg/L	25	0	92.6	77	117	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

CLIENT: Mactec E & C, Inc.
 Work Order: 0310105
 Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Method Blank

1,4-Dichlorobenzene	ND	2.0	µg/L
Dichlorodifluoromethane	ND	5.0	µg/L
1,1-Dichloroethane	ND	2.0	µg/L
1,2-Dichloroethane	ND	2.0	µg/L
1,1-Dichloroethene	ND	1.0	µg/L
cis-1,2-Dichloroethene	ND	2.0	µg/L
trans-1,2-Dichloroethene	ND	2.0	µg/L
1,2-Dichloropropane	ND	2.0	µg/L
1,3-Dichloropropane	ND	2.0	µg/L
2,2-Dichloropropane	ND	2.0	µg/L
1,1-Dichloropropene	ND	2.0	µg/L
cis-1,3-Dichloropropene	ND	1.0	µg/L
trans-1,3-Dichloropropene	ND	1.0	µg/L
Diethyl ether	ND	5.0	µg/L
Diisopropyl ether	ND	2.0	µg/L
1,4-Dioxane	ND	50	µg/L
Ethyl Tertiary Butyl Ether	ND	2.0	µg/L
Ethylbenzene	ND	2.0	µg/L
Hexachlorobutadiene	ND	2.0	µg/L
2-Hexanone	ND	10	µg/L
Isopropylbenzene	ND	2.0	µg/L
4-Isopropyltoluene	ND	2.0	µg/L
2-Butanone	ND	10	µg/L
4-Methyl-2-pentanone	ND	10	µg/L
Methyl tert-butyl ether	ND	2.0	µg/L
Methylene chloride	ND	5.0	µg/L
Naphthalene	ND	5.0	µg/L
n-Propylbenzene	ND	2.0	µg/L
Styrene	ND	2.0	µg/L
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 06-Nov-03

CLIENT: Mactec E & C, Inc.
 Work Order: 0310105
 Project: 3651031003 Taunton - Parcel GA

QC SUMMARY REPORT

Method Blank

Sample ID	mb-10/20/03	Batch ID: R21130	Test Code: SW8260B	Units: µg/L	Analysis Date	10/20/03 1:19:00 PM	Prep Date	10/20/03				
Client ID:		Run ID:	V-3_031020A		SeqNo:	350512						
	QC Sample		QC Spike	Original Sample			Original Sample					
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Acetone	ND	10	µg/L									
Tertiary Amyl Methyl Ether	ND	2.0	µg/L									
Benzene	ND	1.0	µg/L									
Bromobenzene	ND	2.0	µg/L									
Bromochloromethane	ND	2.0	µg/L									
Bromodichloromethane	ND	2.0	µg/L									
Bromoform	ND	2.0	µg/L									
Bromomethane	ND	2.0	µg/L									
sec-Butylbenzene	ND	2.0	µg/L									
n-Butylbenzene	ND	2.0	µg/L									
tert-Butylbenzene	ND	2.0	µg/L									
Carbon disulfide	ND	2.0	µg/L									
Carbon tetrachloride	ND	2.0	µg/L									
Chlorobenzene	ND	2.0	µg/L									
Dibromochloromethane	ND	2.0	µg/L									
Chloroethane	ND	5.0	µg/L									
Chloroform	ND	2.0	µg/L									
Chloromethane	ND	3.0	µg/L									
2-Chlorotoluene	ND	2.0	µg/L									
4-Chlorotoluene	ND	2.0	µg/L									
1,2-Dibromo-3-chloropropane	ND	5.0	µg/L									
1,2-Dibromoethane	ND	2.0	µg/L									
Dibromomethane	ND	2.0	µg/L									
1,3-Dichlorobenzene	ND	2.0	µg/L									
1,2-Dichlorobenzene	ND	2.0	µg/L									

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

A

AMRO Environmental Laboratories Corp.

Date: 30-Oct-03

CLIENT: Mactec E & C, Inc.

Client Sample ID: WES MW4

Lab Order: 0310105

Project: 3651031003 Taunton - Parcel GA

Collection Date: 10/14/03

Lab ID: 0310105-03A

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diisopropyl ether	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,4-Dioxane	ND	50		µg/L	1	10/20/03 9:30:00 PM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Ethylbenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
2-Hexanone	ND	10		µg/L	1	10/20/03 9:30:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
2-Butanone	ND	10		µg/L	1	10/20/03 9:30:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/20/03 9:30:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/20/03 9:30:00 PM
Naphthalene	ND	5.0		µg/L	1	10/20/03 9:30:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Styrene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Tetrahydrofuran	ND	10		µg/L	1	10/20/03 9:30:00 PM
Toluene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Trichloroethene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Vinyl chloride	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
o-Xylene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
m,p-Xylene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Surr: Dibromofluoromethane	98.0	85-120		%REC	1	10/20/03 9:30:00 PM
Surr: 1,2-Dichloroethane-d4	98.2	75-124		%REC	1	10/20/03 9:30:00 PM
Surr: Toluene-d8	88.1	82-112		%REC	1	10/20/03 9:30:00 PM
Surr: 4-Bromofluorobenzene	90.9	77-117		%REC	1	10/20/03 9:30:00 PM

AMRO Environmental Laboratories Corp.

Date: 30-Oct-03

CLIENT: Mactec E & C, Inc.**Client Sample ID:** ECE MW4**Lab Order:** 0310105**Project:** 3651031003 Taunton - Parcel GA**Collection Date:** 10/14/03**Lab ID:** 0310105-02A**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diisopropyl ether	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
1,4-Dioxane	ND	50		µg/L	1	10/20/03 8:55:00 PM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
Ethylbenzene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
2-Hexanone	ND	10		µg/L	1	10/20/03 8:55:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
2-Butanone	ND	10		µg/L	1	10/20/03 8:55:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/20/03 8:55:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/20/03 8:55:00 PM
Naphthalene	ND	5.0		µg/L	1	10/20/03 8:55:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
Styrene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
Tetrahydrofuran	ND	10		µg/L	1	10/20/03 8:55:00 PM
Toluene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
Trichloroethene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
Vinyl chloride	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
o-Xylene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
m,p-Xylene	ND	2.0		µg/L	1	10/20/03 8:55:00 PM
Surr: Dibromofluoromethane	101	85-120		%REC	1	10/20/03 8:55:00 PM
Surr: 1,2-Dichloroethane-d4	94.9	75-124		%REC	1	10/20/03 8:55:00 PM
Surr: Toluene-d8	93.0	82-112		%REC	1	10/20/03 8:55:00 PM
Surr: 4-Bromofluorobenzene	90.0	77-117		%REC	1	10/20/03 8:55:00 PM

AMRO Environmental Laboratories Corp.

Date: 30-Oct-03

CLIENT: Mactec E & C, Inc.**Client Sample ID:** WES MW4**Lab Order:** 0310105**Project:** 3651031003 Taunton - Parcel GA**Collection Date:** 10/14/03**Lab ID:** 0310105-03A**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY MCP MET SW8260B						Analyst: SK
Acetone	ND	10		µg/L	1	10/20/03 9:30:00 PM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Benzene	ND	1.0		µg/L	1	10/20/03 9:30:00 PM
Bromobenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Bromochloromethane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Bromoform	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Bromomethane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Carbon disulfide	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Chlorobenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Chloroethane	ND	5.0		µg/L	1	10/20/03 9:30:00 PM
Chloroform	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Chloromethane	ND	3.0		µg/L	1	10/20/03 9:30:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	10/20/03 9:30:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Dibromomethane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
Dichlorodifluoromethane	ND	5.0		µg/L	1	10/20/03 9:30:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/20/03 9:30:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	10/20/03 9:30:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/20/03 9:30:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/20/03 9:30:00 PM
Diethyl ether	ND	5.0		µg/L	1	10/20/03 9:30:00 PM



ANALYTICAL REPORT

Lab Number:	L1117331
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	PARCEL 6A
Project Number:	5292.9.00
Report Date:	11/01/11

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Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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



Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1117331
Report Date: 11/01/11

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1117331-01	MAI-2 (OW)	TAUNTON	10/21/11 14:00
L1117331-02	MAI-3 (OW)	TAUNTON	10/21/11 13:30
L1117331-03	MAI-5 (OW)	TAUNTON	10/21/11 13:00
L1117331-04	MAI-6 (OW)	TAUNTON	10/21/11 12:35

Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is 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
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
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
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
E 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).	YES
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
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
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1117331
Report Date: 11/01/11

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

MCP Related Narratives

Sample Receipt

The element list for the Dissolved Metals analysis was supplied by the client.

EPH

At the client's request, the results for L1117331-02 are not reported.

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The WG497584-2/-3 LCS/LCSD RPD, associated with L1117331-01, -03 and -04, is above the acceptance criteria for Naphthalene (26%).

Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1117331
Report Date: 11/01/11

Case Narrative (continued)

Dissolved Metals

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

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

Authorized Signature:  Elizabeth Simmons

Title: Technical Director/Representative

Date: 11/01/11

ORGANICS

PETROLEUM HYDROCARBONS

Project Name: PARCEL 6A**Lab Number:** L1117331**Project Number:** 5292.9.00**Report Date:** 11/01/11**SAMPLE RESULTS**

Lab ID: L1117331-01
Client ID: MAI-2 (OW)
Sample Location: TAUNTON
Matrix: Water
Analytical Method: 98,EPH-04-1.1
Analytical Date: 10/26/11 14:41
Analyst: AS

Date Collected: 10/21/11 14:00
Date Received: 10/21/11
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/23/11 17:14
Cleanup Method1: EPH-04-1
Cleanup Date1: 10/25/11

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.1	--	1
2-Methylnaphthalene	ND		ug/l	10.1	--	1
Acenaphthylene	ND		ug/l	10.1	--	1
Acenaphthene	ND		ug/l	10.1	--	1
Fluorene	ND		ug/l	10.1	--	1
Phenanthrene	ND		ug/l	10.1	--	1
Anthracene	ND		ug/l	10.1	--	1
Fluoranthene	ND		ug/l	10.1	--	1
Pyrene	ND		ug/l	10.1	--	1
Benzo(a)anthracene	ND		ug/l	10.1	--	1
Chrysene	ND		ug/l	10.1	--	1
Benzo(b)fluoranthene	ND		ug/l	10.1	--	1
Benzo(k)fluoranthene	ND		ug/l	10.1	--	1
Benzo(a)pyrene	ND		ug/l	10.1	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.1	--	1
D benzo(a,h)anthracene	ND		ug/l	10.1	--	1
Benzo(ghi)perylene	ND		ug/l	10.1	--	1

Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

SAMPLE RESULTS

Lab ID: L1117331-01

Date Collected: 10/21/11 14:00

Client ID: MAI-2 (OW)

Date Received: 10/21/11

Sample Location: TAUNTON

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	66		40-140
o-Terphenyl	65		40-140
2-Fluorobiphenyl	82		40-140
2-Bromonaphthalene	83		40-140

Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

Method Blank Analysis Batch Quality Control

Analytical Method: 98,EPH-04-1.1

Extraction Method: EPA 3510C

Analytical Date: 10/25/11 17:08

Extraction Date: 10/23/11 17:14

Analyst: AS

Cleanup Method1: EPH-04-1

Cleanup Date1: 10/25/11

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01,03-04 Batch: WG497584-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	10.0	--
2-Methylnaphthalene	ND		ug/l	10.0	--
Acenaphthylene	ND		ug/l	10.0	--
Acenaphthene	ND		ug/l	10.0	--
Fluorene	ND		ug/l	10.0	--
Phenanthrene	ND		ug/l	10.0	--
Anthracene	ND		ug/l	10.0	--
Fluoranthene	ND		ug/l	10.0	--
Pyrene	ND		ug/l	10.0	--
Benzo(a)anthracene	ND		ug/l	10.0	--
Chrysene	ND		ug/l	10.0	--
Benzo(b)fluoranthene	ND		ug/l	10.0	--
Benzo(k)fluoranthene	ND		ug/l	10.0	--
Benzo(a)pyrene	ND		ug/l	10.0	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.0	--
Dibenzo(a,h)anthracene	ND		ug/l	10.0	--
Benzo(ghi)perylene	ND		ug/l	10.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	63		40-140
o-Terphenyl	70		40-140
2-Fluorobiphenyl	88		40-140
2-Bromonaphthalene	87		40-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: PARCEL 6A

Project Number: 5292.9.00

Lab Number: L1117331

Report Date: 11/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01,03-04 Batch: WG497584-2 WG497584-3								
C9-C18 Aliphatics	64		60		40-140	6		25
C19-C36 Aliphatics	84		79		40-140	6		25
C11-C22 Aromatics	78		69		40-140	12		25
Naphthalene	77		59		40-140	26	Q	25
2-Methylnaphthalene	82		65		40-140	23		25
Acenaphthylene	74		60		40-140	21		25
Acenaphthene	79		65		40-140	19		25
Fluorene	74		65		40-140	13		25
Phenanthrene	79		72		40-140	9		25
Anthracene	75		68		40-140	10		25
Fluoranthene	77		71		40-140	8		25
Pyrene	80		73		40-140	9		25
Benzo(a)anthracene	71		63		40-140	12		25
Chrysene	75		68		40-140	10		25
Benzo(b)fluoranthene	78		69		40-140	12		25
Benzo(k)fluoranthene	74		66		40-140	11		25
Benzo(a)pyrene	68		59		40-140	14		25
Indeno(1,2,3-cd)Pyrene	74		65		40-140	13		25
Dibenzo(a,h)anthracene	69		58		40-140	17		25
Benzo(ghi)perylene	74		66		40-140	11		25
Nonane (C9)	52		41		30-140	24		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: PARCEL 6A

Project Number: 5292.9.00

Lab Number: L1117331

Report Date: 11/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01,03-04 Batch: WG497584-2 WG497584-3								
Decane (C10)	62		50		40-140	21		25
Dodecane (C12)	69		58		40-140	17		25
Tetradecane (C14)	73		65		40-140	12		25
Hexadecane (C16)	78		74		40-140	5		25
Octadecane (C18)	81		78		40-140	4		25
Nonadecane (C19)	82		84		40-140	2		25
Eicosane (C20)	84		83		40-140	1		25
Docosane (C22)	82		80		40-140	2		25
Tetracosane (C24)	82		81		40-140	1		25
Hexacosane (C26)	83		82		40-140	1		25
Octacosane (C28)	80		79		40-140	1		25
Triacontane (C30)	83		82		40-140	1		25
Hexatriacontane (C36)	81		78		40-140	4		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	73		67		40-140
o-Terphenyl	71		60		40-140
2-Fluorobiphenyl	85		77		40-140
2-Bromonaphthalene	89		77		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

METALS

Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

SAMPLE RESULTS

Lab ID: L1117331-01

Date Collected: 10/21/11 14:00

Client ID: MAI-2 (OW)

Date Received: 10/21/11

Sample Location: TAUNTON

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab											
Arsenic, Dissolved	ND		mg/l	0.005	--	1	10/25/11 11:30	10/27/11 09:47	EPA 3005A	97,6010B	AI
Barium, Dissolved	0.063		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:47	EPA 3005A	97,6010B	AI
Cadmium, Dissolved	ND		mg/l	0.004	--	1	10/25/11 11:30	10/27/11 09:47	EPA 3005A	97,6010B	AI
Chromium, Dissolved	ND		mg/l	0.01	--	1	10/25/11 11:30	10/27/11 09:47	EPA 3005A	97,6010B	AI
Lead, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:47	EPA 3005A	97,6010B	AI
Mercury, Dissolved	ND		mg/l	0.0002	--	1	10/25/11 18:30	10/26/11 12:48	EPA 7470A	97,7470A	JP
Selenium, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:47	EPA 3005A	97,6010B	AI
Silver, Dissolved	ND		mg/l	0.007	--	1	10/25/11 11:30	10/27/11 09:47	EPA 3005A	97,6010B	AI



Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

SAMPLE RESULTS

Lab ID: L1117331-02

Date Collected: 10/21/11 13:30

Client ID: MAI-3 (OW)

Date Received: 10/21/11

Sample Location: TAUNTON

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab											
Arsenic, Dissolved	ND		mg/l	0.005	--	1	10/25/11 11:30	10/27/11 09:53	EPA 3005A	97,6010B	AI
Barium, Dissolved	0.061		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:53	EPA 3005A	97,6010B	AI
Cadmium, Dissolved	ND		mg/l	0.004	--	1	10/25/11 11:30	10/27/11 09:53	EPA 3005A	97,6010B	AI
Chromium, Dissolved	ND		mg/l	0.01	--	1	10/25/11 11:30	10/27/11 09:53	EPA 3005A	97,6010B	AI
Lead, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:53	EPA 3005A	97,6010B	AI
Mercury, Dissolved	ND		mg/l	0.0002	--	1	10/25/11 18:30	10/26/11 12:50	EPA 7470A	97,7470A	JP
Selenium, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:53	EPA 3005A	97,6010B	AI
Silver, Dissolved	ND		mg/l	0.007	--	1	10/25/11 11:30	10/27/11 09:53	EPA 3005A	97,6010B	AI



Project Name: PARCEL 6A

Lab Number: L1117331

Project Number: 5292.9.00

Report Date: 11/01/11

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 01-04 Batch: WG497975-1										
Arsenic, Dissolved	ND		mg/l	0.005	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI
Barium, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI
Cadmium, Dissolved	ND		mg/l	0.004	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI
Chromium, Dissolved	ND		mg/l	0.01	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI
Lead, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI
Selenium, Dissolved	ND		mg/l	0.010	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI
Silver, Dissolved	ND		mg/l	0.007	--	1	10/25/11 11:30	10/27/11 09:38	97,6010B	AI

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Dissolved Metals - Westborough Lab for sample(s): 01-04 Batch: WG498106-1										
Mercury, Dissolved	ND		mg/l	0.0002	--	1	10/25/11 18:30	10/26/11 12:42	97,7470A	JP

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis Batch Quality Control

Project Name: PARCEL 6A

Project Number: 5292.9.00

Lab Number: L1117331

Report Date: 11/01/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01-04 Batch: WG497975-2 WG497975-3								
Arsenic, Dissolved	115		112		80-120	3		20
Barium, Dissolved	107		106		80-120	1		20
Cadmium, Dissolved	112		109		80-120	3		20
Chromium, Dissolved	105		105		80-120	0		20
Lead, Dissolved	110		108		80-120	2		20
Selenium, Dissolved	115		112		80-120	3		20
Silver, Dissolved	109		108		80-120	1		20
MCP Dissolved Metals - Westborough Lab Associated sample(s): 01-04 Batch: WG498106-2 WG498106-3								
Mercury, Dissolved	110		110		80-120	0		20

Project Name: PARCEL 6A

Project Number: 5292.9.00

Lab Number: L1117331

Report Date: 11/01/11

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1117331-01A	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	EPH-DELUX-10(14)
L1117331-01B	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	EPH-DELUX-10(14)
L1117331-01C	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-01D	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-01X	Plastic 1000ml HNO3 preserved sp	A	<2	2	Y	Absent	MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-SE-6010S-10(180)
L1117331-02A	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	-
L1117331-02B	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	-
L1117331-02C	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-02D	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-02X	Plastic 1000ml HNO3 preserved sp	A	<2	2	Y	Absent	MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-SE-6010S-10(180)
L1117331-03A	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	EPH-DELUX-10(14)
L1117331-03B	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	EPH-DELUX-10(14)
L1117331-03C	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-03D	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-03X	Plastic 1000ml HNO3 preserved sp	A	<2	2	Y	Absent	MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-SE-6010S-10(180)

*Values in parentheses indicate holding time in days



Project Name: PARCEL 6A

Project Number: 5292.9.00

Lab Number: L1117331

Report Date: 11/01/11

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1117331-04A	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	EPH-DELUX-10(14)
L1117331-04B	Amber 1000ml HCl preserved	A	<2	2	Y	Absent	EPH-DELUX-10(14)
L1117331-04C	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-04D	Plastic 1000ml unpreserved	A	7	2	Y	Absent	-
L1117331-04X	Plastic 1000ml HNO3 preserved sp	A	<2	2	Y	Absent	MCP-CD-6010S-10(180),MCP-7470S-10(28),MCP-AG-6010S-10(180),MCP-AS-6010S-10(180),MCP-CR-6010S-10(180),MCP-BA-6010S-10(180),MCP-PB-6010S-10(180),MCP-SE-6010S-10(180)

*Values in parentheses indicate holding time in days

Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1117331
Report Date: 11/01/11

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
M	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
NJ	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



Project Name: PARCEL 6A**Lab Number:** L1117331**Project Number:** 5292.9.00**Report Date:** 11/01/11**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1117331
Report Date: 11/01/11

REFERENCES

- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.
- 98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

LIMITATION OF LIABILITIES

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

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



Certificate/Approval Program Summary

Last revised September 19, 2011 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

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Non-Potable Water (Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl, V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID: 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID: 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE.
Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 6010B, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5035, 8015B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**
 Refer to MA-DEP Certificate for Potable and Non-Potable Water.
 Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S²⁻ D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.



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

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab:

10/21/11

ALPHA Job #:

L1117331

Project Information

Project Name: Parcel 6A

Project Location: Taunton

Project #: 5292.9.00

Project Manager: Amy Falconeiri

ALPHA Quote #:

Turn-Around Time

☒ Standard

☐ RUSH (only confirmed if pre-approved!)

Date Due: 10/28/11

Time:

Report Information - Data Deliverables

☐ FAX

☐ EMAIL

☐ ADEx

☐ Add'l Deliverables

Billing Information

☐ Same as Client info

PO #:

Regulatory Requirements/Report Limits

State/Fed Program MA/DEP

Criteria RCS-1

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☒ Yes ☐ No

Are MCP Analytical Methods Required?

☐ Yes ☒ No

Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)

☐ Yes ☒ No

Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS
Dissolved Metals
EPH

SAMPLE HANDLING

Filtration _____

☐ Done

☐ Not needed

☐ Lab to do

Preservation

☐ Lab to do

(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

Client Information

Client: McPhail Associates

Address: 2269 MASS. AVE

CAMBRIDGE, MA 02140

Phone: 617 868 1420

Fax:

Email:

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials											Sample Specific Comments	
		Date	Time														
17331	MAI-2 (ow)	10/21/11	1400	H2O	FBK	X	X									2- Amber (L) 2- plastic	4
2	MAI-3 (ow)	10/21/11	1330	H2O	FBK	X	X									"	4
3	MAI-5 (ow)	10/21/11	1300	H2O	FBK	X	X									"	4
4	MAI-6 (ow)	10/21/11	1235	H2O	FBK	X	X									"	4

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
MA MCP or CT RCP?

Container Type

P A

Preservative

C B

Relinquished By:

Date/Time

10/21/11 1600
10/21/11 1805

Received By:

Date/Time

10/21/11 1605
10/21/11 1805

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



ANALYTICAL REPORT

Lab Number:	L1118320
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	PARCEL 6A
Project Number:	5292.9.00
Report Date:	11/10/11

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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



Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1118320
Report Date: 11/10/11

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1118320-01	MA1-3 (OW)	TAUNTON	11/04/11 15:15

Project Name: PARCEL 6A

Lab Number: L1118320

Project Number: 5292.9.00

Report Date: 11/10/11

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is 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
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
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
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
E 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).	YES
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
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
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1118320
Report Date: 11/10/11

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

MCP Related Narratives

Sample Receipt

The samples were received at the laboratory above the required temperature range. The samples were transported to the laboratory in a cooler with ice and delivered directly from the sampling site.

EPH

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

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

Authorized Signature:



Elizabeth Simmons

Title: Technical Director/Representative

Date: 11/10/11

ORGANICS

PETROLEUM HYDROCARBONS

Project Name: PARCEL 6A**Lab Number:** L1118320**Project Number:** 5292.9.00**Report Date:** 11/10/11**SAMPLE RESULTS**

Lab ID: L1118320-01
Client ID: MA1-3 (OW)
Sample Location: TAUNTON
Matrix: Water
Analytical Method: 98,EPH-04-1.1
Analytical Date: 11/07/11 17:12
Analyst: AS

Date Collected: 11/04/11 15:15
Date Received: 11/04/11
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/05/11 14:32
Cleanup Method1: EPH-04-1
Cleanup Date1: 11/07/11

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	108		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	108		ug/l	100	--	1
Naphthalene	ND		ug/l	10.0	--	1
2-Methylnaphthalene	ND		ug/l	10.0	--	1
Acenaphthylene	ND		ug/l	10.0	--	1
Acenaphthene	ND		ug/l	10.0	--	1
Fluorene	ND		ug/l	10.0	--	1
Phenanthrene	ND		ug/l	10.0	--	1
Anthracene	ND		ug/l	10.0	--	1
Fluoranthene	ND		ug/l	10.0	--	1
Pyrene	ND		ug/l	10.0	--	1
Benzo(a)anthracene	ND		ug/l	10.0	--	1
Chrysene	ND		ug/l	10.0	--	1
Benzo(b)fluoranthene	ND		ug/l	10.0	--	1
Benzo(k)fluoranthene	ND		ug/l	10.0	--	1
Benzo(a)pyrene	ND		ug/l	10.0	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.0	--	1
D benzo(a,h)anthracene	ND		ug/l	10.0	--	1
Benzo(ghi)perylene	ND		ug/l	10.0	--	1

Project Name: PARCEL 6A**Lab Number:** L1118320**Project Number:** 5292.9.00**Report Date:** 11/10/11**SAMPLE RESULTS**

Lab ID: L1118320-01

Date Collected: 11/04/11 15:15

Client ID: MA1-3 (OW)

Date Received: 11/04/11

Sample Location: TAUNTON

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	69		40-140
o-Terphenyl	80		40-140
2-Fluorobiphenyl	88		40-140
2-Bromonaphthalene	86		40-140

Project Name: PARCEL 6A

Lab Number: L1118320

Project Number: 5292.9.00

Report Date: 11/10/11

Method Blank Analysis Batch Quality Control

Analytical Method: 98,EPH-04-1.1

Extraction Method: EPA 3510C

Analytical Date: 11/07/11 15:06

Extraction Date: 11/05/11 14:32

Analyst: AS

Cleanup Method1: EPH-04-1

Cleanup Date1: 11/07/11

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01 Batch: WG500389-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	10.0	--
2-Methylnaphthalene	ND		ug/l	10.0	--
Acenaphthylene	ND		ug/l	10.0	--
Acenaphthene	ND		ug/l	10.0	--
Fluorene	ND		ug/l	10.0	--
Phenanthrene	ND		ug/l	10.0	--
Anthracene	ND		ug/l	10.0	--
Fluoranthene	ND		ug/l	10.0	--
Pyrene	ND		ug/l	10.0	--
Benzo(a)anthracene	ND		ug/l	10.0	--
Chrysene	ND		ug/l	10.0	--
Benzo(b)fluoranthene	ND		ug/l	10.0	--
Benzo(k)fluoranthene	ND		ug/l	10.0	--
Benzo(a)pyrene	ND		ug/l	10.0	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.0	--
Dibenzo(a,h)anthracene	ND		ug/l	10.0	--
Benzo(ghi)perylene	ND		ug/l	10.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	70		40-140
o-Terphenyl	64		40-140
2-Fluorobiphenyl	71		40-140
2-Bromonaphthalene	70		40-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: PARCEL 6A

Project Number: 5292.9.00

Lab Number: L1118320

Report Date: 11/10/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG500389-2 WG500389-3								
C9-C18 Aliphatics	67		76		40-140	13		25
C19-C36 Aliphatics	83		99		40-140	18		25
C11-C22 Aromatics	95		94		40-140	1		25
Naphthalene	71		67		40-140	6		25
2-Methylnaphthalene	77		72		40-140	7		25
Acenaphthylene	75		69		40-140	8		25
Acenaphthene	74		70		40-140	6		25
Fluorene	73		72		40-140	1		25
Phenanthrene	75		77		40-140	3		25
Anthracene	75		75		40-140	0		25
Fluoranthene	75		76		40-140	1		25
Pyrene	77		78		40-140	1		25
Benzo(a)anthracene	72		74		40-140	3		25
Chrysene	73		74		40-140	1		25
Benzo(b)fluoranthene	74		79		40-140	7		25
Benzo(k)fluoranthene	70		73		40-140	4		25
Benzo(a)pyrene	70		70		40-140	0		25
Indeno(1,2,3-cd)Pyrene	70		72		40-140	3		25
Dibenzo(a,h)anthracene	64		68		40-140	6		25
Benzo(ghi)perylene	70		72		40-140	3		25
Nonane (C9)	57		58		30-140	2		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: PARCEL 6A

Project Number: 5292.9.00

Lab Number: L1118320

Report Date: 11/10/11

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01 Batch: WG500389-2 WG500389-3								
Decane (C10)	62		68		40-140	9		25
Dodecane (C12)	68		67		40-140	1		25
Tetradecane (C14)	70		72		40-140	3		25
Hexadecane (C16)	82		78		40-140	5		25
Octadecane (C18)	74		82		40-140	10		25
Nonadecane (C19)	76		84		40-140	10		25
Eicosane (C20)	76		85		40-140	11		25
Docosane (C22)	77		83		40-140	8		25
Tetracosane (C24)	78		84		40-140	7		25
Hexacosane (C26)	76		84		40-140	10		25
Octacosane (C28)	76		83		40-140	9		25
Triacontane (C30)	78		86		40-140	10		25
Hexatriacontane (C36)	87		97		40-140	11		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	78		75		40-140
o-Terphenyl	70		73		40-140
2-Fluorobiphenyl	76		79		40-140
2-Bromonaphthalene	75		77		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Project Name: PARCEL 6A**Lab Number:** L1118320**Project Number:** 5292.9.00**Report Date:** 11/10/11**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA**Cooler Information Custody Seal****Cooler**

A

Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1118320-01A	Amber 1000ml HCl preserved	A	<2	9	Y	Absent	EPH-DELUX-10(14)
L1118320-01B	Amber 1000ml HCl preserved	A	<2	9	Y	Absent	EPH-DELUX-10(14)

*Values in parentheses indicate holding time in days

Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1118320
Report Date: 11/10/11

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

Data Qualifiers

- | | |
|-----------|---|
| A | - Spectra identified as "Aldol Condensation Product". |
| B | - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. |
| C | - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses. |
| D | - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte. |
| E | - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument. |
| G | - The concentration may be biased high due to matrix interferences (i.e., co-elution) with non-target compound(s). The result should be considered estimated. |
| H | - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection. |
| I | - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference. |
| M | - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte. |
| NJ | - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search. |

Report Format: Data Usability Report



Project Name: PARCEL 6A**Lab Number:** L1118320**Project Number:** 5292.9.00**Report Date:** 11/10/11**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: PARCEL 6A
Project Number: 5292.9.00

Lab Number: L1118320
Report Date: 11/10/11

REFERENCES

- 98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

LIMITATION OF LIABILITIES

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

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



Certificate/Approval Program Summary

Last revised September 19, 2011 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Aldrin, Dieldrin, DDD, DDE, DDT, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters:

Pennsylvania Department of Environmental Protection Certificate/Lab ID: 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE.
Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 6010B, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5035, 8015B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**
 Refer to MA-DEP Certificate for Potable and Non-Potable Water.
 Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 376.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S²⁻ D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.



ANALYTICAL REPORT

Lab Number:	L1200565
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	PARCEL 6A
Project Number:	5292.9.01
Report Date:	01/17/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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



Project Name: PARCEL 6A
Project Number: 5292.9.01

Lab Number: L1200565
Report Date: 01/17/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1200565-01	MAI-101 (OW)	TAUNTON, MA	01/11/12 08:30
L1200565-02	MAI-102 (OW)	TAUNTON, MA	01/11/12 09:00
L1200565-03	MAI-103 (OW)	TAUNTON, MA	01/11/12 09:30
L1200565-04	MAI-1 (OW)	TAUNTON, MA	01/11/12 08:00
L1200565-05	MAI-106 (OW)	TAUNTON, MA	01/11/12 10:00
L1200565-06	MAI-107 (OW)	TAUNTON, MA	01/11/12 10:30
L1200565-07	MAI-109 (OW)	TAUNTON, MA	01/11/12 11:00
L1200565-08	MAI-111 (OW)	TAUNTON, MA	01/11/12 11:30

Project Name: PARCEL 6A

Lab Number: L1200565

Project Number: 5292.9.01

Report Date: 01/17/12

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is 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
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
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
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
E 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).	YES
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
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
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: PARCEL 6A
Project Number: 5292.9.01

Lab Number: L1200565
Report Date: 01/17/12

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

For additional information, please contact Client Services at 800-624-9220.

MCP Related Narratives

Volatile Organics

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

In reference to question H:

The WG513755-2 LCSD recovery, associated with L1200565-05 through -08, is below the acceptance criteria for 2-Hexanone (69%); however, it has been identified as a "difficult" analyte and is within the 40-160% acceptance limits. The results of the associated samples are reported; however, all results are considered to have a potentially low bias for this compound.

The WG513755-1/-2 LCS/LCSD RPDs, associated with L1200565-05 through -08, are above the acceptance criteria for 2-Butanone (25%) and 4-Methyl-2-pentanone (27%).

The initial calibration, associated with L1200565-05 through -08, did not meet the method required minimum

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**Case Narrative (continued)**

response factors on the lowest calibration standards for 1,4-Dioxane (0.00304), as well as the average response factor for tert-Butyl alcohol and 1,4-Dioxane.

The continuing calibration standard, associated with L1200565-05 through -08, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

EPH

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

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

Authorized Signature:



Cynthia McQueen

Title: Technical Director/Representative

Date: 01/17/12

PETROLEUM HYDROCARBONS

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-01
Client ID: MAI-101 (OW)
Sample Location: TAUNTON, MA
Matrix: Water
Analytical Method: 98,EPH-04-1.1
Analytical Date: 01/14/12 20:55
Analyst: NH

Date Collected: 01/11/12 08:30
Date Received: 01/11/12
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 01/12/12 10:23
Cleanup Method1: EPH-04-1
Cleanup Date1: 01/13/12

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.1	--	1
2-Methylnaphthalene	ND		ug/l	10.1	--	1
Acenaphthylene	ND		ug/l	10.1	--	1
Acenaphthene	ND		ug/l	10.1	--	1
Fluorene	ND		ug/l	10.1	--	1
Phenanthrene	ND		ug/l	10.1	--	1
Anthracene	ND		ug/l	10.1	--	1
Fluoranthene	ND		ug/l	10.1	--	1
Pyrene	ND		ug/l	10.1	--	1
Benzo(a)anthracene	ND		ug/l	10.1	--	1
Chrysene	ND		ug/l	10.1	--	1
Benzo(b)fluoranthene	ND		ug/l	10.1	--	1
Benzo(k)fluoranthene	ND		ug/l	10.1	--	1
Benzo(a)pyrene	ND		ug/l	10.1	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.1	--	1
D benzo(a,h)anthracene	ND		ug/l	10.1	--	1
Benzo(ghi)perylene	ND		ug/l	10.1	--	1

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-01

Date Collected: 01/11/12 08:30

Client ID: MAI-101 (OW)

Date Received: 01/11/12

Sample Location: TAUNTON, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	48		40-140
o-Terphenyl	79		40-140
2-Fluorobiphenyl	77		40-140
2-Bromonaphthalene	77		40-140

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-02
Client ID: MAI-102 (OW)
Sample Location: TAUNTON, MA
Matrix: Water
Analytical Method: 98,EPH-04-1.1
Analytical Date: 01/14/12 21:26
Analyst: NH

Date Collected: 01/11/12 09:00
Date Received: 01/11/12
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 01/12/12 10:23
Cleanup Method1: EPH-04-1
Cleanup Date1: 01/13/12

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.0	--	1
2-Methylnaphthalene	ND		ug/l	10.0	--	1
Acenaphthylene	ND		ug/l	10.0	--	1
Acenaphthene	ND		ug/l	10.0	--	1
Fluorene	ND		ug/l	10.0	--	1
Phenanthrene	ND		ug/l	10.0	--	1
Anthracene	ND		ug/l	10.0	--	1
Fluoranthene	ND		ug/l	10.0	--	1
Pyrene	ND		ug/l	10.0	--	1
Benzo(a)anthracene	ND		ug/l	10.0	--	1
Chrysene	ND		ug/l	10.0	--	1
Benzo(b)fluoranthene	ND		ug/l	10.0	--	1
Benzo(k)fluoranthene	ND		ug/l	10.0	--	1
Benzo(a)pyrene	ND		ug/l	10.0	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.0	--	1
D benzo(a,h)anthracene	ND		ug/l	10.0	--	1
Benzo(ghi)perylene	ND		ug/l	10.0	--	1

Project Name: PARCEL 6A

Lab Number: L1200565

Project Number: 5292.9.01

Report Date: 01/17/12

SAMPLE RESULTS

Lab ID: L1200565-02

Date Collected: 01/11/12 09:00

Client ID: MAI-102 (OW)

Date Received: 01/11/12

Sample Location: TAUNTON, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	85		40-140
o-Terphenyl	87		40-140
2-Fluorobiphenyl	92		40-140
2-Bromonaphthalene	91		40-140

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-03
Client ID: MAI-103 (OW)
Sample Location: TAUNTON, MA
Matrix: Water
Analytical Method: 98,EPH-04-1.1
Analytical Date: 01/14/12 21:57
Analyst: NH

Date Collected: 01/11/12 09:30
Date Received: 01/11/12
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 01/12/12 10:23
Cleanup Method1: EPH-04-1
Cleanup Date1: 01/13/12

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.2	--	1
2-Methylnaphthalene	ND		ug/l	10.2	--	1
Acenaphthylene	ND		ug/l	10.2	--	1
Acenaphthene	ND		ug/l	10.2	--	1
Fluorene	ND		ug/l	10.2	--	1
Phenanthrene	ND		ug/l	10.2	--	1
Anthracene	ND		ug/l	10.2	--	1
Fluoranthene	ND		ug/l	10.2	--	1
Pyrene	ND		ug/l	10.2	--	1
Benzo(a)anthracene	ND		ug/l	10.2	--	1
Chrysene	ND		ug/l	10.2	--	1
Benzo(b)fluoranthene	ND		ug/l	10.2	--	1
Benzo(k)fluoranthene	ND		ug/l	10.2	--	1
Benzo(a)pyrene	ND		ug/l	10.2	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.2	--	1
D benzo(a,h)anthracene	ND		ug/l	10.2	--	1
Benzo(ghi)perylene	ND		ug/l	10.2	--	1

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-03

Date Collected: 01/11/12 09:30

Client ID: MAI-103 (OW)

Date Received: 01/11/12

Sample Location: TAUNTON, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	60		40-140
o-Terphenyl	76		40-140
2-Fluorobiphenyl	80		40-140
2-Bromonaphthalene	82		40-140

Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**SAMPLE RESULTS**

Lab ID: L1200565-04
Client ID: MAI-1 (OW)
Sample Location: TAUNTON, MA
Matrix: Water
Analytical Method: 98,EPH-04-1.1
Analytical Date: 01/14/12 22:28
Analyst: NH

Date Collected: 01/11/12 08:00
Date Received: 01/11/12
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 01/12/12 10:23
Cleanup Method1: EPH-04-1
Cleanup Date1: 01/13/12

Quality Control Information

Condition of sample received:	Satisfactory
Aqueous Preservative:	Laboratory Provided Preserved Container
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Extractable Petroleum Hydrocarbons - Westborough Lab						
C9-C18 Aliphatics	ND		ug/l	100	--	1
C19-C36 Aliphatics	ND		ug/l	100	--	1
C11-C22 Aromatics	ND		ug/l	100	--	1
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--	1
Naphthalene	ND		ug/l	10.1	--	1
2-Methylnaphthalene	ND		ug/l	10.1	--	1
Acenaphthylene	ND		ug/l	10.1	--	1
Acenaphthene	ND		ug/l	10.1	--	1
Fluorene	ND		ug/l	10.1	--	1
Phenanthrene	ND		ug/l	10.1	--	1
Anthracene	ND		ug/l	10.1	--	1
Fluoranthene	ND		ug/l	10.1	--	1
Pyrene	ND		ug/l	10.1	--	1
Benzo(a)anthracene	ND		ug/l	10.1	--	1
Chrysene	ND		ug/l	10.1	--	1
Benzo(b)fluoranthene	ND		ug/l	10.1	--	1
Benzo(k)fluoranthene	ND		ug/l	10.1	--	1
Benzo(a)pyrene	ND		ug/l	10.1	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.1	--	1
D benzo(a,h)anthracene	ND		ug/l	10.1	--	1
Benzo(ghi)perylene	ND		ug/l	10.1	--	1

Project Name: PARCEL 6A

Lab Number: L1200565

Project Number: 5292.9.01

Report Date: 01/17/12

SAMPLE RESULTS

Lab ID: L1200565-04

Date Collected: 01/11/12 08:00

Client ID: MAI-1 (OW)

Date Received: 01/11/12

Sample Location: TAUNTON, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Extractable Petroleum Hydrocarbons - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	69		40-140
o-Terphenyl	77		40-140
2-Fluorobiphenyl	80		40-140
2-Bromonaphthalene	79		40-140

Project Name: PARCEL 6A

Lab Number: L1200565

Project Number: 5292.9.01

Report Date: 01/17/12

Method Blank Analysis Batch Quality Control

Analytical Method: 98,EPH-04-1.1

Extraction Method: EPA 3510C

Analytical Date: 01/14/12 12:35

Extraction Date: 01/12/12 10:23

Analyst: NH

Cleanup Method1: EPH-04-1

Cleanup Date1: 01/13/12

Parameter	Result	Qualifier	Units	RL	MDL
Extractable Petroleum Hydrocarbons - Westborough Lab for sample(s): 01-04 Batch: WG513278-1					
C9-C18 Aliphatics	ND		ug/l	100	--
C19-C36 Aliphatics	ND		ug/l	100	--
C11-C22 Aromatics	ND		ug/l	100	--
C11-C22 Aromatics, Adjusted	ND		ug/l	100	--
Naphthalene	ND		ug/l	10.0	--
2-Methylnaphthalene	ND		ug/l	10.0	--
Acenaphthylene	ND		ug/l	10.0	--
Acenaphthene	ND		ug/l	10.0	--
Fluorene	ND		ug/l	10.0	--
Phenanthrene	ND		ug/l	10.0	--
Anthracene	ND		ug/l	10.0	--
Fluoranthene	ND		ug/l	10.0	--
Pyrene	ND		ug/l	10.0	--
Benzo(a)anthracene	ND		ug/l	10.0	--
Chrysene	ND		ug/l	10.0	--
Benzo(b)fluoranthene	ND		ug/l	10.0	--
Benzo(k)fluoranthene	ND		ug/l	10.0	--
Benzo(a)pyrene	ND		ug/l	10.0	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	10.0	--
Dibenzo(a,h)anthracene	ND		ug/l	10.0	--
Benzo(ghi)perylene	ND		ug/l	10.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	73		40-140
o-Terphenyl	74		40-140
2-Fluorobiphenyl	79		40-140
2-Bromonaphthalene	77		40-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: PARCEL 6A

Project Number: 5292.9.01

Lab Number: L1200565

Report Date: 01/17/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-04 Batch: WG513278-2 WG513278-3								
C9-C18 Aliphatics	49		60		40-140	20		25
C19-C36 Aliphatics	71		85		40-140	18		25
C11-C22 Aromatics	72		79		40-140	9		25
Naphthalene	60		67		40-140	11		25
2-Methylnaphthalene	67		76		40-140	13		25
Acenaphthylene	57		68		40-140	18		25
Acenaphthene	67		76		40-140	13		25
Fluorene	69		77		40-140	11		25
Phenanthrene	71		80		40-140	12		25
Anthracene	67		75		40-140	11		25
Fluoranthene	71		80		40-140	12		25
Pyrene	71		82		40-140	14		25
Benzo(a)anthracene	66		76		40-140	14		25
Chrysene	70		80		40-140	13		25
Benzo(b)fluoranthene	71		82		40-140	14		25
Benzo(k)fluoranthene	71		80		40-140	12		25
Benzo(a)pyrene	61		73		40-140	18		25
Indeno(1,2,3-cd)Pyrene	70		81		40-140	15		25
Dibenzo(a,h)anthracene	65		76		40-140	16		25
Benzo(ghi)perylene	69		79		40-140	14		25
Nonane (C9)	34		43		30-140	23		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: PARCEL 6A
Project Number: 5292.9.01

Lab Number: L1200565
Report Date: 01/17/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Extractable Petroleum Hydrocarbons - Westborough Lab Associated sample(s): 01-04 Batch: WG513278-2 WG513278-3								
Decane (C10)	41		50		40-140	20		25
Dodecane (C12)	50		61		40-140	20		25
Tetradecane (C14)	56		69		40-140	21		25
Hexadecane (C16)	62		74		40-140	18		25
Octadecane (C18)	66		79		40-140	18		25
Nonadecane (C19)	67		80		40-140	18		25
Eicosane (C20)	68		81		40-140	17		25
Docosane (C22)	68		82		40-140	19		25
Tetracosane (C24)	70		84		40-140	18		25
Hexacosane (C26)	71		85		40-140	18		25
Octacosane (C28)	72		86		40-140	18		25
Triacontane (C30)	76		90		40-140	17		25
Hexatriacontane (C36)	86		99		40-140	14		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	57		78		40-140
o-Terphenyl	91		89		40-140
2-Fluorobiphenyl	80		83		40-140
2-Bromonaphthalene	79		82		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

Project Name: PARCEL 6A

Lab Number: L1200565

Project Number: 5292.9.01

Report Date: 01/17/12

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

B Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1200565-01A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-01B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-01C	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	-
L1200565-01D	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	-
L1200565-02A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-02B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-03A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-03B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-04A	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-04B	Amber 1000ml HCl preserved	A	<2	3	Y	Absent	EPH-DELUX-10(14)
L1200565-05A	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-05B	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-06A	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-06B	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-07A	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-07B	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-08A	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)
L1200565-08B	Vial HCl preserved	B	N/A	3	Y	Absent	MCP-8260-10(14)

*Values in parentheses indicate holding time in days



Project Name: PARCEL 6A
Project Number: 5292.9.01

Lab Number: L1200565
Report Date: 01/17/12

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

Data Qualifiers

- | | |
|-----------|---|
| A | - Spectra identified as "Aldol Condensation Product". |
| B | - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. |
| C | - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses. |
| D | - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte. |
| E | - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument. |
| G | - The concentration may be biased high due to matrix interferences (i.e., co-elution) with non-target compound(s). The result should be considered estimated. |
| H | - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection. |
| I | - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference. |
| M | - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte. |
| NJ | - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search. |

Report Format: Data Usability Report



Project Name: PARCEL 6A**Lab Number:** L1200565**Project Number:** 5292.9.01**Report Date:** 01/17/12**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: PARCEL 6A
Project Number: 5292.9.01

Lab Number: L1200565
Report Date: 01/17/12

REFERENCES

- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.
- 98 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, May 2004, Revision 1.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, July 2010.

LIMITATION OF LIABILITIES

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

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



Certificate/Approval Program Summary

Last revised January 3, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP), Ethylene Dibromide (EDB), 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D))

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E).)

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3,3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 8081, 8082, 8330, 8151A, 624, 8260, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

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Non-Potable Water (Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1,

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B;Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050C, 9065,1311, 1312, 3005A, 3050B. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8330, 8151A, 8015B, 8082, 8081A.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, SM4500F-BC, EPA 200.7, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 6020, 6020A, 7470A, 5540C, 4500H-B, EPA 200.8, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, NJ OQA-QAM-025 Rev.7, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3545, 3546, 3550B, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. *NELAP Accredited.*

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500H-B, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, LACHAT 10-107-04-1-C, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6020, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, EPA 9040B, SM4500-HB, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 9010B, 9030B.. Organic Parameters: EPA 624, 8260B, 8270C, 625, 608, 8081A, 8151A, 8330, 8082, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: 1010, 1030, EPA 6010B, 7196A, 7471A, 9012A, 9014, 9040B, 9045C, 9065, 9050, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8015B, 8081A, 8151A, 8330, 8082, 3540C, 3545, 3546, 3580, 5030B, 5035.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3005A, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 802A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S²⁻ D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 3005A, 3015, 1312, 6010B, 6010C, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B.)

Department of Defense Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6020, 245.1, 245.2, 7470A, 9040B, 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 5220D, 5310C, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8270C, 8330A, 625, 8082, 8081A, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 7471A, 9010, 9012A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8270C, 8330A/B-prep, 8082, 8081A, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A**: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C**: Methyl naphthalene, Dimethyl naphthalene, Total Methyl naphthalenes, Total Dimethyl naphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625**: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix.

7A
Volatile CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1200565

Instrument ID: Jack.i Calibration Date: 13-JAN-2012 Time: 06:50

Lab File ID: 0113A03 Init. Calib. Date(s): 10-NOV-2 10-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 14:05 17:52

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
dichlorodifluoromethane	.63412	.4754	.1	25	20	F
chloromethane	.95786	.69159	.1	28	20	F
vinyl chloride	.74427	.59696	.1	20	20	
bromomethane	.39483	.43865	.1	-11	20	
chloroethane	.39305	.35392	.1	10	20	
trichlorofluoromethane	.82135	.96323	.1	-17	20	
ethyl ether	.27366	.30104	.05	-10	20	
1,1,-dichloroethene	.52913	.56455	.1	-7	20	
carbon disulfide	1.3417	1.7381	.1	-30	20	F
freon-113	.49861	.54543	.1	-9	20	
iodomethane	.46115	.93248	.05	-102	20	F
acrolin	.06123	.03081	.05	50	20	F
methylene chloride	.59325	.57906	.1	2	20	
acetone	.17578	.1774	.1	-1	20	
trans-1,2-dichloroethene	.5946	.59823	.1	-1	20	
methyl acetate	.47873	.44075	.1	8	20	
methyl tert butyl ether	1.4467	1.4451	.1	0	20	
Diisopropyl Ether	2.2812	1.9488	.01	15	20	
tert butyl alcohol	.04495	.04338	.05	4	20	F
1,1-dichloroethane	1.1853	1.1403	.2	4	20	
Halothane	.42592	.55195	.05	-30	20	F
Ethyl-Tert-Butyl-Ether	1.8167	1.7845	.05	2	20	
vinyl acetate	1.0104	.94825	.05	6	20	
acrylonitrile	.19335	.16312	.05	16	20	
cis-1,2-dichloroethene	.65975	.64661	.1	2	20	
2,2-dichloropropane	.8794	.9453	.05	-7	20	
bromochloromethane	.30073	.328	.05	-9	20	
chloroform	1.1719	1.1193	.2	4	20	
carbontetrachloride	.75039	.86341	.1	-15	20	
ethyl acetate	.58943	.48695	.05	17	20	
tetrahydrofuran	.19351	.16475	.05	15	20	
1,1,1-trichloroethane	.93377	.9997	.1	-7	20	
1,1-dichloropropene	.86955	.8597	.05	1	20	
2-butanone	.27149	.26835	.1	1	20	
benzene	2.5011	2.5217	.5	-1	20	
Tertiary-Amyl Methyl Ether	1.4357	1.5682	.05	-9	20	
1,2-dichloroethane	.77064	.78864	.1	-2	20	
trichloroethene	.67819	.71358	.2	-5	20	

FORM VII MCP-8260-10

7A
CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1200565

Instrument ID: Jack.i Calibration Date: 13-JAN-2012 Time: 06:50

Lab File ID: 0113A03 Init. Calib. Date(s): 10-NOV-2 10-NOV-2

Sample No: 8260 CCAL Init. Calib. Times : 14:05 17:52

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
=====	=====	=====	=====	=====	=====	
dibromomethane	.28908	.33311	.05	-15	20	
1,2-dichloropropane	.60764	.62556	.1	-3	20	
bromodichloromethane	.77452	.77627	.2	0	20	
1,4-dioxane	.00288	.00309	.05	-7	20	F
cis-1,3-dichloropropene	.84496	.82429	.2	2	20	
toluene	1.9564	1.8619	.4	5	20	
2-chloroethylvinyl ether	.18925	.24915	.05	-32	20	F
tetrachloroethene	.88552	.92673	.2	-5	20	
4-methyl-2-pentanone	.1822	.20721	.1	-14	20	
trans-1,3-dichloropropene	.94644	.85797	.1	9	20	
1,1,2-trichloroethane	.54839	.51719	.1	6	20	
chlorodibromomethane	.7176	.77454	.1	-8	20	
1,3-dichloropropane	1.0278	.93349	.05	9	20	
1,2-dibromoethane	.47291	.49041	.1	-4	20	
2-hexanone	.51913	.40947	.1	21	20	F
chlorobenzene	2.1771	2.0720	.5	5	20	
ethyl benzene	3.3045	3.1135	.1	6	20	
1,1,1,2-tetrachloroethane	.78864	.81908	.05	-4	20	
p/m xylene	1.3059	1.2412	.1	5	20	
o xylene	1.3257	1.2809	.3	3	20	
bromoform	.76614	.73831	.1	4	20	
styrene	2.0857	2.1918	.3	-5	20	
isopropylbenzene	2.8673	2.8851	.1	-1	20	
bromobenzene	1.5900	1.5029	.05	5	20	
n-propylbenzene	5.7418	5.1039	.05	11	20	
1,1,2,2,-tetrachloroethane	1.3867	1.1451	.3	17	20	
4-ethyltoluene	5.1002	4.3200	.05	15	20	
2-chlorotoluene	4.4556	3.7946	.05	15	20	
1,2,3-trichloropropane	1.0206	.84412	.05	17	20	
1,3,5-trimethybenzene	4.6142	4.1815	.05	9	20	
trans-1,4-dichloro-2-butene	100	79.359	.05	21	20	F
4-chlorotoluene	4.0527	3.5098	.05	13	20	
tert-butylbenzene	3.6802	3.3587	.05	9	20	
1,2,4-trimethylbenzene	4.7087	4.2208	.05	10	20	
sec-butylbenzene	4.3264	4.0007	.01	8	20	
p-isopropyltoluene	3.8741	3.7738	.05	3	20	
1,3-dichlorobenzene	2.7407	2.6470	.6	3	20	
1,4-dichlorobenzene	2.7555	2.6844	.5	3	20	

FORM VII MCP-8260-10

MADEP MCP Analytical Method Report Certification Form						
Laboratory Name: AMRO Environmental Laboratories, Inc.			Project Number: 0310133			
Project Location: 3651031003/03 Taunton - Parcel GA			MADEP RTN ¹			
0310133-01	0310133-02	0310133-03	0310133-04	0310133-05		
Sample Matrices:		Ground Water <input checked="" type="checkbox"/> Soil / Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Other Matrix <input type="checkbox"/>				
MCP SW-846 Methods Used As specified in MADEP Compendium of Analytical Methods (check all that apply)	8260B <input checked="" type="checkbox"/>	8151A <input type="checkbox"/>	8330 <input type="checkbox"/>	6010B <input checked="" type="checkbox"/>	7470A/1A <input checked="" type="checkbox"/>	
	8270C <input type="checkbox"/>	8081A <input type="checkbox"/>	VPH <input type="checkbox"/>	6020 <input type="checkbox"/>	9014M ² <input type="checkbox"/>	
	8082 <input type="checkbox"/>	8021B <input type="checkbox"/>	EPH <input checked="" type="checkbox"/>	7000S ³ <input checked="" type="checkbox"/>	Other <input type="checkbox"/>	
¹ List Release Tracking Number (RTN) if known ² M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method ³ S SW-846 Methods 7000 Series List individual method analyte						
An affirmative response to questions A, B, C and D is required for "Presumptive Certainty" status						
A	Were all samples received by the laboratory in a condition consistent with that described on the Chain of Custody documentation for the data set?				<input checked="" type="radio"/> Yes <input type="radio"/> No ¹	
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guide lines?				<input checked="" type="radio"/> Yes <input type="radio"/> No ¹	
C	Does the analytical data included in this report meet all the requirements for Presumptive Certainty, as described in Section 2.0 of the MADEP document CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?				<input checked="" type="radio"/> Yes <input type="radio"/> No ¹	
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?				<input type="radio"/> Yes <input checked="" type="radio"/> No ¹	
A response to questions E and F below is required for "Presumptive Certainty" status						
E	Were all QC performance standards and recommendations for the specified methods achieved?				<input type="radio"/> Yes <input checked="" type="radio"/> No ¹	
F	Were results for all analyte-list compounds / elements for the specified method(s) reported?				<input checked="" type="radio"/> Yes <input type="radio"/> No ¹	
¹ All NO answers 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: <u><i>Samir A. Naguib</i></u>			Position: <u>QA Manager</u>			
Printed Name: <u>Samir A. Naguib</u>			Date: <u>11/11/03</u>			

B

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.

Client Sample ID: ECE MW3

Lab Order: 0310133

Project: 3651031003/03 Taunton - Parcel GA

Collection Date: 10/16/03

Lab ID: 0310133-01A

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY MCP MET SW8260B						Analyst: SK
Acetone	ND	10		µg/L	1	10/25/03 4:24:00 PM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Benzene	ND	1.0		µg/L	1	10/25/03 4:24:00 PM
Bromobenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Bromochloromethane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Bromoform	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Bromomethane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Carbon disulfide	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Chlorobenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Chloroethane	ND	5.0		µg/L	1	10/25/03 4:24:00 PM
Chloroform	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Chloromethane	ND	3.0		µg/L	1	10/25/03 4:24:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	10/25/03 4:24:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Dibromomethane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Dichlorodifluoromethane	ND	5.0		µg/L	1	10/25/03 4:24:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/25/03 4:24:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/25/03 4:24:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/25/03 4:24:00 PM
Diethyl ether	ND	5.0		µg/L	1	10/25/03 4:24:00 PM

B

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.**Client Sample ID:** ECE MW3**Lab Order:** 0310133**Project:** 3651031003/03 Taunton - Parcel GA**Collection Date:** 10/16/03**Lab ID:** 0310133-01A**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diisopropyl ether	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,4-Dioxane	ND	50		µg/L	1	10/25/03 4:24:00 PM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Ethylbenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
2-Hexanone	ND	10		µg/L	1	10/25/03 4:24:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
2-Butanone	ND	10		µg/L	1	10/25/03 4:24:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/25/03 4:24:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/25/03 4:24:00 PM
Naphthalene	5.6	5.0		µg/L	1	10/25/03 4:24:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Styrene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Tetrahydrofuran	ND	10		µg/L	1	10/25/03 4:24:00 PM
Toluene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Trichloroethene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
1,2,4-Trimethylbenzene	7.0	2.0		µg/L	1	10/25/03 4:24:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
Vinyl chloride	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
o-Xylene	ND	2.0		µg/L	1	10/25/03 4:24:00 PM
m,p-Xylene	2.1	2.0		µg/L	1	10/25/03 4:24:00 PM
Surr: Dibromofluoromethane	99.2	85-120		%REC	1	10/25/03 4:24:00 PM
Surr: 1,2-Dichloroethane-d4	94.0	75-124		%REC	1	10/25/03 4:24:00 PM
Surr: Toluene-d8	92.0	82-112		%REC	1	10/25/03 4:24:00 PM
Surr: 4-Bromofluorobenzene	91.2	77-117		%REC	1	10/25/03 4:24:00 PM

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.

Client Sample ID: ECE MW3DUP

Lab Order: 0310133

Project: 3651031003/03 Taunton - Parcel GA

Collection Date: 10/16/03

Lab ID: 0310133-02A

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY MCP MET SW8260B						Analyst: SK
Acetone	ND	10		µg/L	1	10/25/03 4:59:00 PM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Benzene	ND	1.0		µg/L	1	10/25/03 4:59:00 PM
Bromobenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Bromochloromethane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Bromoform	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Bromomethane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Carbon disulfide	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Chlorobenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Chloroethane	ND	5.0		µg/L	1	10/25/03 4:59:00 PM
Chloroform	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Chloromethane	ND	3.0		µg/L	1	10/25/03 4:59:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	10/25/03 4:59:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Dibromomethane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Dichlorodifluoromethane	ND	5.0		µg/L	1	10/25/03 4:59:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/25/03 4:59:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/25/03 4:59:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/25/03 4:59:00 PM
Diethyl ether	ND	5.0		µg/L	1	10/25/03 4:59:00 PM

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

B

CLIENT: Mactec E & C, Inc.**Client Sample ID:** ECE MW3DUP**Lab Order:** 0310133**Project:** 3651031003/03 Taunton - Parcel GA**Collection Date:** 10/16/03**Lab ID:** 0310133-02A**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diisopropyl ether	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,4-Dioxane	ND	50		µg/L	1	10/25/03 4:59:00 PM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Ethylbenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
2-Hexanone	ND	10		µg/L	1	10/25/03 4:59:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
2-Butanone	ND	10		µg/L	1	10/25/03 4:59:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/25/03 4:59:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/25/03 4:59:00 PM
Naphthalene	ND	5.0		µg/L	1	10/25/03 4:59:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Styrene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Tetrahydrofuran	ND	10		µg/L	1	10/25/03 4:59:00 PM
Toluene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Trichloroethene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
1,2,4-Trimethylbenzene	4.0	2.0		µg/L	1	10/25/03 4:59:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Vinyl chloride	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
o-Xylene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
m,p-Xylene	ND	2.0		µg/L	1	10/25/03 4:59:00 PM
Surr: Dibromofluoromethane	103	85-120		%REC	1	10/25/03 4:59:00 PM
Surr: 1,2-Dichloroethane-d4	95.3	75-124		%REC	1	10/25/03 4:59:00 PM
Surr: Toluene-d8	88.5	82-112		%REC	1	10/25/03 4:59:00 PM
Surr: 4-Bromofluorobenzene	92.3	77-117		%REC	1	10/25/03 4:59:00 PM

B

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT:	Mactec E & C, Inc.	Client Sample ID:	ECE MW2
Lab Order:	0310133		
Project:	3651031003/03 Taunton - Parcel GA	Collection Date:	10/16/03
Lab ID:	0310133-03A	Matrix:	GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY MCP MET SW8260B

Analyst: SK

Acetone	ND	10		µg/L	1	10/25/03 5:34:00 PM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Benzene	ND	1.0		µg/L	1	10/25/03 5:34:00 PM
Bromobenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Bromochloromethane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Bromoform	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Bromomethane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Carbon disulfide	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Chlorobenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Chloroethane	ND	5.0		µg/L	1	10/25/03 5:34:00 PM
Chloroform	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Chloromethane	ND	3.0		µg/L	1	10/25/03 5:34:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	10/25/03 5:34:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Dibromomethane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Dichlorodifluoromethane	ND	5.0		µg/L	1	10/25/03 5:34:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/25/03 5:34:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/25/03 5:34:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/25/03 5:34:00 PM
Diethyl ether	ND	5.0		µg/L	1	10/25/03 5:34:00 PM

B

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.

Client Sample ID: ECE MW2

Lab Order: 0310133

Project: 3651031003/03 Taunton - Parcel GA

Collection Date: 10/16/03

Lab ID: 0310133-03A

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diisopropyl ether	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,4-Dioxane	ND	50		µg/L	1	10/25/03 5:34:00 PM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Ethylbenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
2-Hexanone	ND	10		µg/L	1	10/25/03 5:34:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
2-Butanone	ND	10		µg/L	1	10/25/03 5:34:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/25/03 5:34:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/25/03 5:34:00 PM
Naphthalene	ND	5.0		µg/L	1	10/25/03 5:34:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Styrene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Tetrahydrofuran	ND	10		µg/L	1	10/25/03 5:34:00 PM
Toluene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Trichloroethene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Vinyl chloride	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
o-Xylene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
m,p-Xylene	ND	2.0		µg/L	1	10/25/03 5:34:00 PM
Surr: Dibromofluoromethane	102	85-120		%REC	1	10/25/03 5:34:00 PM
Surr: 1,2-Dichloroethane-d4	97.6	75-124		%REC	1	10/25/03 5:34:00 PM
Surr: Toluene-d8	90.9	82-112		%REC	1	10/25/03 5:34:00 PM
Surr: 4-Bromofluorobenzene	90.7	77-117		%REC	1	10/25/03 5:34:00 PM

A

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.

Client Sample ID: ECE MW1

Lab Order: 0310133

Project: 3651031003/03 Taunton - Parcel GA

Collection Date: 10/16/03

Lab ID: 0310133-04A

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY MCP MET SW8260B						Analyst: SK
Acetone	14	10		µg/L	1	10/27/03 7:45:00 PM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Benzene	ND	1.0		µg/L	1	10/27/03 7:45:00 PM
Bromobenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Bromochloromethane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Bromoform	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Bromomethane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Carbon disulfide	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Chlorobenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Chloroethane	ND	5.0		µg/L	1	10/27/03 7:45:00 PM
Chloroform	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Chloromethane	ND	3.0		µg/L	1	10/27/03 7:45:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	10/27/03 7:45:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Dibromomethane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
Dichlorodifluoromethane	ND	5.0		µg/L	1	10/27/03 7:45:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/27/03 7:45:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	10/27/03 7:45:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/27/03 7:45:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/27/03 7:45:00 PM
Diethyl ether	ND	5.0		µg/L	1	10/27/03 7:45:00 PM

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.

Client Sample ID: ECE MW3

Lab Order: 0310133

Tag Number:

Project: 3651031003/03 Taunton - Parcel GA

Collection Date: 10/16/03

Lab ID: 0310133-01B

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EXTRACTABLE PETROLEUM HYDROCARBONS MAEPH						Analyst: GG
C9-C18 Aliphatic Hydrocarbons	180	110		µg/L	1	10/28/03 12:42:00 PM
C19-C36 Aliphatic Hydrocarbons	340	110	B	µg/L	1	10/28/03 12:42:00 PM
C11-C22 Aromatic Hydrocarbons	1,700	110		µg/L	1	10/28/03 12:42:00 PM
Naphthalene	4.0	1.1		µg/L	1	10/28/03 12:42:00 PM
2-Methylnaphthalene	8.5	1.1		µg/L	1	10/28/03 12:42:00 PM
Acenaphthylene	ND	1.1		µg/L	1	10/28/03 12:42:00 PM
Acenaphthene	3.0	1.1		µg/L	1	10/28/03 12:42:00 PM
Fluorene	3.6	1.1		µg/L	1	10/28/03 12:42:00 PM
Phenanthrene	2.5	1.1		µg/L	1	10/28/03 12:42:00 PM
Anthracene	ND	1.1		µg/L	1	10/28/03 12:42:00 PM
Fluoranthene	ND	1.1		µg/L	1	10/28/03 12:42:00 PM
Pyrene	ND	1.1		µg/L	1	10/28/03 12:42:00 PM
Benz(a)anthracene	ND	1.1		µg/L	1	10/28/03 12:42:00 PM
Chrysene	ND	1.1		µg/L	1	10/28/03 12:42:00 PM
Benzo(b)fluoranthene	ND	1.1		µg/L	1	10/28/03 12:42:00 PM
Benzo(k)fluoranthene	ND	1.1		µg/L	1	10/28/03 12:42:00 PM
Benzo(a)pyrene	ND	1.1		µg/L	1	10/28/03 12:42:00 PM
Dibenz(a,h)anthracene	ND	1.1		µg/L	1	10/28/03 12:42:00 PM
Indeno(1,2,3-cd)pyrene	ND	1.1		µg/L	1	10/28/03 12:42:00 PM
Benzo(g,h,i)perylene	ND	1.1		µg/L	1	10/28/03 12:42:00 PM
Surr: 1-Chlorooctadecane	60.1	40-140		%REC	1	10/28/03 12:42:00 PM
Surr: 2-Bromonaphthalene	106	40-140		%REC	1	10/28/03 12:42:00 PM
Surr: 2-Fluorobiphenyl	105	40-140		%REC	1	10/28/03 12:42:00 PM
Surr: o-Terphenyl	88.4	40-140		%REC	1	10/28/03 12:42:00 PM

Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. EPH: C11-C22 Aromatic Hydrocarbons exclude the concentration of target PAH analytes. VPH: C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range. C9-C12 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range and concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION

Were all QA/QC procedures required by the VPH or EPH method followed:

☐ Yes ☒ No - If No, See Case Narrative

Were all performance/acceptance standards for required QA/QC procedures achieved:

☒ Yes ☐ No - If No, See Case Narrative

Were any significant modifications made to the method as specified in section 11.3:

☐ No ☒ Yes - Details enclosed

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

SIGNATURE:

PRINTED NAME: Nancy Stewart

DATE:

11/11/03

POSITION: Laboratory Director (or designee)

Qualifiers: RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

E - Value above quantitation range

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

- See Case Narrative

B - Analyte detected in the associated Method Blank

H - Method prescribed holding time exceeded

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.
Lab Order: 0310133
Project: 3651031003/03 Taunton - Parcel GA
Lab ID: 0310133-02B

Client Sample ID: ECE MW3DUP
Tag Number:
Collection Date: 10/16/03
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EXTRACTABLE PETROLEUM HYDROCARBONS MAEPH						Analyst: GG
C9-C18 Aliphatic Hydrocarbons	190	100		µg/L	1	10/28/03 2:17:00 PM
C19-C36 Aliphatic Hydrocarbons	420	100	B	µg/L	1	10/28/03 2:17:00 PM
C11-C22 Aromatic Hydrocarbons	2,000	100		µg/L	1	10/28/03 2:17:00 PM
Naphthalene	4.9	1.0		µg/L	1	10/28/03 2:17:00 PM
2-Methylnaphthalene	12	1.0		µg/L	1	10/28/03 2:17:00 PM
Acenaphthylene	ND	1.0		µg/L	1	10/28/03 2:17:00 PM
Acenaphthene	3.5	1.0		µg/L	1	10/28/03 2:17:00 PM
Fluorene	4.1	1.0		µg/L	1	10/28/03 2:17:00 PM
Phenanthrene	3.2	1.0		µg/L	1	10/28/03 2:17:00 PM
Anthracene	ND	1.0		µg/L	1	10/28/03 2:17:00 PM
Fluoranthene	ND	1.0		µg/L	1	10/28/03 2:17:00 PM
Pyrene	ND	1.0		µg/L	1	10/28/03 2:17:00 PM
Benz(a)anthracene	ND	1.0		µg/L	1	10/28/03 2:17:00 PM
Chrysene	ND	1.0		µg/L	1	10/28/03 2:17:00 PM
Benzo(b)fluoranthene	ND	1.0		µg/L	1	10/28/03 2:17:00 PM
Benzo(k)fluoranthene	ND	1.0		µg/L	1	10/28/03 2:17:00 PM
Benzo(a)pyrene	ND	1.0		µg/L	1	10/28/03 2:17:00 PM
Dibenz(a,h)anthracene	ND	1.0		µg/L	1	10/28/03 2:17:00 PM
Indeno(1,2,3-cd)pyrene	ND	1.0		µg/L	1	10/28/03 2:17:00 PM
Benzo(g,h,i)perylene	ND	1.0		µg/L	1	10/28/03 2:17:00 PM
Surr: 1-Chlorooctadecane	56.0	40-140		%REC	1	10/28/03 2:17:00 PM
Surr: 2-Bromonaphthalene	96.9	40-140		%REC	1	10/28/03 2:17:00 PM
Surr: 2-Fluorobiphenyl	96.9	40-140		%REC	1	10/28/03 2:17:00 PM
Surr: o-Terphenyl	89.4	40-140		%REC	1	10/28/03 2:17:00 PM

Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. EPH: C11-C22 Aromatic Hydrocarbons exclude the concentration of target PAH analytes. VPH: C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range. C9-C12 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range and concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION

Were all QA/QC procedures required by the VPH or EPH method followed: ☐ Yes ☒ No - If No, See Case Narrative
Were all performance/acceptance standards for required QA/QC procedures achieved: ☒ Yes ☐ No - If No, See Case Narrative
Were any significant modifications made to the method as specified in section 11.3: ☐ No ☒ Yes - Details enclosed

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

SIGNATURE: 
PRINTED NAME: Nancy Stewart

DATE: 11/11/03
POSITION: Laboratory Director (or designee)

Qualifiers: RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits E - Value above quantitation range
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits # - See Case Narrative
B - Analyte detected in the associated Method Blank H - Method prescribed holding time exceeded

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.

Client Sample ID: ECE MW2

Lab Order: 0310133

Tag Number:

Project: 3651031003/03 Taunton - Parcel GA

Collection Date: 10/16/03

Lab ID: 0310133-03B

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EXTRACTABLE PETROLEUM HYDROCARBONS MAEPH						Analyst: GG
C9-C18 Aliphatic Hydrocarbons	410	110		µg/L	1	10/28/03 2:48:00 PM
C19-C36 Aliphatic Hydrocarbons	520	110	B	µg/L	1	10/28/03 2:48:00 PM
C11-C22 Aromatic Hydrocarbons	1,700	110		µg/L	1	10/28/03 2:48:00 PM
Naphthalene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
2-Methylnaphthalene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Acenaphthylene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Acenaphthene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Fluorene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Phenanthrene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Anthracene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Fluoranthene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Pyrene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Benz(a)anthracene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Chrysene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Benzo(b)fluoranthene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Benzo(k)fluoranthene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Benzo(a)pyrene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Dibenz(a,h)anthracene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Indeno(1,2,3-cd)pyrene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Benzo(g,h,i)perylene	ND	1.1		µg/L	1	10/28/03 2:48:00 PM
Surr: 1-Chlorooctadecane	57.7	40-140		%REC	1	10/28/03 2:48:00 PM
Surr: 2-Bromonaphthalene	99.1	40-140		%REC	1	10/28/03 2:48:00 PM
Surr: 2-Fluorobiphenyl	98.9	40-140		%REC	1	10/28/03 2:48:00 PM
Surr: o-Terphenyl	76.4	40-140		%REC	1	10/28/03 2:48:00 PM

Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. EPH: C11-C22 Aromatic Hydrocarbons exclude the concentration of target PAH analytes. VPH: C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range. C9-C12 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range and concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION

Were all QA/QC procedures required by the VPH or EPH method followed:

☐ Yes ☒ No - If No, See Case Narrative

Were all performance/acceptance standards for required QA/QC procedures achieved:

☒ Yes ☐ No - If No, See Case Narrative

Were any significant modifications made to the method as specified in section 11.3:

☐ No ☒ Yes - Details enclosed

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

SIGNATURE:

PRINTED NAME: Nancy Stewart

DATE:

POSITION: Laboratory Director (or designee)

Qualifiers: RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

E - Value above quantitation range

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

- See Case Narrative

B - Analyte detected in the associated Method Blank

H - Method prescribed holding time exceeded

A

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.

Client Sample ID: ECE MW1

Lab Order: 0310133

Tag Number:

Project: 3651031003/03 Taunton - Parcel GA

Collection Date: 10/16/03

Lab ID: 0310133-04B

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EXTRACTABLE PETROLEUM HYDROCARBONS MAEPH						Analyst: GG
C9-C18 Aliphatic Hydrocarbons	ND	110		µg/L	1	10/28/03 3:20:00 PM
C19-C36 Aliphatic Hydrocarbons	160	110	B	µg/L	1	10/28/03 3:20:00 PM
C11-C22 Aromatic Hydrocarbons	300	110		µg/L	1	10/28/03 3:20:00 PM
Naphthalene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
2-Methylnaphthalene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Acenaphthylene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Acenaphthene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Fluorene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Phenanthrene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Anthracene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Fluoranthene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Pyrene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Benz(a)anthracene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Chrysene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Benzo(b)fluoranthene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Benzo(k)fluoranthene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Benzo(a)pyrene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Dibenz(a,h)anthracene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Indeno(1,2,3-cd)pyrene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Benzo(g,h,i)perylene	ND	1.1		µg/L	1	10/28/03 3:20:00 PM
Surr: 1-Chlorooctadecane	73.8	40-140		%REC	1	10/28/03 3:20:00 PM
Surr: 2-Bromonaphthalene	99.0	40-140		%REC	1	10/28/03 3:20:00 PM
Surr: 2-Fluorobiphenyl	96.6	40-140		%REC	1	10/28/03 3:20:00 PM
Surr: o-Terphenyl	89.3	40-140		%REC	1	10/28/03 3:20:00 PM

Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. EPH: C11-C22 Aromatic Hydrocarbons exclude the concentration of target PAH analytes. VPH: C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range. C9-C12 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range and concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION

Were all QA/QC procedures required by the VPH or EPH method followed:

☐ Yes ☒ No - If No, See Case Narrative

Were all performance/acceptance standards for required QA/QC procedures achieved:

☒ Yes ☐ No - If No, See Case Narrative

Were any significant modifications made to the method as specified in section 11.3:

☐ No ☒ Yes - Details enclosed

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

SIGNATURE:

PRINTED NAME: Nancy Stewart

DATE:

POSITION: Laboratory Director (or designee)

Qualifiers: RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

E - Value above quantitation range

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

- See Case Narrative

B - Analyte detected in the associated Method Blank

H - Method prescribed holding time exceeded

AMRO Environmental Laboratories Corp.

Date: 07-Nov-03

B

CLIENT: Mactec E & C, Inc.

Client Sample ID: ECE MW3DUP

Lab Order: 0310133

Project: 3651031003/03 Taunton - Parcel GA

Collection Date: 10/16/03

Lab ID: 0310133-02C

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ICP METALS TOTAL SW-846		SW6010B		Analyst: SJC		
Barium	ND	200		µg/L	1	10/22/03 7:16:32 PM
Beryllium	ND	5.0		µg/L	1	10/22/03 7:16:32 PM
Cadmium	ND	5.0		µg/L	1	10/22/03 7:16:32 PM
Chromium	ND	10		µg/L	1	10/22/03 7:16:32 PM
Nickel	ND	40		µg/L	1	10/22/03 7:16:32 PM
Silver	ND	7.0		µg/L	1	10/22/03 7:16:32 PM
Vanadium	ND	50		µg/L	1	10/22/03 7:16:32 PM
Zinc	ND	20		µg/L	1	10/22/03 7:16:32 PM
ARSENIC, TOTAL		SW7060A		Analyst: APL		
Arsenic	ND	5.0		µg/L	1	10/23/03 10:55:30 PM
MERCURY, TOTAL		SW7470A		Analyst: RK		
Mercury	ND	0.20		µg/L	1	10/21/03 1:30:48 PM
LEAD, TOTAL		SW7421		Analyst: APL		
Lead	ND	5.0		µg/L	1	10/23/03 10:55:30 PM
ANTIMONY, TOTAL		SW7041		Analyst: APL		
Antimony	ND	5.0		µg/L	1	10/27/03 11:56:56 PM
SELENIUM, TOTAL		SW7740		Analyst: APL		
Selenium	ND	5.0		µg/L	1	10/23/03 10:55:30 PM
THALLIUM, TOTAL		SW7841		Analyst: APL		
Thallium	ND	5.0		µg/L	1	10/23/03 10:55:30 PM

AMRO Environmental Laboratories Corp.

Date: 11-Nov-03

CLIENT: Mactec E & C, Inc.

Work Order: 0310133

Project: 3651031003/03 Taunton - Parcel GA

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID	LCS-10402	Batch ID: 10402	Test Code: MAEPH	Units: µg/L	Analysis Date	10/28/03 12:11:00 PM	Prep Date	10/27/03				
Client ID:		Run ID:	SV-2_031028A		SeqNo:	352981						
Analyte	QC Sample Result	RL	Units	QC Spike Amount	Original Sample Result	%REC	LowLimit	HighLimit	Original Sample or MS Result	%RPD	RPDLimit	Qua
n-Eicosane	23.19	1.0	µg/L	25	0	92.8	40	140	0			
n-Nonadecane	23.78	1.0	µg/L	25	0	95.1	40	140	0			
n-Nonane	15.52	1.0	µg/L	25	0	62.1	40	140	0			
n-Octacosane	20.4	1.0	µg/L	25	0	81.6	40	140	0			
n-Tetradecane	22.02	1.0	µg/L	25	0	88.1	40	140	0			
Naphthalene	23.84	1.0	µg/L	25	0	95.4	40	140	0			
Acenaphthene	25.16	1.0	µg/L	25	0	101	40	140	0			
Anthracene	28.67	1.0	µg/L	25	0	115	40	140	0			
Pyrene	26.7	1.0	µg/L	25	0	107	40	140	0			
Chrysene	24.33	1.0	µg/L	25	0	97.3	40	140	0			
Surr: 1-Chlorooctadecane	16.66	1.0	µg/L	20	0	83.3	40	140	0			
Surr: 2-Bromonaphthalene	22.22	1.0	µg/L	20	0	111	40	140	0			
Surr: 2-Fluorobiphenyl	22.02	1.0	µg/L	20	0	110	40	140	0			
Surr: o-Terphenyl	20.34	1.0	µg/L	20	0	102	40	140	0			

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 27-Jan-04

CLIENT: Mactec E & C, Inc.**Client Sample ID:** MW 8**Lab Order:** 0401077**Project:** 3651031003 Taunton Parcel 6A**Collection Date:** 1/15/04**Lab ID:** 0401077-01A**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY MCP MET SW8260B						Analyst: KT
Acetone	ND	10		µg/L	1	1/23/04 3:04:00 PM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Benzene	ND	1.0		µg/L	1	1/23/04 3:04:00 PM
Bromobenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Bromochloromethane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Bromoform	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Bromomethane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Carbon disulfide	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Chlorobenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Chloroethane	ND	5.0		µg/L	1	1/23/04 3:04:00 PM
Chloroform	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Chloromethane	ND	3.0		µg/L	1	1/23/04 3:04:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	1/23/04 3:04:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Dibromomethane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Dichlorodifluoromethane	ND	5.0		µg/L	1	1/23/04 3:04:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/23/04 3:04:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/23/04 3:04:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/23/04 3:04:00 PM
Diethyl ether	ND	5.0		µg/L	1	1/23/04 3:04:00 PM

DATA COMMENT PAGE

Organic Data Qualifiers

ND	Indicates compound was analyzed for, but not detected at or above the reporting limit.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than the method detection limit.
H	Method prescribed holding time exceeded.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
B	This flag is used when the analyte is found in the associated blank as well as in the sample.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
#	See Case Narrative

Inorganic Data Qualifiers

ND or	Indicates element was analyzed for, but not detected at or above the reporting limit.
J	Indicates a value greater than or equal to the method detection limit, but less than the quantitation limit.
H	Indicates analytical holding time exceedance.
B	Indicates that the analyte is found in the associated blank, as well as in the sample.
MSA	Indicates value determined by the Method of Standard Addition
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
R	RPD outside accepted recovery limits
RL	Reporting limit; defined as the lowest concentration the laboratory can accurately quantitate.
S	Spike Recovery outside accepted recovery limits.
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995
#	See Case Narrative

Report Comments:

1. Soil, sediment and sludge sample results are reported on a "dry weight" basis.
2. Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

Volatile Petroleum Hydrocarbons (VPH)
Massachusetts Department of Environmental Protection (MADEP)
Method 1.0 - January 1998
AMRO Modifications

This modification is based on the use of a purge and trap gas chromatography mass spectrometer (GC/MS) system to analyze samples for VPH. The hydrocarbon ranges are quantified using predominant mass fragmentation ions that are characteristic for the range being measured. This approach eliminates potential false positives for the target analytes while providing accurate hydrocarbon range data and also eliminates the double counting of aromatics in the C9-C12 Aliphatic Range. The C5-C8 Aliphatic Range and C9-C12 Aliphatic Range are quantified using m/z 43 which is the largest ion in the spectra of most low molecular weight aliphatics and the C9-C10 Aromatic Range is quantified using m/z 91, the tropylium ion, which is characteristic of all alkyl benzene aromatics. AMRO has evaluated both "fresh" and "weathered" gasoline reference materials from different sources to validate the accuracy of this ion set. No significant negative or positive bias has been observed in the quantitation of fresh or weathered gasolines. Recoveries meet all method criteria. Validation data has been reviewed by MADEP and is available on request.

The chromatographic column is a HP-624 capillary column that has been validated by GC/MS analysis of a gasoline standard to correctly identify the marker compounds and elution order of specific gasoline components. Batch quality control includes, at a minimum, method blank, laboratory control sample, and duplicate analysis. A matrix spike and/or matrix spike duplicate is analyzed if sufficient sample is submitted to the laboratory.

The Reporting Limit (RL) of this method for each of the collective aliphatic and aromatic ranges is approximately 0.6-2.5 mg/kg in soil and 25-100 $\mu\text{g/L}$ in water. The RL of this method for the target analytes ranges from approximately 0.05-0.12 mg/kg in soil and 2.0-5.0 $\mu\text{g/L}$ for water samples.

Extractable Petroleum Hydrocarbons (EPH)
Massachusetts Department of Environmental Protection (MADEP)
Method 1.0 - January 1998
AMRO Modifications

This modification is based on a solvent extraction and gas chromatography mass spectrometer (GC/MS) analysis. The hydrocarbon ranges are quantified using predominant mass fragmentation ions which are characteristic for the range being measured. This approach eliminates the silica gel solid-phase fractionation step. False positives for targeted PAH analytes are eliminated by using GC/MS as the primary analysis technique and non-petroleum interferences can be identified and often eliminated. The hydrocarbon ranges are quantified using predominant mass fragmentation ions that are characteristic and selective for the range being measured. The C9-C18 and C19-C36 Aliphatic Ranges are quantified using the combined ions m/z 43, 57, 67 and 71. These are the dominant fragment ions in aliphatic alkane and cycloaliphatic hydrocarbons present in the common distillate petroleum products. The C11-C22 Aromatic Range is quantified using ions m/z 50, 63, and 74. These are the principal unique and characteristic aromatic ring fragment ions in semivolatile aromatic hydrocarbons present in distillate petroleum products. AMRO has evaluated quantitative recovery using these ion sets for a wide variety of semivolatile petroleum products including diesel fuels, jet fuels, and motor oils. Accuracy of the aliphatic vs. aromatic quantitation has been validated using an EPA/API reference material and silica gel separation. Recoveries meet all method criteria. Validation data has been reviewed by MADEP and is available on request.

The chromatographic column is a J&W Scientific DB-5ms capillary column. Internal standard calibration is performed using 5 α -Androstane at a concentration of 20 ng/ μL . o-Terphenyl and 1-Chlorooctadecane are added as surrogate compounds at 20 ng/ μL in the sample extract. These two surrogates monitor the effects of the sample matrix and extraction efficiency. Two additional surrogates, 2-Fluorobiphenyl and 2-Bromonaphthalene, are added to the finished extract prior to analysis to monitor instrument performance. Batch quality control includes, at a minimum, a procedure blank, laboratory control sample and duplicate sample analysis. A matrix spike is analyzed if sufficient sample is submitted to the laboratory.

The Reporting Limit (RL) of this method for each of the collective aliphatic and aromatic ranges is approximately 50 mg/kg in soil and 100 $\mu\text{g/L}$ in water. The RL of this method for the Target PAH analytes is approximately 0.25 mg/kg in soil; 1.0 $\mu\text{g/L}$ for water when operating the GC/MS in full scan mode, and 0.1 $\mu\text{g/L}$ when operating the GC/MS in SIM mode. For sites requiring the lowest levels cited in the Massachusetts Contingency Plan for water, GC/MS in the Selected Ion Monitoring (SIM) mode is used.

MADEP MCP Analytical Method Report Certification Form						
Laboratory Name: AMRO Environmental Laboratories, Inc.			Project Number: 0401077			
Project Location: 3651031003 Taunton Parcel 6A			MADEP RTN ¹			
0401077-01	0401077-02					
Sample Matrices:		Ground Water <input checked="" type="checkbox"/> Soil / Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Other Matrix <input type="checkbox"/>				
MCP SW-846 Methods Used As specified in MADEP Compendium of Analytical Methods. (check all that apply)	8260B <input checked="" type="checkbox"/>	8151A <input type="checkbox"/>	8330 <input type="checkbox"/>	6010B <input checked="" type="checkbox"/>	7470A/1A <input checked="" type="checkbox"/>	
	8270C <input type="checkbox"/>	8081A <input type="checkbox"/>	VPH <input type="checkbox"/>	6020 <input type="checkbox"/>	9014M ² <input type="checkbox"/>	
	8082 <input type="checkbox"/>	8021B <input type="checkbox"/>	EPH <input checked="" type="checkbox"/>	7000S ³ <input checked="" type="checkbox"/>	Other <input type="checkbox"/>	
¹ List Release Tracking Number (RTN) if known ² M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method ³ S - SW-846 Methods 7000 Series. List individual method analyte.						
An affirmative response to questions A, B, C and D is required for "Presumptive Certainty" status						
A	Were all samples received by the laboratory in a condition consistent with that described on the Chain of Custody documentation for the data set?				() Yes () No ¹	
B	Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guide lines?				() Yes () No ¹	
C	Does the analytical data included in this report meet all the requirements for Presumptive Certainty, as described in Section 2.0 of the MADEP document CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?				() Yes () No ¹	
D	VPH and EPH methods only: Was the VPH or EPH method run without significant modifications, as specified in Section 11.3?				() Yes () No ¹	
A response to questions E and F below is required for "Presumptive Certainty" status						
E	Were all QC performance standards and recommendations for the specified methods achieved?				() Yes () No ¹	
F	Were results for all analyte-list compounds / elements for the specified method(s) reported?				() Yes () No ¹	
¹ All NO answers 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: <u>Nancy Stewart</u>			Position: <u>Lab Director</u>			
Printed Name: <u>Nancy Stewart</u>			Date: <u>1-30-04</u>			

CASE NARRATIVE

0401077

GC/MS-VOLATILES

WATER

1. Quadratic regression was utilized in the Initial Calibration performed on 11/15/03 on instrument V-1 for Vinyl acetate.
2. A Laboratory Control Sample (LCS-01/23/04) and Laboratory Control Duplicate Sample (Batch ID: R22297) were performed. 4 compounds recovered outside the Quality Control Limits in both.

MADEP-EPH

WATER

1. The surrogate 1-Chlorooctadecane recovered below the QC limits (40-140%) in sample MW 10 (0401077-02B) at 34.8%.

TRACE METALS

WATER

1. The %REC's for Arsenic in the Continuing Calibration Verification Standard (CCV) that bracketed the samples in this project (012004A GFAA analytical run) were 110.55% and 111.56% outside the MADEP-MCP acceptable limit (90-110%), however these %REC's were within the SW-846 7000series acceptable limits (80-120%). Arsenic was not detected in any sample.
2. The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) were not performed on the client's sample.

Merrimack, NH 03054
(603) 424-2022

AMRO ID: 0401077

[illegible]

1-19-04

7

AMRO ID: 0401077
Date Rec.: 1-16-04
Date Due: 1-23-04

Yes	No	NA	Comments
		✓	
		✓	
		✓	
		✓	
✓			
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✓			
✓			
		✓	

If NO then fax client and inform the VOA lab ASAP.

Date: 1-20-04

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qc/qcmemos/forms/amrococ/Rev. 2001/02

Lab Order: 0401077
Client: Mactec E & C, Inc.
Project: 3651031003 Taunton Parcel 6A

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Analytical Test Name		Analysis Date	
				Preparatory Test Name	Prep Date	Batch ID	TCLP Date
0401077-02C	MW 10	1/15/04	Groundwater	EPA 7060 ARSENIC, Total		1/20/04	
				EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	10932	
				EPA 7421 LEAD, Total		1/20/04	
					1/19/04	10933	
				EPA 7470 MERCURY, Total		1/19/04	
				MERCURY PREP: EPA 245.1/7040	1/19/04	10922	
				EPA 7740 SELENIUM, Total		1/20/04	
				EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	10934	
				EPA 7841 THALLIUM, Total		1/20/04	
					1/19/04	10935	
				ICP METALS, TOTAL		1/19/04	
					1/19/04	10924	

Lab Order: 0401077
 Client: Mactec E & C, Inc.
 Project: 3651031003 Taunton Parcel 6A

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Analytical Test Name	Prep Date	Analysis Date	
				Preparatory Test Name		Batch ID	TCLP Date
0401077-01A	MW 8	1/15/04	Groundwater	MCP VOCs 8260, EPA 5030B		1/23/04	
				EPA 5030B	1/23/04	R22297	
0401077-01B				EPH, Water, Full List		1/26/04	
				AQPREP SEP FUNNEL: EPH	1/26/04	10963	
0401077-01C				EPA 7041 ANTIMONY, Total		1/20/04	
				EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	10936	
				EPA 7060 ARSENIC, Total		1/20/04	
					1/19/04	10932	
				EPA 7421 LEAD, Total		1/20/04	
					1/19/04	10933	
				EPA 7470 MERCURY, Total		1/19/04	
				MERCURY PREP: EPA 245.1/7040	1/19/04	10922	
				EPA 7740 SELENIUM, Total		1/20/04	
				EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	10934	
				EPA 7841 THALLIUM, Total		1/20/04	
					1/19/04	10935	
				ICP METALS, TOTAL		1/19/04	
					1/19/04	10924	
0401077-02A	MW 10			MCP VOCs 8260, EPA 5030B		1/23/04	
				EPA 5030B	1/23/04	R22297	
0401077-02B				EPH, Water, Full List		1/26/04	
				AQPREP SEP FUNNEL: EPH	1/26/04	10963	
0401077-02C				EPA 7041 ANTIMONY, Total		1/20/04	
				EPA 3010 AQPREP TOTAL METALS: ICP/GFAA	1/19/04	10936	

AMRO Environmental Laboratories Corp.

Date: 27-Jan-04

CLIENT: Mactec E & C, Inc.
Project: 3651031003 Taunton Parcel 6A
Lab Order: 0401077
Date Received: 1/16/04

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Collection Date
0401077-01A	MW 8	1/15/04
0401077-01B	MW 8	1/15/04
0401077-01C	MW 8	1/15/04
0401077-02A	MW 10	1/15/04
0401077-02B	MW 10	1/15/04
0401077-02C	MW 10	1/15/04

AMRO Environmental Laboratories Corp.

Date: 07-Nov-03

CLIENT: Mactec E & C, Inc.

Client Sample ID: ECE MW1

Lab Order: 0310133

Project: 3651031003/03 Taunton - Parcel GA

Collection Date: 10/16/03

Lab ID: 0310133-04C

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ICP METALS TOTAL SW-846		SW6010B				Analyst: SJC
Barium	ND	200		µg/L	1	10/22/03 7:35:31 PM
Beryllium	ND	5.0		µg/L	1	10/22/03 7:35:31 PM
Cadmium	ND	5.0		µg/L	1	10/22/03 7:35:31 PM
Chromium	ND	10		µg/L	1	10/22/03 7:35:31 PM
Nickel	ND	40		µg/L	1	10/22/03 7:35:31 PM
Silver	ND	7.0		µg/L	1	10/22/03 7:35:31 PM
Vanadium	ND	50		µg/L	1	10/22/03 7:35:31 PM
Zinc	1,200	20		µg/L	1	10/22/03 7:35:31 PM
ARSENIC, TOTAL		SW7060A				Analyst: APL
Arsenic	ND	5.0		µg/L	1	10/23/03 11:12:40 PM
MERCURY, TOTAL		SW7470A				Analyst: RK
Mercury	ND	0.20		µg/L	1	10/21/03 1:38:48 PM
LEAD, TOTAL		SW7421				Analyst: APL
Lead	11	5.0		µg/L	1	10/23/03 11:12:40 PM
ANTIMONY, TOTAL		SW7041				Analyst: APL
Antimony	ND	5.0		µg/L	1	10/28/03 12:14:45 AM
SELENIUM, TOTAL		SW7740				Analyst: APL
Selenium	ND	5.0		µg/L	1	10/23/03 11:12:40 PM
THALLIUM, TOTAL		SW7841				Analyst: APL
Thallium	ND	5.0		µg/L	1	10/23/03 11:12:40 PM

B

AMRO Environmental Laboratories Corp.

Date: 07-Nov-03

CLIENT:	Mactec E & C, Inc.	Client Sample ID:	ECE MW2
Lab Order:	0310133		
Project:	3651031003/03 Taunton - Parcel GA	Collection Date:	10/16/03
Lab ID:	0310133-03C	Matrix:	GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ICP METALS TOTAL SW-846		SW6010B		Analyst: SJC		
Barium	ND	200		µg/L	1	10/22/03 7:30:22 PM
Beryllium	ND	5.0		µg/L	1	10/22/03 7:30:22 PM
Cadmium	ND	5.0		µg/L	1	10/22/03 7:30:22 PM
Chromium	ND	10		µg/L	1	10/22/03 7:30:22 PM
Nickel	ND	40		µg/L	1	10/22/03 7:30:22 PM
Silver	ND	7.0		µg/L	1	10/22/03 7:30:22 PM
Vanadium	ND	50		µg/L	1	10/22/03 7:30:22 PM
Zinc	64	20		µg/L	1	10/22/03 7:30:22 PM
ARSENIC, TOTAL		SW7060A		Analyst: APL		
Arsenic	11	5.0		µg/L	1	10/24/03 10:30:57 PM
MERCURY, TOTAL		SW7470A		Analyst: RK		
Mercury	ND	0.20		µg/L	1	10/21/03 1:34:48 PM
LEAD, TOTAL		SW7421		Analyst: APL		
Lead	32	5.0		µg/L	1	10/23/03 11:03:57 PM
ANTIMONY, TOTAL		SW7041		Analyst: APL		
Antimony	6.0	5.0		µg/L	1	10/28/03 12:05:50 AM
SELENIUM, TOTAL		SW7740		Analyst: APL		
Selenium	ND	5.0		µg/L	1	10/23/03 11:03:57 PM
THALLIUM, TOTAL		SW7841		Analyst: APL		
Thallium	ND	5.0		µg/L	1	10/23/03 11:03:57 PM

B

AMRO Environmental Laboratories Corp.

Date: 27-Jan-04

CLIENT: Mactec E & C, Inc.

Client Sample ID: MW 8

Lab Order: 0401077

Project: 3651031003 Taunton Parcel 6A

Collection Date: 1/15/04

Lab ID: 0401077-01A

Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Diisopropyl ether	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,4-Dioxane	ND	50		µg/L	1	1/23/04 3:04:00 PM
Ethyl Tertiary Butyl Ether	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Ethylbenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Hexachlorobutadiene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
2-Hexanone	ND	10		µg/L	1	1/23/04 3:04:00 PM
Isopropylbenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
4-Isopropyltoluene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
2-Butanone	ND	10		µg/L	1	1/23/04 3:04:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/23/04 3:04:00 PM
Methyl tert-butyl ether	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Methylene chloride	ND	5.0		µg/L	1	1/23/04 3:04:00 PM
Naphthalene	ND	5.0		µg/L	1	1/23/04 3:04:00 PM
n-Propylbenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Styrene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Tetrachloroethene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Tetrahydrofuran	ND	10		µg/L	1	1/23/04 3:04:00 PM
Toluene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Trichloroethene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Trichlorofluoromethane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,2,4-Trimethylbenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
1,3,5-Trimethylbenzene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Vinyl chloride	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
o-Xylene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
m,p-Xylene	ND	2.0		µg/L	1	1/23/04 3:04:00 PM
Surr: Dibromofluoromethane	100	85-120		%REC	1	1/23/04 3:04:00 PM
Surr: 1,2-Dichloroethane-d4	104	75-124		%REC	1	1/23/04 3:04:00 PM
Surr: Toluene-d8	104	82-112		%REC	1	1/23/04 3:04:00 PM
Surr: 4-Bromofluorobenzene	108	77-117		%REC	1	1/23/04 3:04:00 PM

A

AMRO Environmental Laboratories Corp.

Date: 27-Jan-04

CLIENT: Mactec E & C, Inc. **Client Sample ID:** MW 10
Lab Order: 0401077
Project: 3651031003 Taunton Parcel 6A **Collection Date:** 1/15/04
Lab ID: 0401077-02A **Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY MCP MET SW8260B						Analyst: KT
Acetone	ND	10		µg/L	1	1/23/04 3:40:00 PM
Tertiary Amyl Methyl Ether	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
Benzene	ND	1.0		µg/L	1	1/23/04 3:40:00 PM
Bromobenzene	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
Bromochloromethane	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
Bromodichloromethane	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
Bromoform	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
Bromomethane	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
sec-Butylbenzene	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
n-Butylbenzene	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
tert-Butylbenzene	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
Carbon disulfide	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
Carbon tetrachloride	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
Chlorobenzene	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
Dibromochloromethane	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
Chloroethane	ND	5.0		µg/L	1	1/23/04 3:40:00 PM
Chloroform	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
Chloromethane	ND	3.0		µg/L	1	1/23/04 3:40:00 PM
2-Chlorotoluene	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
4-Chlorotoluene	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
1,2-Dibromo-3-chloropropane	ND	5.0		µg/L	1	1/23/04 3:40:00 PM
1,2-Dibromoethane	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
Dibromomethane	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
1,3-Dichlorobenzene	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
1,2-Dichlorobenzene	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
1,4-Dichlorobenzene	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
Dichlorodifluoromethane	ND	5.0		µg/L	1	1/23/04 3:40:00 PM
1,1-Dichloroethane	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
1,2-Dichloroethane	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/23/04 3:40:00 PM
cis-1,2-Dichloroethene	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
trans-1,2-Dichloroethene	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
1,2-Dichloropropane	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
1,3-Dichloropropane	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
1,1-Dichloropropene	ND	2.0		µg/L	1	1/23/04 3:40:00 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/23/04 3:40:00 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/23/04 3:40:00 PM
Diethyl ether	ND	5.0		µg/L	1	1/23/04 3:40:00 PM

AMRO Environmental Laboratories Corp.

Date: 27-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401077
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Method Blank

1,4-Dichlorobenzene	ND	2.0	µg/L
Dichlorodifluoromethane	ND	5.0	µg/L
1,1-Dichloroethane	ND	2.0	µg/L
1,2-Dichloroethane	ND	2.0	µg/L
1,1-Dichloroethene	ND	1.0	µg/L
cis-1,2-Dichloroethene	ND	2.0	µg/L
trans-1,2-Dichloroethene	ND	2.0	µg/L
1,2-Dichloropropane	ND	2.0	µg/L
1,3-Dichloropropane	ND	2.0	µg/L
2,2-Dichloropropane	ND	2.0	µg/L
1,1-Dichloropropene	ND	2.0	µg/L
cis-1,3-Dichloropropene	ND	1.0	µg/L
trans-1,3-Dichloropropene	ND	1.0	µg/L
Diethyl ether	ND	5.0	µg/L
Diisopropyl ether	ND	2.0	µg/L
1,4-Dioxane	ND	50	µg/L
Ethyl Tertiary Butyl Ether	ND	2.0	µg/L
Ethylbenzene	ND	2.0	µg/L
Hexachlorobutadiene	ND	2.0	µg/L
2-Hexanone	ND	10	µg/L
Isopropylbenzene	ND	2.0	µg/L
4-Isopropyltoluene	ND	2.0	µg/L
2-Butanone	ND	10	µg/L
4-Methyl-2-pentanone	ND	10	µg/L
Methyl tert-butyl ether	ND	2.0	µg/L
Methylene chloride	ND	5.0	µg/L
Naphthalene	ND	5.0	µg/L
n-Propylbenzene	ND	2.0	µg/L
Styrene	ND	2.0	µg/L
1,1,1,2-Tetrachloroethane	ND	2.0	µg/L
1,1,2,2-Tetrachloroethane	ND	2.0	µg/L

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 27-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401077
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Method Blank

Tetrachloroethene	ND	2.0	µg/L							
Tetrahydrofuran	ND	10	µg/L							
Toluene	ND	2.0	µg/L							
1,2,4-Trichlorobenzene	ND	2.0	µg/L							
1,2,3-Trichlorobenzene	ND	2.0	µg/L							
1,1,1-Trichloroethane	ND	2.0	µg/L							
1,1,2-Trichloroethane	ND	2.0	µg/L							
Trichloroethene	ND	2.0	µg/L							
Trichlorofluoromethane	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,2,4-Trimethylbenzene	ND	2.0	µg/L							
1,3,5-Trimethylbenzene	ND	2.0	µg/L							
Vinyl chloride	ND	2.0	µg/L							
o-Xylene	ND	2.0	µg/L							
m,p-Xylene	ND	2.0	µg/L							
Surr: Dibromofluoromethane	25.5	2.0	µg/L	25	0	102	85	120	0	
Surr: 1,2-Dichloroethane-d4	26.02	2.0	µg/L	25	0	104	75	124	0	
Surr: Toluene-d8	26.01	2.0	µg/L	25	0	104	82	112	0	
Surr: 4-Bromofluorobenzene	28.7	2.0	µg/L	25	0	115	77	117	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 27-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401077
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Laboratory Control Spike - Full List

Sample ID	lcsf-01/23/04	Batch ID: R22297	Test Code: SW8260B	Units: µg/L	Analysis Date	1/23/04 10:03:00 AM	Prep Date	1/23/04				
Client ID:		Run ID: V-1_040123A			SeqNo:	369765						
	QC Sample		QC Spike	Original Sample				Original Sample				
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
Acetone	31.32	10	µg/L	20	0	157	70	130	0			S
Tertiary Amyl Methyl Ether	18.78	2.0	µg/L	20	0	93.9	70	130	0			
Benzene	17.64	1.0	µg/L	20	0	88.2	81	115	0			
Bromobenzene	17.02	2.0	µg/L	20	0	85.1	83	118	0			
Bromochloromethane	20.58	2.0	µg/L	20	0	103	70	126	0			
Bromodichloromethane	17.93	2.0	µg/L	20	0	89.7	72	119	0			
Bromoform	18.22	2.0	µg/L	20	0	91.1	70	127	0			
Bromomethane	21.32	2.0	µg/L	20	0	107	70	130	0			
sec-Butylbenzene	17.23	2.0	µg/L	20	0	86.2	70	130	0			
n-Butylbenzene	16.19	2.0	µg/L	20	0	81	70	130	0			
tert-Butylbenzene	16.71	2.0	µg/L	20	0	83.6	70	130	0			
Carbon disulfide	13.35	2.0	µg/L	20	0	66.8	70	130	0			S
Carbon tetrachloride	18.99	2.0	µg/L	20	0	95	78	124	0			
Chlorobenzene	18.05	2.0	µg/L	20	0	90.2	80	115	0			
Dibromochloromethane	17.99	2.0	µg/L	20	0	90	70	127	0			
Chloroethane	20.14	5.0	µg/L	20	0	101	70	130	0			
Chloroform	18.4	2.0	µg/L	20	0	92	80	119	0			
Chloromethane	20.86	3.0	µg/L	20	0	104	70	130	0			
2-Chlorotoluene	16.69	2.0	µg/L	20	0	83.4	70	130	0			
4-Chlorotoluene	16.79	2.0	µg/L	20	0	84	78	130	0			
1,2-Dibromo-3-chloropropane	18.28	5.0	µg/L	20	0	91.4	70	130	0			
1,2-Dibromoethane	22.22	2.0	µg/L	20	0	111	70	130	0			
Dibromomethane	21.56	2.0	µg/L	20	0	108	70	129	0			
1,3-Dichlorobenzene	17.88	2.0	µg/L	20	0	89.4	81	130	0			
1,2-Dichlorobenzene	18.19	2.0	µg/L	20	0	91	80	124	0			

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits NA - Not applicable where J values or ND results occur
 RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 27-Jan-04

CLIENT: Mactec E & C, Inc.

Work Order: 0401077

Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Laboratory Control Spike - Full List

1,4-Dichlorobenzene	18.18	2.0	µg/L	20	0	90.9	74	130	0	
Dichlorodifluoromethane	26.05	5.0	µg/L	20	0	130	10	130	0	S
1,1-Dichloroethane	18.23	2.0	µg/L	20	0	91.2	83	134	0	
1,2-Dichloroethane	19.62	2.0	µg/L	20	0	98.1	70	125	0	
1,1-Dichloroethene	18.12	1.0	µg/L	20	0	90.6	72	130	0	
cis-1,2-Dichloroethene	17.46	2.0	µg/L	20	0	87.3	76	125	0	
trans-1,2-Dichloroethene	18.22	2.0	µg/L	20	0	91.1	77	128	0	
1,2-Dichloropropane	17.48	2.0	µg/L	20	0	87.4	78	122	0	
1,3-Dichloropropane	17.57	2.0	µg/L	20	0	87.8	70	124	0	
2,2-Dichloropropane	20.36	2.0	µg/L	20	0	102	73	130	0	
1,1-Dichloropropene	16.51	2.0	µg/L	20	0	82.6	70	107	0	
cis-1,3-Dichloropropene	17.82	1.0	µg/L	20	0	89.1	70	115	0	
trans-1,3-Dichloropropene	19.27	1.0	µg/L	20	0	96.4	70	129	0	
Diethyl ether	23.12	5.0	µg/L	20	0	116	70	130	0	
Diisopropyl ether	17.62	2.0	µg/L	20	0	88.1	70	130	0	
1,4-Dioxane	129.8	50	µg/L	100	0	130	70	130	0	
Ethyl Tertiary Butyl Ether	18.9	2.0	µg/L	20	0	94.5	70	130	0	
Ethylbenzene	18.05	2.0	µg/L	20	0	90.2	82	119	0	
Hexachlorobutadiene	19.93	2.0	µg/L	20	0	99.7	70	130	0	
2-Hexanone	19.14	10	µg/L	20	0	95.7	70	130	0	
Isopropylbenzene	16.57	2.0	µg/L	20	0	82.8	72	130	0	
4-Isopropyltoluene	16.38	2.0	µg/L	20	0	81.9	74	130	0	
2-Butanone	32.42	10	µg/L	20	0	162	70	130	0	S
4-Methyl-2-pentanone	24.29	10	µg/L	20	0	121	70	130	0	
Methyl tert-butyl ether	25.32	2.0	µg/L	20	0	127	70	130	0	
Methylene chloride	17.97	5.0	µg/L	20	0	89.8	70	141	0	
Naphthalene	18.85	5.0	µg/L	20	0	94.2	70	130	0	
n-Propylbenzene	16.44	2.0	µg/L	20	0	82.2	71	130	0	
Styrene	18.16	2.0	µg/L	20	0	90.8	72	123	0	
1,1,1,2-Tetrachloroethane	17.43	2.0	µg/L	20	0	87.2	83	118	0	
1,1,2,2-Tetrachloroethane	18.11	2.0	µg/L	20	0	90.6	70	130	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 27-Jan-04

CLIENT: Mactec E & C, Inc.

Work Order: 0401077

Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Laboratory Control Spike - Full List

Tetrachloroethene	21.02	2.0	µg/L	20	0	105	77	123	0
Tetrahydrofuran	22.02	10	µg/L	20	0	110	70	130	0
Toluene	19.25	2.0	µg/L	20	0	96.2	86	112	0
1,2,4-Trichlorobenzene	20.79	2.0	µg/L	20	0	104	70	130	0
1,2,3-Trichlorobenzene	19.17	2.0	µg/L	20	0	95.8	70	130	0
1,1,1-Trichloroethane	18.96	2.0	µg/L	20	0	94.8	78	124	0
1,1,2-Trichloroethane	21.61	2.0	µg/L	20	0	108	70	133	0
Trichloroethene	18.34	2.0	µg/L	20	0	91.7	83	112	0
Trichlorofluoromethane	23.85	2.0	µg/L	20	0	119	70	130	0
1,2,3-Trichloropropane	17.86	2.0	µg/L	20	0	89.3	70	130	0
1,2,4-Trimethylbenzene	16.77	2.0	µg/L	20	0	83.8	78	129	0
1,3,5-Trimethylbenzene	17.16	2.0	µg/L	20	0	85.8	77	130	0
Vinyl chloride	23.33	2.0	µg/L	20	0	117	70	130	0
o-Xylene	18.55	2.0	µg/L	20	0	92.8	80	119	0
m,p-Xylene	37.82	2.0	µg/L	40	0	94.6	70	130	0
Surr: Dibromofluoromethane	26.09	2.0	µg/L	25	0	104	85	120	0
Surr: 1,2-Dichloroethane-d4	26.45	2.0	µg/L	25	0	106	80	124	0
Surr: Toluene-d8	26.32	2.0	µg/L	25	0	105	82	112	0
Surr: 4-Bromofluorobenzene	27.28	2.0	µg/L	25	0	109	77	117	0

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

B

AMRO Environmental Laboratories Corp.

Date: 27-Jan-04

CLIENT: Mactec E & C, Inc. **Client Sample ID:** MW 8
Lab Order: 0401077 **Tag Number:**
Project: 3651031003 Taunton Parcel 6A **Collection Date:** 1/15/04
Lab ID: 0401077-01B **Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EXTRACTABLE PETROLEUM HYDROCARBONS MAEPH						Analyst: RKK
C9-C18 Aliphatic Hydrocarbons	ND	110		µg/L	1	1/26/04 6:28:00 PM
C19-C36 Aliphatic Hydrocarbons	ND	110		µg/L	1	1/26/04 6:28:00 PM
C11-C22 Aromatic Hydrocarbons	ND	110		µg/L	1	1/26/04 6:28:00 PM
Naphthalene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
2-Methylnaphthalene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Acenaphthylene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Acenaphthene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Fluorene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Phenanthrene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Anthracene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Fluoranthene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Pyrene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Benz(a)anthracene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Chrysene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Benzo(b)fluoranthene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Benzo(k)fluoranthene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Benzo(a)pyrene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Dibenz(a,h)anthracene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Indeno(1,2,3-cd)pyrene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Benzo(g,h,i)perylene	ND	1.1		µg/L	1	1/26/04 6:28:00 PM
Surr: 1-Chlorooctadecane	52.8	40-140		%REC	1	1/26/04 6:28:00 PM
Surr: 2-Bromonaphthalene	98.0	40-140		%REC	1	1/26/04 6:28:00 PM
Surr: 2-Fluorobiphenyl	89.4	40-140		%REC	1	1/26/04 6:28:00 PM
Surr: o-Terphenyl	102	40-140		%REC	1	1/26/04 6:28:00 PM

Hydrocarbon range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. EPH: C11-C22 Aromatic Hydrocarbons exclude the concentration of target PAH analytes. VPH: C5-C8 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range. C9-C12 Aliphatic Hydrocarbons exclude the concentration of target analytes eluting in this range and concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION

Were all QA/QC procedures required by the VPH or EPH method followed:

☒ Yes ☐ No - If No, See Case Narrative

Were all performance/acceptance standards for required QA/QC procedures achieved:

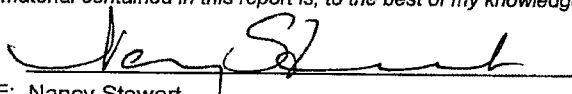
☒ Yes ☐ No - If No, See Case Narrative

Were any significant modifications made to the method as specified in section 11.3:

☐ No ☒ Yes - Details enclosed

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

SIGNATURE:



DATE:

1-30-04

PRINTED NAME: Nancy Stewart

POSITION: Laboratory Director (or designee)

Qualifiers: RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

E - Value above quantitation range

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

- See Case Narrative

B - Analyte detected in the associated Method Blank

H - Method prescribed holding time exceeded

AMRO Environmental Laboratories Corp.

Date: 30-Oct-03

CLIENT: Mactec E & C, Inc.
Project: 3651031003 Taunton - Parcel GA**Lab Order:** 0310105**Lab ID:** 0310105-01**Collection Date:** 10/14/03**Client Sample ID:** WES MW2**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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ICP METALS TOTAL SW-846**SW6010B****Analyst: SJC**

Barium	ND	200		µg/L	1	10/22/03 8:08:01 PM
Beryllium	ND	4.0		µg/L	1	10/22/03 8:08:01 PM
Cadmium	ND	5.0		µg/L	1	10/22/03 8:08:01 PM
Chromium	11	10		µg/L	1	10/22/03 8:08:01 PM
Nickel	40	40		µg/L	1	10/22/03 8:08:01 PM
Silver	ND	7.0		µg/L	1	10/22/03 8:08:01 PM
Vanadium	ND	50		µg/L	1	10/22/03 8:08:01 PM
Zinc	390	20		µg/L	1	10/22/03 8:08:01 PM

ARSENIC, TOTAL**SW7060A****Analyst: APL**

Arsenic	9.7	5.0		µg/L	1	10/27/03 5:24:28 PM
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MERCURY, TOTAL**SW7470A****Analyst: RK**

Mercury	ND	0.20		µg/L	1	10/21/03 12:39:19 PM
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LEAD, TOTAL**SW7421****Analyst: APL**

Lead	23	5.0		µg/L	1	10/24/03 5:35:18 PM
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ANTIMONY, TOTAL**SW7041****Analyst: APL**

Antimony	7.8	5.0		µg/L	1	10/28/03 1:17:20 AM
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SELENIUM, TOTAL**SW7740****Analyst: APL**

Selenium	ND	5.0		µg/L	1	10/24/03 5:35:18 PM
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THALLIUM, TOTAL**SW7841****Analyst: APL**

Thallium	ND	5.0		µg/L	1	10/24/03 5:35:18 PM
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AMRO Environmental Laboratories Corp.

Date: 30-Oct-03

CLIENT: Mactec E & C, Inc.
Project: 3651031003 Taunton - Parcel GA**Lab Order:** 0310105**Lab ID:** 0310105-02**Collection Date:** 10/14/03**Client Sample ID:** ECE MW4**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ICP METALS TOTAL SW-846		SW6010B		Analyst: SJC		
Barium	470	200		µg/L	1	10/22/03 8:13:04 PM
Beryllium	ND	4.0		µg/L	1	10/22/03 8:13:04 PM
Cadmium	ND	5.0		µg/L	1	10/22/03 8:13:04 PM
Chromium	ND	10		µg/L	1	10/22/03 8:13:04 PM
Nickel	ND	40		µg/L	1	10/22/03 8:13:04 PM
Silver	ND	7.0		µg/L	1	10/22/03 8:13:04 PM
Vanadium	ND	50		µg/L	1	10/22/03 8:13:04 PM
Zinc	90	20		µg/L	1	10/22/03 8:13:04 PM
ARSENIC, TOTAL		SW7060A		Analyst: APL		
Arsenic	ND	5.0		µg/L	1	10/24/03 5:44:01 PM
MERCURY, TOTAL		SW7470A		Analyst: RK		
Mercury	0.21	0.20		µg/L	1	10/21/03 12:43:15 PM
LEAD, TOTAL		SW7421		Analyst: APL		
Lead	63	5.0		µg/L	1	10/24/03 5:44:01 PM
ANTIMONY, TOTAL		SW7041		Analyst: APL		
Antimony	ND	5.0		µg/L	1	10/28/03 1:26:09 AM
SELENIUM, TOTAL		SW7740		Analyst: APL		
Selenium	ND	5.0		µg/L	1	10/24/03 5:44:01 PM
THALLIUM, TOTAL		SW7841		Analyst: APL		
Thallium	ND	5.0		µg/L	1	10/24/03 5:44:01 PM

AMRO Environmental Laboratories Corp.

Date: 27-Jan-04

CLIENT: Mactec E & C, Inc.
Project: 3651031003 Taunton Parcel 6A**Lab Order:** 0401077**Lab ID:** 0401077-01**Collection Date:** 1/15/04**Client Sample ID:** MW 8**Matrix:** GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
ICP METALS TOTAL SW-846		SW6010B		Analyst: SJC		
Barium	ND	200		µg/L	1	1/19/04 7:57:06 PM
Beryllium	ND	4.0		µg/L	1	1/19/04 7:57:06 PM
Cadmium	ND	5.0		µg/L	1	1/19/04 7:57:06 PM
Chromium	ND	10		µg/L	1	1/19/04 7:57:06 PM
Copper	ND	25		µg/L	1	1/19/04 7:57:06 PM
Nickel	ND	40		µg/L	1	1/19/04 7:57:06 PM
Silver	ND	7.0		µg/L	1	1/19/04 7:57:06 PM
Vanadium	ND	50		µg/L	1	1/19/04 7:57:06 PM
Zinc	ND	20		µg/L	1	1/19/04 7:57:06 PM
ARSENIC, TOTAL		SW7060A		Analyst: APL		
Arsenic	ND	5.0		µg/L	1	1/20/04 5:24:42 PM
MERCURY, TOTAL		SW7470A		Analyst: RK		
Mercury	ND	0.20		µg/L	1	1/19/04 1:47:15 PM
LEAD, TOTAL		SW7421		Analyst: APL		
Lead	ND	5.0		µg/L	1	1/20/04 5:24:42 PM
ANTIMONY, TOTAL		SW7041		Analyst: APL		
Antimony	ND	5.0		µg/L	1	1/20/04 10:55:53 PM
SELENIUM, TOTAL		SW7740		Analyst: APL		
Selenium	ND	5.0		µg/L	1	1/20/04 5:24:42 PM
THALLIUM, TOTAL		SW7841		Analyst: APL		
Thallium	ND	5.0		µg/L	1	1/20/04 5:24:42 PM

CLIENT: Mactec E & C, Inc.
 Work Order: 0401077
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT
 Laboratory Control Spike Duplicate

Sample ID	LCSD-10963	Batch ID: 10963	Test Code: MAEPH	Units: µg/L	Analysis Date	1/26/04 4:33:00 PM	Prep Date	1/26/04				
Client ID:		Run ID: SV-2_040126A	SeqNo: 370012									
	QC Sample		QC Spike	Original Sample				Original Sample				
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
n-Eicosane	13.55	1.0	µg/L	25	0	54.2	40	140	17.53	25.6	50	
n-Nonadecane	13.36	1.0	µg/L	25	0	53.5	40	140	16.32	19.9	50	
n-Nonane	16.48	1.0	µg/L	25	0	65.9	40	140	12.78	25.3	50	
n-Octacosane	13.04	1.0	µg/L	25	0	52.2	40	140	15.9	19.8	50	
n-Tetradecane	11.6	1.0	µg/L	25	0	46.4	40	140	14.18	20	50	
Naphthalene	16.49	1.0	µg/L	25	0	66	40	140	16.8	1.83	50	
Acenaphthene	19.95	1.0	µg/L	25	0	79.8	40	140	20.62	3.3	50	
Anthracene	25.56	1.0	µg/L	25	0	102	40	140	26.8	4.76	50	
Pyrene	27.9	1.0	µg/L	25	0	112	40	140	29.42	5.29	50	
Chrysene	21.02	1.0	µg/L	25	0	84.1	40	140	25.87	20.6	50	
Surr: 1-Chlorooctadecane	9.17	1.0	µg/L	20	0	45.8	40	140	0	0	0	
Surr: 2-Bromonaphthalene	19.3	1.0	µg/L	20	0	96.5	40	140	0	0	0	
Surr: 2-Fluorobiphenyl	17.6	1.0	µg/L	20	0	88	40	140	0	0	0	
Surr: o-Terphenyl	19.91	1.0	µg/L	20	0	99.6	40	140	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 27-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401077
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID	LCS-10963	Batch ID: 10963	Test Code: MAEPH	Units: µg/L	Analysis Date	1/26/04 4:02:00 PM	Prep Date	1/26/04				
Client ID:		Run ID: SV-2_040126A	SeqNo: 370011									
	QC Sample		QC Spike	Original Sample				Original Sample				
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
n-Eicosane	17.53	1.0	µg/L	25	0	70.1	40	140	0			
n-Nonadecane	16.32	1.0	µg/L	25	0	65.3	40	140	0			
n-Nonane	12.78	1.0	µg/L	25	0	51.1	40	140	0			
n-Octacosane	15.9	1.0	µg/L	25	0	63.6	40	140	0			
n-Tetradecane	14.18	1.0	µg/L	25	0	56.7	40	140	0			
Naphthalene	16.8	1.0	µg/L	25	0	67.2	40	140	0			
Acenaphthene	20.62	1.0	µg/L	25	0	82.5	40	140	0			
Anthracene	26.8	1.0	µg/L	25	0	107	40	140	0			
Pyrene	29.42	1.0	µg/L	25	0	118	40	140	0			
Chrysene	25.87	1.0	µg/L	25	0	103	40	140	0			
Surr: 1-Chlorooctadecane	11.7	1.0	µg/L	20	0	58.5	40	140	0			
Surr: 2-Bromonaphthalene	19.84	1.0	µg/L	20	0	99.2	40	140	0			
Surr: 2-Fluorobiphenyl	18.28	1.0	µg/L	20	0	91.4	40	140	0			
Surr: o-Terphenyl	20.68	1.0	µg/L	20	0	103	40	140	0			

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

AMRO Environmental Laboratories Corp.

Date: 27-Jan-04

CLIENT: Mactec E & C, Inc.
 Work Order: 0401077
 Project: 3651031003 Taunton Parcel 6A

QC SUMMARY REPORT

Sample Duplicate

Sample ID	0401077-01BDUP	Batch ID:	10963	Test Code:	MAEPH	Units:	µg/L	Analysis Date	1/26/04 6:59:00 PM	Prep Date	1/26/04	
Client ID:	MW 8	Run ID:	SV-2_040126A	SeqNo:	370016							
	QC Sample			QC Spike	Original Sample				Original Sample			
Analyte	Result	RL	Units	Amount	Result	%REC	LowLimit	HighLimit	or MS Result	%RPD	RPDLimit	Qua
C9-C18 Aliphatic Hydrocarbons	ND	110	µg/L	0	0	0	0	0	0	0	50	
C19-C36 Aliphatic Hydrocarbons	ND	110	µg/L	0	0	0	0	0	0	0	50	
C11-C22 Aromatic Hydrocarbons	ND	110	µg/L	0	0	0	0	0	0	0	50	
Naphthalene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
2-Methylnaphthalene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Acenaphthylene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Acenaphthene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Fluorene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Phenanthrene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Anthracene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Fluoranthene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Pyrene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Benz(a)anthracene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Chrysene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Benzo(b)fluoranthene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Benzo(k)fluoranthene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Benzo(a)pyrene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Dibenz(a,h)anthracene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Indeno(1,2,3-cd)pyrene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Benzo(g,h,i)perylene	ND	1.1	µg/L	0	0	0	0	0	0	0	50	
Surr: 1-Chlorooctadecane	10.39	1.1	µg/L	22.22	0	46.8	40	140	0	0	0	
Surr: 2-Bromonaphthalene	20.64	1.1	µg/L	22.22	0	92.9	40	140	0	0	0	
Surr: 2-Fluorobiphenyl	19.33	1.1	µg/L	22.22	0	87	40	140	0	0	0	
Surr: o-Terphenyl	23.35	1.1	µg/L	22.22	0	105	40	140	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

NA - Not applicable where J values or ND results occur

RL - Reporting Limit; defined as the lowest concentration the laboratory can accurately quantitate.

B

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Dissolved Metals

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: WES MW2
Date Sampled: 3/1/99

ESS Project ID: 99030024
ESS Sample ID: 99030024-02
Units: mg/L
Dilution: 1
Percent Solid: N/A

Test Name	Result	MRL	Date Analyzed	Analyst	Method
Arsenic	ND	0.1	3/5/99	SAM	6010
Cadmium	ND	0.01	3/5/99	SAM	6010
Chromium	ND	0.05	3/5/99	SAM	6010
Lead	ND	0.1	3/5/99	SAM	6010
Mercury	ND	0.0005	3/4/99	AR	7470

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: _____

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Total Petroleum Hydrocarbon

Client Name: East Coast Engineering

ESS Project ID: 99030024

Client Project ID: Parcel 6A Taunton

ESS Sample ID: 99030024-02

Client Sample ID: WES MW2

Units: mg/L

Date Sampled: 3/1/99

Dilution: 1

Extraction Date: 3/2/99

Percent Solid: N/A

Date Analyzed: 3/4/99

Sample Amount: 1000 ml

Analyst: AS

Test Name	Result	MRL
Total Petroleum Hydrocarbons	ND	0.5

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	73	39-137

Approved By: AS

Date: 3/4/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: WES MW2
Date Sampled: 3/1/99
Date Analyzed: 3/5/99
Analyst: JR

ESS Project ID: 99030024
ESS Sample ID: 99030024-02
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	1
1,2-Dichlorobenzene	ND	2
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
1,2-Dibromo-3-Chloropropane	ND	1
1,2-Dibromoethane	ND	2
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichlorobenzene	ND	1
1,3,5-Trimethylbenzene	ND	1
1,3-Dichloropropane	ND	1
1,4-Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	1
2-Chlorotoluene	ND	20
2-Hexanone	ND	1
4-Chlorotoluene	ND	10
4-Isopropyltoluene	ND	1
4-Methyl-2-Pentanone	ND	1
Acetone	ND	10
Benzene	ND	20
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	2
Carbon Disulfide	ND	2

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Project ID: Parcel 6A Taunton
Client Sample ID: WES MW2

ESS Project ID: 99030024
ESS Sample ID: 99030024-02

Compound Name	Result	MRL
Carbon Tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2 Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	0.5
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	0.6
Isopropylbenzene	ND	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Napthalene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	1
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	0.5
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl Chloride	ND	2
Xylenes (Total)	ND	1

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: LAB

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Polynuclear Aromatic Hydrocarbons by EPA Method 8270c (SIM Modified)

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: WES MW2
Date Sampled: 3/1/99
Date Extracted: 3/2/99
Date Analyzed: 3/4/99
Analyst: AC

ESS Project ID: 99030024
ESS Sample ID: 99030024-02
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL
2-Methylnaphthalene	ND	0.2
Acenaphthene	ND	0.2
Acenaphthylene	ND	0.2
Anthracene	ND	0.2
Benzo(a)anthracene	ND	0.2
Benzo(a)pyrene	ND	0.2
Benzo(b)fluoranthene	ND	0.2
Benzo(g,h,i)perylene	ND	0.2
Benzo(k)fluoranthene	ND	0.1
Chrysene	ND	0.2
Dibenzo(a,h)Anthracene	ND	0.2
Fluoranthene	ND	0.2
Fluorene	ND	0.2
Indeno(1,2,3-cd)Pyrene	ND	0.2
Naphthalene	ND	0.2
Phenanthrene	ND	0.2
Pyrene	ND	0.2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: WES

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

B

CERTIFICATE OF ANALYSIS

Dissolved Metals

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW3
Date Sampled: 3/1/99

ESS Project ID: 99030024
ESS Sample ID: 99030024-05
Units: mg/L
Dilution: 1
Percent Solid: N/A

Test Name	Result	MRL	Date Analyzed	Analyst	Method
Arsenic	ND	0.1	3/5/99	SAM	6010
Cadmium	ND	0.01	3/5/99	SAM	6010
Chromium	ND	0.05	3/5/99	SAM	6010
Lead	ND	0.1	3/5/99	SAM	6010
Mercury	ND	0.0005	3/4/99	AR	7470

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: LOS

Date: 3/10/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Total Petroleum Hydrocarbon

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW3
Date Sampled: 3/1/99
Extraction Date: 3/2/99
Date Analyzed: 3/5/99
Analyst: AS

ESS Project ID: 99030024
ESS Sample ID: 99030024-05
Units: mg/L
Dilution: 5
Percent Solid: N/A
Sample Amount: 975 ml

Test Name	Result	MRL
Total Petroleum Hydrocarbons	107	2.56

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	75	39-137

Approved By: AS

Date: 3/1/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW3
Date Sampled: 3/1/99
Date Analyzed: 3/5/99
Analyst: JR

ESS Project ID: 99030024
ESS Sample ID: 99030024-05
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	2
1,2 Dichlorobenzene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	12	1
1,2-Dibromo-3-Chloropropane	ND	2
1,2-Dibromoethane	ND	1
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3 Dichlorobenzene	ND	1
1,3,5-Trimethylbenzene	2	1
1,3-Dichloropropane	ND	1
1,4 Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	20
2-Chlorotoluene	ND	1
2-Hexanone	ND	10
4-Chlorotoluene	ND	1
4-Isopropyltoluene	4	1
4-Methyl-2-Pentanone	ND	10
Acetone	ND	20
Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	2
Bromomethane	ND	2
Carbon Disulfide	ND	1

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW3

ESS Project ID: 99030024
ESS Sample ID: 99030024-05

Compound Name	Result	MRL
Carbon Tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2 Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	0.5
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	0.6
Isopropylbenzene	2	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	2	1
n-Propylbenzene	ND	1
Napthalene	22	1
sec-Butylbenzene	3	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	1
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	0.5
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl Chloride	ND	2
Xylenes (Total)	ND	1

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: LAS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Polynuclear Aromatic Hydrocarbons by EPA Method 8270c (SIM Modified)

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW3
Date Sampled: 3/1/99
Date Extracted: 3/2/99
Date Analyzed: 3/5/99
Analyst: AC

ESS Project ID: 99030024
ESS Sample ID: 99030024-05
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 975 ml

Test Name	Result	MRL
2-Methylnaphthalene	60	10
Acenaphthene	36	10
Acenaphthylene	7.7	0.2
Anthracene	14	10
Benzo(a)anthracene	6.7	0.2
Benzo(a)pyrene	3.8	0.2
Benzo(b)fluoranthene	6.8	0.2
Benzo(g,h,i)perylene	1.8	0.2
Benzo(k)fluoranthene	2.7	0.1
Chrysene	6.6	0.2
Dibenzo(a,h)Anthracene	0.2	0.2
Fluoranthene	29	10
Fluorene	55	10
Indeno(1,2,3-cd)Pyrene	2	0.2
Naphthalene	44	10
Phenanthrene	79	10
Pyrene	20	10

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: WS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Dissolved Metals

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW2
Date Sampled: 3/1/99

ESS Project ID: 99030024
ESS Sample ID: 99030024-06
Units: mg/L
Dilution: 1
Percent Solid: N/A

Test Name	Result	MRL	Date Analyzed	Analyst	Method
Arsenic	ND	0.1	3/5/99	SAM	6010
Cadmium	ND	0.01	3/5/99	SAM	6010
Chromium	ND	0.05	3/5/99	SAM	6010
Lead	ND	0.1	3/5/99	SAM	6010
Mercury	ND	0.0005	3/4/99	AR	7470

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: LAB

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Total Petroleum Hydrocarbon

Client Name: East Coast Engineering

Client Project ID: Parcel 6A Taunton

Client Sample ID: ECE MW2

Date Sampled: 3/1/99

Extraction Date: 3/2/99

Date Analyzed: 3/4/99

Analyst: AS

ESS Project ID: 99030024

ESS Sample ID: 99030024-06

Units: mg/L

Dilution: 1

Percent Solid: N/A

Sample Amount: 1000 ml

Test Name	Result	MRL
Total Petroleum Hydrocarbons	14.6	0.5

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	64	39-137

Approved By: AS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW2
Date Sampled: 3/1/99
Date Analyzed: 3/5/99
Analyst: MD

ESS Project ID: 99030024
ESS Sample ID: 99030024-06
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	1
1,2 Dichlorobenzene	ND	2
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	1	1
1,2-Dibromo-3-Chloropropane	ND	1
1,2-Dibromoethane	ND	2
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3 Dichlorobenzene	ND	1
1,3,5-Trimethylbenzene	ND	1
1,3-Dichloropropane	ND	1
1,4 Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	1
2-Chlorotoluene	ND	20
2-Hexanone	ND	1
4-Chlorotoluene	ND	10
4-Isopropyltoluene	ND	1
4-Methyl-2-Pentanone	ND	1
Acetone	ND	10
Benzene	ND	20
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	2
Carbon Disulfide	ND	2

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW2

ESS Project ID: 99030024
ESS Sample ID: 99030024-06

Compound Name	Result	MRL
Carbon Tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	1
Chloroform	ND	2
Chloromethane	ND	1
cis-1,2 Dichloroethene	ND	2
cis-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	0.5
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	1
Ethylbenzene	ND	2
Hexachlorobutadiene	ND	1
Isopropylbenzene	ND	0.6
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Napthalene	2	1
sec-Butylbenzene	2	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	1
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	1
Trichloroethene	ND	0.5
Trichlorofluoromethane	ND	1
Vinyl Chloride	ND	2
Xylenes (Total)	ND	2
		1

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: AS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Polynuclear Aromatic Hydrocarbons by EPA Method 8270c (SIM Modified)

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW2
Date Sampled: 3/1/99
Date Extracted: 3/2/99
Date Analyzed: 3/5/99
Analyst: AC

ESS Project ID: 99030024
ESS Sample ID: 99030024-06
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL
2-Methylnaphthalene	13	10
Acenaphthene	16	10
Acenaphthylene	3.5	0.2
Anthracene	6.5	0.2
Benzo(a)anthracene	3.5	0.2
Benzo(a)pyrene	1.7	0.2
Benzo(b)fluoranthene	2.9	0.2
Benzo(g,h,i)perylene	1.1	0.2
Benzo(k)fluoranthene	1.5	0.1
Chrysene	3.6	0.2
Dibenzo(a,h)Anthracene	0.3	0.2
Fluoranthene	14	10
Fluorene	13	10
Indeno(1,2,3-cd)Pyrene	1.1	0.2
Naphthalene	4.1	0.2
Phenanthrene	20	10
Pyrene	8.3	0.2

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: LAB

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Dissolved Metals

Client Name: East Coast Engineering

Client Project ID: Parcel 6A Taunton

Client Sample ID: ECE MW2 DUP

Date Sampled: 3/1/99

ESS Project ID: 99030024

ESS Sample ID: 99030024-07

Units: mg/L

Dilution: 1

Percent Solid: N/A

Test Name	Result	MRL	Date Analyzed	Analyst	Method
Arsenic	ND	0.1	3/5/99	SAM	6010
Cadmium	ND	0.01	3/5/99	SAM	6010
Chromium	ND	0.05	3/5/99	SAM	6010
Lead	ND	0.1	3/5/99	SAM	6010
Mercury	ND	0.0005	3/4/99	AR	7470

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: ESS

Date: 3/1/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Total Petroleum Hydrocarbon

Client Name: East Coast Engineering

Client Project ID: Parcel 6A Taunton

Client Sample ID: ECE MW2 DUP

Date Sampled: 3/1/99

Extraction Date: 3/2/99

Date Analyzed: 3/6/99

Analyst: AS

ESS Project ID: 99030024

ESS Sample ID: 99030024-07

Units: mg/L

Dilution: 1

Percent Solid: N/A

Sample Amount: 1000 ml

Test Name	Result	MRL
Total Petroleum Hydrocarbons	13	0.5

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	47	39-137

Approved By: AS

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

EPA Method 8260B

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW2 DUP
Date Sampled: 3/1/99
Date Analyzed: 3/5/99
Analyst: MD

ESS Project ID: 99030024
ESS Sample ID: 99030024-07
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 5 ml

Compound Name	Result	MRL
1,1,1,2-Tetrachloroethane	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,1,2-Trichloroethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,1-Dichloropropene	ND	1
1,2-Dichlorobenzene	ND	2
1,2,3-Trichlorobenzene	ND	1
1,2,3-Trichloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
1,2,4-Trimethylbenzene	2	1
1,2-Dibromo-3-Chloropropane	ND	1
1,2-Dibromoethane	ND	2
1,2-Dichloroethane	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichlorobenzene	ND	1
1,3,5-Trimethylbenzene	ND	1
1,3-Dichloropropane	ND	1
1,4-Dichlorobenzene	ND	1
1-Chlorohexane	ND	1
2,2-Dichloropropane	ND	1
2-Butanone	ND	1
2-Chlorotoluene	ND	20
2-Hexanone	ND	1
4-Chlorotoluene	ND	10
4-Isopropyltoluene	1	1
4-Methyl-2-Pentanone	ND	1
Acetone	ND	10
Benzene	ND	20
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	2
Carbon Disulfide	ND	2

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW2 DUP

ESS Project ID: 99030024
ESS Sample ID: 99030024-07

Compound Name	Result	MRL
Carbon Tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	2
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2 Dichloroethene	ND	1
cis-1,3-Dichloropropene	ND	0.5
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	0.6
Isopropylbenzene	1	1
Methyl tert-Butyl Ether	ND	1
Methylene Chloride	ND	1
n-Butylbenzene	ND	1
n-Propylbenzene	1	1
Napthalene	2	1
sec-Butylbenzene	3	1
Styrene	ND	1
tert-Butylbenzene	ND	1
Tetrachloroethene	ND	1
Tetrahydrofuran	ND	1
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	0.5
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl Chloride	ND	2
Xylenes (Total)	ND	1

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: 105

Date: 3/11/99

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Polynuclear Aromatic Hydrocarbons by EPA Method 8270c (SIM Modified)

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW2 DUP
Date Sampled: 3/1/99
Date Extracted: 3/2/99
Date Analyzed: 3/11/99
Analyst: RS

ESS Project ID: 99030024
ESS Sample ID: 99030024-07
Units: µg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL
2-Methylnaphthalene	6	5
Acenaphthene	9.8	0.2
Acenaphthylene	ND	0.2
Anthracene	4.6	0.2
Benzo(a)anthracene	3.9	0.2
Benzo(a)pyrene	2.2	0.2
Benzo(b)fluoranthene	3.8	0.2
Benzo(g,h,i)perylene	1.2	0.2
Benzo(k)fluoranthene	1.5	0.1
Chrysene	4.6	0.2
Dibenzo(a,h)Anthracene	0.5	0.2
Fluoranthene	9.3	5
Fluorene	9.8	0.2
Indeno(1,2,3-cd)Pyrene	1.6	0.2
Naphthalene	3.1	0.2
Phenanthrene	11.4	5
Pyrene	7.4	5

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Approved By: LAB

Date: 3/12/99

ESS Laborator

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

PROJECT NARRATIVE

CLIENT: East Coast Engineering
CLIENT PROJECT ID: Parcel 6A Taunton
ESS PROJECT ID: 99030024

Sample Receipt

Ten liquid samples and one Trip Blank were received on March 2, 1999 for the analysis specified on the enclosed Chain of Custody Record.

Analytical Summary

The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan.

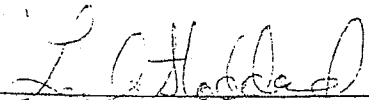
Semivolatile Organics Analysis

Surrogate recoveries were outside of the recommended ranges for samples 99030024-02 and -07.

No other observations noted.

This signed Certificate of Analysis is our approved release of your analytical results. Beginning with this Project Narrative, the entire report has been paginated. The Chain of Custody is the final report page. This report should not be copied except in full without the approval of the laboratory.

End of project narrative.



Laurel Stoddard/Eric Baanante
Laboratory Director/Operations Manager

4/9/99

Date

PS: Revised on April 9, 1999. Enclosed please find the revised data report of laboratory test results for the analysis of the sample previously submitted to you. The corresponding replacement pages have been re-paginated, beginning with this Project Narrative, and are enclosed. Please discard the corresponding Certificate of Analysis pages.

B

ESS Laborator,

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Hydrocarbon Fingerprint

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW3
Date Sampled: 3/1/99
Extraction Date: 3/2/99
Date Analyzed: 3/5/99
Analyst: AS

ESS Project ID: 99030024
ESS Sample ID: 99030024-05
Units: mg/L
Dilution: 5
Percent Solid: N/A
Sample Amount: 975 ml

Test Name	Result	MRL
Total Petroleum Hydrocarbons	107	2.56

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Qualitative ID

This sample has the GC/FID characteristics that are similar to: fuel oil #2.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	75	39-137

Approved By: EFC

Date: 4/5/99

B

ESS Laborator_y

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Hydrocarbon Fingerprint

Client Name: East Coast Engineering
Client Project ID: Parcel 6A Taunton
Client Sample ID: ECE MW2
Date Sampled: 3/1/99
Extraction Date: 3/2/99
Date Analyzed: 3/4/99
Analyst: AS

ESS Project ID: 99030024
ESS Sample ID: 99030024-06
Units: mg/L
Dilution: 1
Percent Solid: N/A
Sample Amount: 1000 ml

Test Name	Result	MRL
Total Petroleum Hydrocarbons	14.6	0.5

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Qualitative ID

This sample has the GC/FID characteristics that are similar to: fuel oil #2.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	64	39-137

Approved By: AS

Date: 4/5/99

ESS Laborator,

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

8100M Hydrocarbon Fingerprint

Client Name: East Coast Engineering

Client Project ID: Parcel 6A Taunton

Client Sample ID: ECE MW2 DUP

Date Sampled: 3/1/99

Extraction Date: 3/2/99

Date Analyzed: 3/6/99

Analyst: AS

ESS Project ID: 99030024

ESS Sample ID: 99030024-07

Units: mg/L

Dilution: 1

Percent Solid: N/A

Sample Amount: 1000 ml

Test Name	Result	MRL
Total Petroleum Hydrocarbons	13	0.5

MRL = Method Reporting Limit.

ND = Not Detected above MRL.

Qualitative ID

This sample has the GC/FID characteristics that are similar to: fuel oil #2.

Surrogate	% Recovery	Limits
Ortho-terphenyl (OTP)	47	39-137

Approved By: EE

Date: 4/5/99

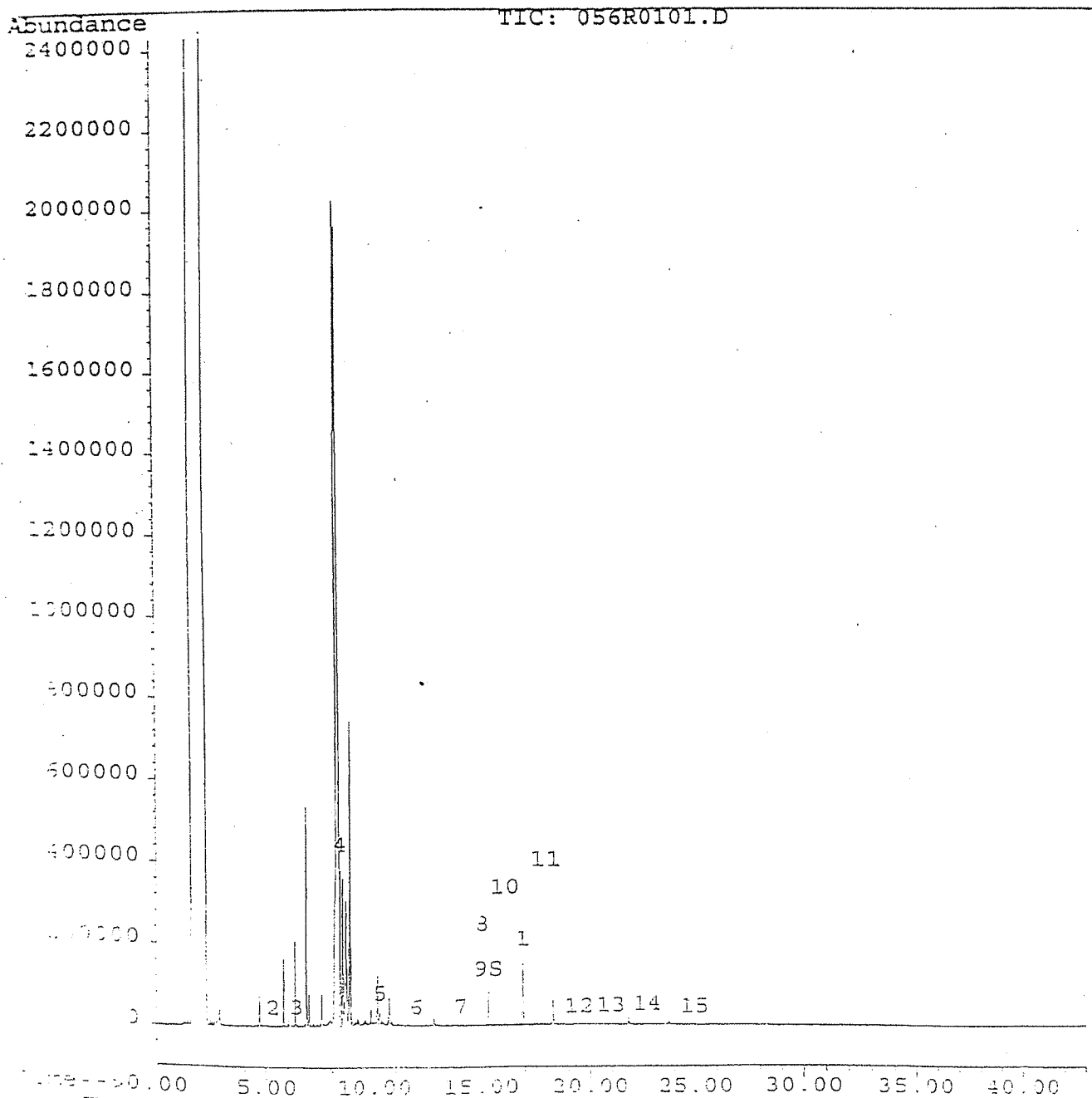
Quantitation Report

Data File : C:\HPCHEM\1\DATA\GC030499\056R0101.D
 Acq On : 04 Mar 99 08:33 PM
 Sample : 99030024-03
 Misc : *ECF MW4*
 Quant Time: Mar 5 9:15 1999

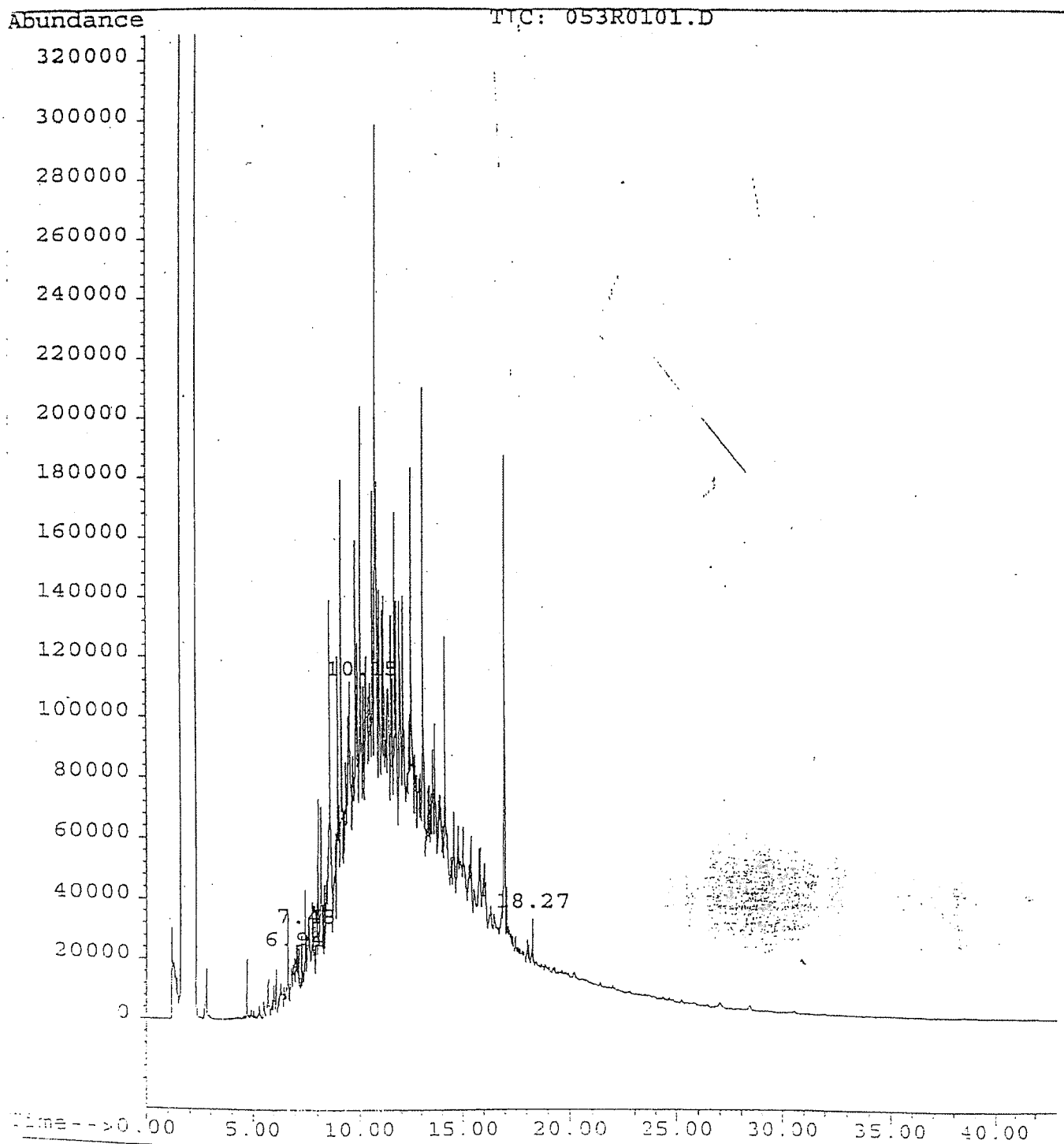
Vial: 56
 Operator: [GC]MS
 Inst : GC-FID 2
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\99BTPH2C.M
 Title : alkanes-front-GC2
 Last Update : Tue Mar 02 18:25:48 1999
 Response via : Multiple Level Calibration

Volume Inj. :
 Signal Phase :
 Signal Info :



File : C:\HPCHEM\1\DATA\GC030599\053R0101.D
Operator : [GC]MS
Acquired : 05 Mar 99 11:10 AM using AcqMethod 8100M.MTH
Instrument : GC-FID 2
Sample Name: 99030024-05,5X
Misc Info : *ECE MW3*
Vial Number: 53





APPENDIX D

AREAS OF CRITICAL CONCERN, ENDANGERED AND THREATENED SPECIES

Based on an on-line edition of the Massachusetts Geographic Information Systems DEP Priority Resources Map, the subject site is not located within the boundaries of a Potentially Productive Aquifer or within a Zone II, Interim Wellhead Protection Area as defined by the Massachusetts Department of Environmental Protection. Further, there are no public drinking water supply wells, no Areas of Critical Environmental Concern, no areas designated as Protected Open Space, no fish habitats, no habitats of Species of Special Concern or Threatened or Endangered Species within specified distances of the subject site. According to the Taunton Board of Health there are no private wells within 1 mile of the subject site.

According to the Resource Map, the nearest water body is identified as the Mill River which is located approximately 900 feet to the northeast of the subject site. A portion of Mill River is listed as a Protected Open Space. Based upon the City of Taunton storm drain plans, a intermittent stream identified as Myrtle Brook is located approximately 250 feet to the southeast of the subject site. According to aerial photographs, Myrtle Brook discharges to a wetland area located approximately 300 feet to the southeast of the subject site.

Consultation with the U.S. Fish and Wildlife Service did not identify the presence of threatened and/or endangered species or critical habitats at or in the vicinity of the discharge location and/or discharge outfall. A copy of the Consolation Letter received by the U.S. Fish and Wildlife Service is included in this appendix. In addition, a review of the Massachusetts Division of Fisheries and Wildlife on-line database did not indicate the presence of threatened or endangered species at the point of discharge and/or the discharge outfall.

Based upon the above, the site is considered criterion B pursuant to Appendix IV of the RGP.

MassDEP - Bureau of Waste Site Cleanup

MCP Numerical Ranking System Map: 500 feet & 0.5 Mile Radii

Site Name:

Parcel 6A
Mason/Porter Street
Taunton, MA

RTH:

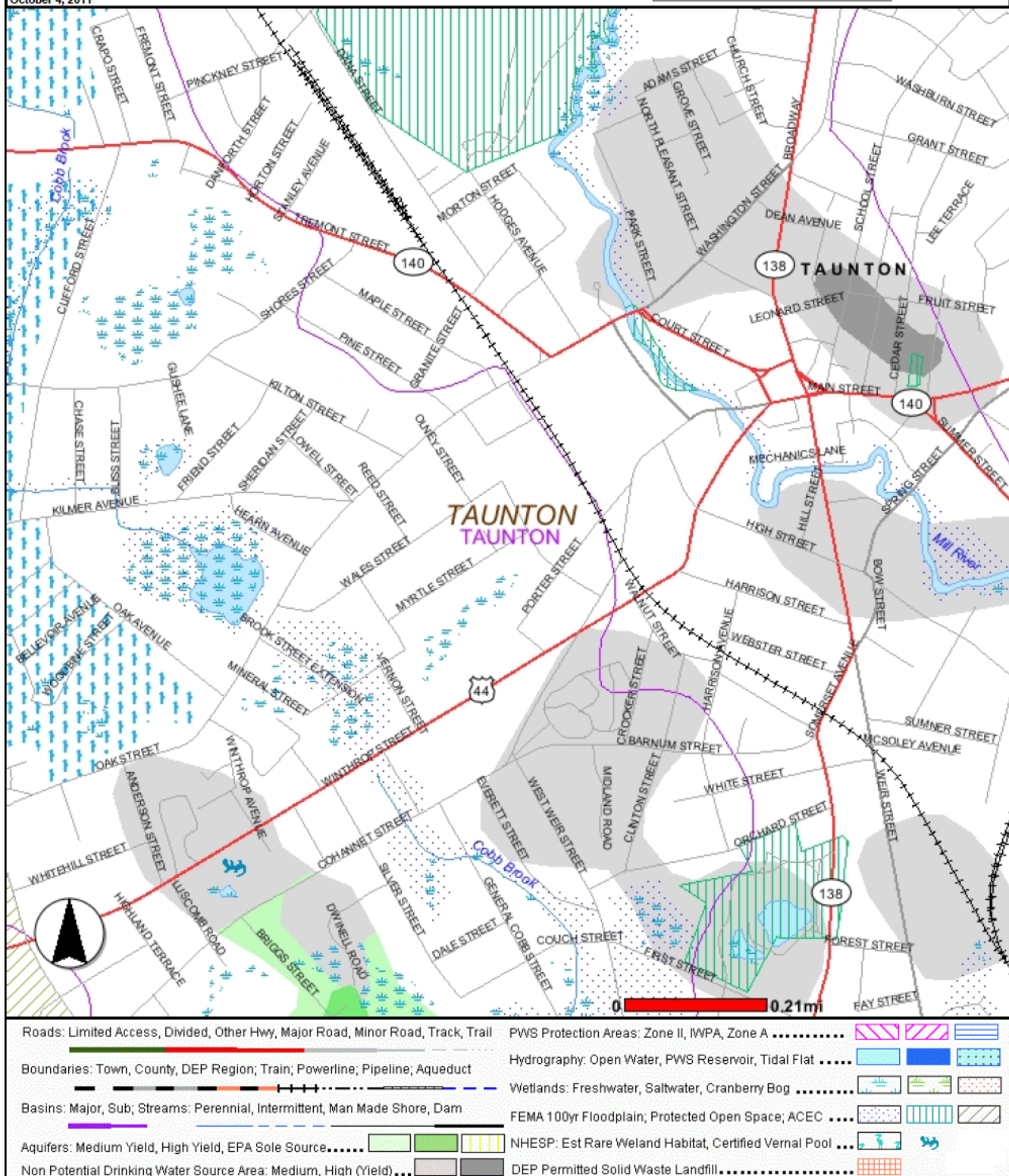
NAD83 MA Coordinates:
0mE, 0mN



The information shown on this map is the best available at the date of printing. For more information please refer to www.mass.gov/mgis/massgis.htm



October 4, 2011





United States Department of the Interior



FISH AND WILDLIFE SERVICE
NEW ENGLAND ECOLOGICAL SERVICES FIELD OFFICE
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 03301
PHONE: (603)223-2541 FAX: (603)223-0104
URL: www.fws.gov/newengland

Consultation Tracking Number: 05E1NE00-2013-SLI-0126

March 20, 2013

Project Name: Parcel 6A

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, and proposed species, designated critical habitat, and candidate species 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



United States Department of Interior
Fish and Wildlife Service

Project name: Parcel 6A

Official Species List

Provided by:

NEW ENGLAND ECOLOGICAL SERVICES FIELD OFFICE
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 03301
(603) 223-2541
<http://www.fws.gov/newengland>

Consultation Tracking Number: 05E1NE00-2013-SLI-0126

Project Type: Development

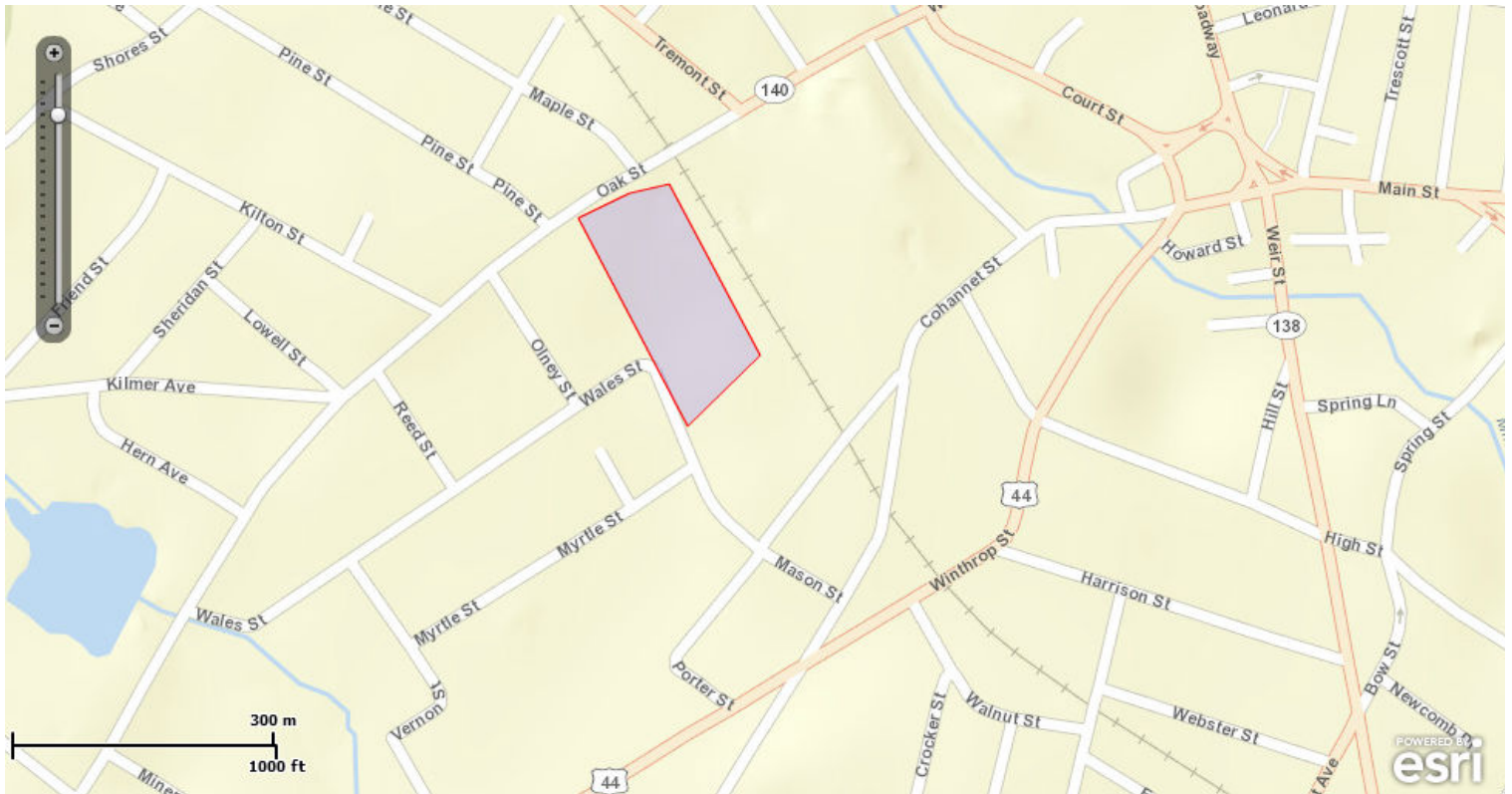
Project Description: The site consists of a 6.44-acre parcel of land located along Mason and Porter Streets in Taunton, Massachusetts. The site is bordered by a railroad right-of-way to the northeast, residential properties to the southeast, Mason Street to the southwest and the Greater Attleboro/Taunton Regional Transit Authority (GATRA) property to the northwest. Currently, the Parcel 6A site is an active construction site the perimeter which is surrounded by a chain link fenced.



United States Department of Interior
Fish and Wildlife Service

Project name: Parcel 6A

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-71.1008974 41.9017285, -71.0996325 41.8999558, -71.1006399 41.8992211, -71.1021634 41.9013772, -71.1014553 41.9016327, -71.1008974 41.9017285)))

Project Counties: Bristol, MA



United States Department of Interior
Fish and Wildlife Service

Project name: Parcel 6A

Endangered Species Act Species List

Species lists are not entirely based upon the current range of a species but may also take into consideration actions that affect a species that exists in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Please contact the designated FWS office if you have questions.

There are no listed species identified for the vicinity of your project.

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN

June 2009

Total Approximate Acreage: 268,000 acres

Approximate acreage and designation date follow ACEC names below.

Bourne Back River

(1,850 acres, 1989) Bourne

Canoe River Aquifer and Associated Areas (17,200 acres, 1991) Easton, Foxborough, Mansfield, Norton, Sharon, and Taunton

Cedar Swamp

(1,650 acres, 1975) Hopkinton and Westborough

Central Nashua River Valley

(12,900 acres, 1996) Bolton, Harvard, Lancaster, and Leominster

Cranberry Brook Watershed

(1,050 acres, 1983) Braintree and Holbrook

Ellisville Harbor

(600 acres, 1980) Plymouth

Fowl Meadow and Ponkapoag Bog

(8,350 acres, 1992) Boston, Canton, Dedham, Milton, Norwood, Randolph, Sharon, and Westwood

Golden Hills

(500 acres, 1987) Melrose, Saugus, and Wakefield

Great Marsh (originally designated as Parker River/Essex Bay)

(25,500 acres, 1979) Essex, Gloucester, Ipswich, Newbury, and Rowley

Herring River Watershed

(4,450 acres, 1991) Bourne and Plymouth

Hinsdale Flats Watershed

(14,500 acres, 1992) Dalton, Hinsdale, Peru, and Washington

Hockomock Swamp

(16,950 acres, 1990) Bridgewater, Easton, Norton, Raynham, Taunton, and West Bridgewater

Inner Cape Cod Bay

(2,600 acres, 1985) Brewster, Eastham, and Orleans

Kampoosa Bog Drainage Basin

(1,350 acres, 1995) Lee and Stockbridge

Karner Brook Watershed

(7,000 acres, 1992) Egremont and Mount Washington

Miscoe, Warren, and Whitehall Watersheds

(8,700 acres, 2000) Grafton, Hopkinton, and Upton

Neponset River Estuary

(1,300 acres, 1995) Boston, Milton, and Quincy

Petapawag

(25,680 acres, 2002) Ayer, Dunstable, Groton, Pepperell, and Tyngsborough

Pleasant Bay

(9,240 acres, 1987) Brewster, Chatham, Harwich, and Orleans

Pocasset River

(160 acres, 1980) Bourne

Rumney Marshes

(2,800 acres, 1988) Boston, Lynn, Revere, Saugus, and Winthrop

Sandy Neck Barrier Beach System

(9,130 acres, 1978) Barnstable and Sandwich

Schenob Brook Drainage Basin

(13,750 acres, 1990) Mount Washington and Sheffield

Squannassit

(37,420 acres, 2002) Ashby, Ayer, Groton, Harvard, Lancaster, Lunenburg, Pepperell, Shirley, and Townsend

Three Mile River Watershed

(14,280 acres, 2008) Dighton, Norton, Taunton

Upper Housatonic River

(12,280 acres, 2009) Lee, Lenox, Pittsfield, Washington

Waquoit Bay

(2,580 acres, 1979) Falmouth and Mashpee

Weir River

(950 acres, 1986) Cohasset, Hingham, and Hull

Wellfleet Harbor

(12,480 acres, 1989) Eastham, Truro, and Wellfleet

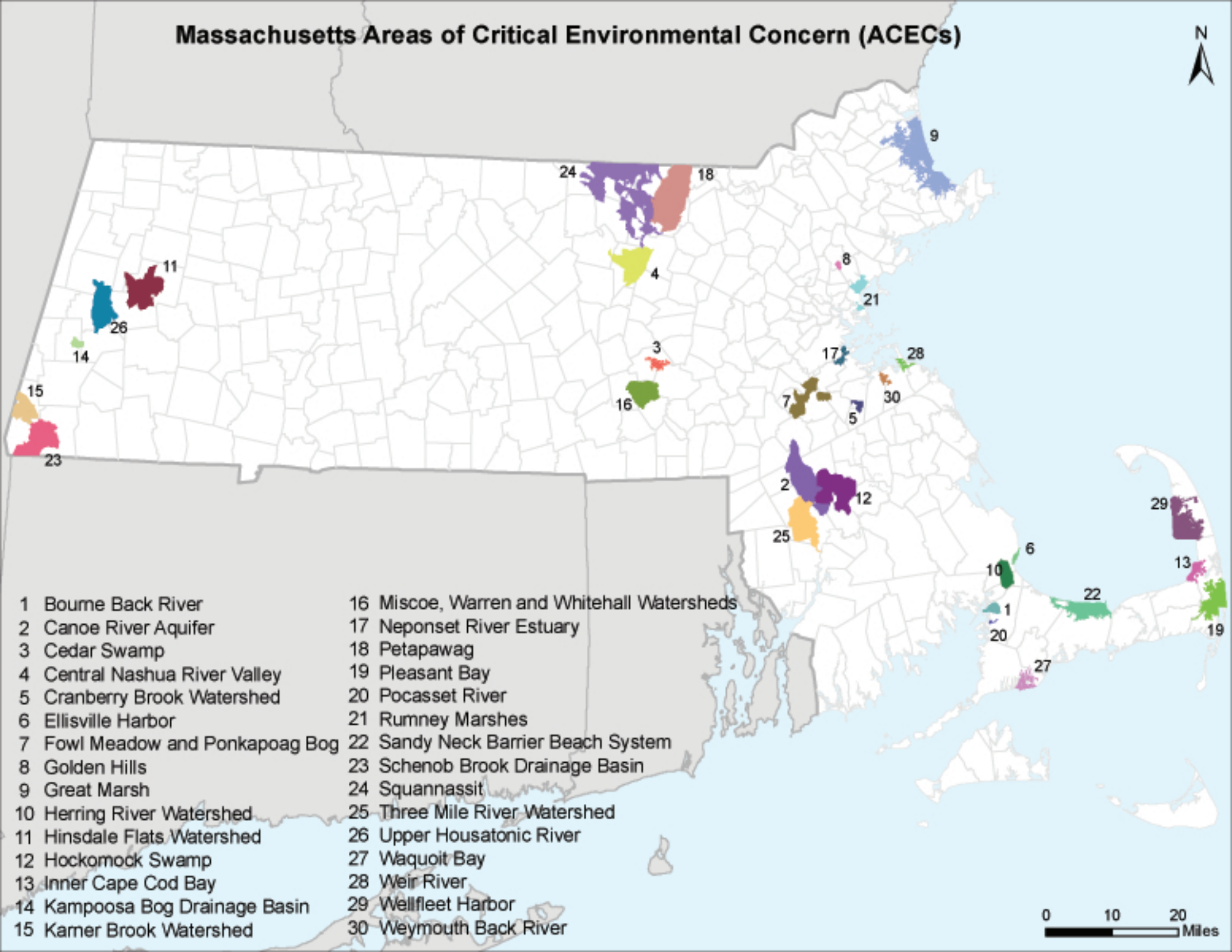
Weymouth Back River

(800 acres, 1982) Hingham and Weymouth

Towns with ACECs within their Boundaries**June 2009**

TOWN	ACEC	TOWN	ACEC
Ashby	Squannassit	Mt. Washington	Karner Brook Watershed
Ayer	Petapawag		Schenob Brook
	Squannassit	Newbury	Great Marsh
Barnstable	Sandy Neck Barrier Beach System	Norton	Hockomock Swamp
Bolton	Central Nashua River Valley		Canoe River Aquifer
Boston	Rumney Marshes		Three Mile River Watershed
	Fowl Meadow and Ponkapoag Bog	Norwood	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary	Orleans	Inner Cape Cod Bay
Bourne	Pocasset River		Pleasant Bay
	Bourne Back River	Pepperell	Petapawag
	Herring River Watershed		Squannassit
Braintree	Cranberry Brook Watershed	Peru	Hinsdale Flats Watershed
Brewster	Pleasant Bay	Pittsfield	Upper Housatonic River
	Inner Cape Cod Bay	Plymouth	Herring River Watershed
Bridgewater	Hockomock Swamp		Ellisville Harbor
Canton	Fowl Meadow and Ponkapoag Bog	Quincy	Neponset River Estuary
Chatham	Pleasant Bay	Randolph	Fowl Meadow and Ponkapoag Bog
Cohasset	Weir River	Raynham	Hockomock Swamp
Dalton	Hinsdale Flats Watershed	Revere	Rumney Marshes
Dedham	Fowl Meadow and Ponkapoag Bog	Rowley	Great Marsh
Dighton	Three Mile River Watershed	Sandwich	Sandy Neck Barrier Beach System
Dunstable	Petapawag	Saugus	Rumney Marshes
Eastham	Inner Cape Cod Bay		Golden Hills
	Wellfleet Harbor	Sharon	Canoe River Aquifer
Easton	Canoe River Aquifer		Fowl Meadow and Ponkapoag Bog
	Hockomock Swamp	Sheffield	Schenob Brook
Egremont	Karner Brook Watershed	Shirley	Squannassit
Essex	Great Marsh	Stockbridge	Kampoosa Bog Drainage Basin
Falmouth	Waquoit Bay	Taunton	Hockomock Swamp
Foxborough	Canoe River Aquifer		Canoe River Aquifer
Gloucester	Great Marsh		Three Mile River Watershed
Grafton	Miscoe-Warren-Whitehall Watersheds	Truro	Wellfleet Harbor
		Townsend	Squannassit
Groton	Petapawag	Tyngsborough	Petapawag
	Squannassit	Upton	Miscoe-Warren-Whitehall Watersheds
Harvard	Central Nashua River Valley		
	Squannassit	Wakefield	Golden Hills
Harwich	Pleasant Bay	Washington	Hinsdale Flats Watershed
Hingham	Weir River		Upper Housatonic River
	Weymouth Back River	Wellfleet	Wellfleet Harbor
Hinsdale	Hinsdale Flats Watershed	W Bridgewater	Hockomock Swamp
Holbrook	Cranberry Brook Watershed	Westborough	Cedar Swamp
Hopkinton	Miscoe-Warren-Whitehall Watersheds	Westwood	Fowl Meadow and Ponkapoag Bog
		Weymouth	Weymouth Back River
	Cedar Swamp	Winthrop	Rumney Marshes
Hull	Weir River		
Ipswich	Great Marsh		
Lancaster	Central Nashua River Valley		
	Squannassit		
Lee	Kampoosa Bog Drainage Basin		
	Upper Housatonic River		
Lenox	Upper Housatonic River		
Leominster	Central Nashua River Valley		
Lunenburg	Squannassit		
Lynn	Rumney Marshes		
Mansfield	Canoe River Aquifer		
Mashpee	Waquoit Bay		
Melrose	Golden Hills		
Milton	Fowl Meadow and Ponkapoag Bog		
	Neponset River Estuary		

Massachusetts Areas of Critical Environmental Concern (ACECs)



- | | |
|---------------------------------|--|
| 1 Bourne Back River | 16 Miscoe, Warren and Whitehall Watersheds |
| 2 Canoe River Aquifer | 17 Neponset River Estuary |
| 3 Cedar Swamp | 18 Petapawag |
| 4 Central Nashua River Valley | 19 Pleasant Bay |
| 5 Cranberry Brook Watershed | 20 Pocasset River |
| 6 Ellisville Harbor | 21 Rumney Marshes |
| 7 Fowl Meadow and Ponkapoag Bog | 22 Sandy Neck Barrier Beach System |
| 8 Golden Hills | 23 Schenob Brook Drainage Basin |
| 9 Great Marsh | 24 Squannassit |
| 10 Herring River Watershed | 25 Three Mile River Watershed |
| 11 Hinsdale Flats Watershed | 26 Upper Housatonic River |
| 12 Hockomock Swamp | 27 Waquoit Bay |
| 13 Inner Cape Cod Bay | 28 Weir River |
| 14 Kampoosa Bog Drainage Basin | 29 Wellfleet Harbor |
| 15 Karter Brook Watershed | 30 Weymouth Back River |

0 10 20 Miles

**FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
IN MASSACHUSETTS**

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Bourne (north of the Cape Cod Canal)
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Raynham and Taunton
Dukes	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Piping Plover	Threatened	Coastal Beaches	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Aquinnah and Chilmark
	Sandplain gerardia	Endangered	Open areas with sandy soils.	West Tisbury
Essex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Gloucester, Essex and Manchester
	Piping Plover	Threatened	Coastal Beaches	Gloucester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague
	Dwarf wedgemussel	Endangered	Mill River	Whately
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hadley, Hatfield, Amherst and Northampton
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, and Wareham
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Plymouth, Marion, Wareham, and Mattapoisett.
Suffolk	Piping Plover	Threatened	Coastal Beaches	Winthrop
Worcester	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Leominster

- Eastern cougar and gray wolf are considered extirpated in Massachusetts.
- Endangered gray wolves are not known to be present in Massachusetts, but dispersing individuals from source populations in Canada may occur statewide.
- Critical habitat for the Northern Red-bellied cooter is present in Plymouth County.

7/31/2008



APPENDIX E

NATIONAL REGISTER OF HISTORIC PLACES

The National Register of Historic Places and Massachusetts Historical Commission on-line databases were reviewed for listings located within the immediate vicinity of the subject site in Taunton, Massachusetts. A review of the most recent National Register of Historical Places for Bristol County, Massachusetts did not identify records or addresses of Historic Places that exist in the immediate vicinity of the subject site and/or outfall location. The Massachusetts Historical Commission on-line database identified one residential house located approximately 150 feet to the south of the subject site which is listed with the address of 19 Mason Street as being a historic place. However, given that dewatering activities will be contained within the subject site and the ultimate point of discharge for the dewatered groundwater from the site is over 400 feet to the southeast of the the 19 Mason Street property, the dewatering and off-site discharge activities at the site are not considered to affect the historic place located in close proximity to the subject site.

Based upon the above, the site considered criterion 2 pursuant to Appendix IV of the RGP.

Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No:	TAU.256
Historic Name:	Maxim, L. W. House
Common Name:	
Address:	19 Mason St
City/Town:	Taunton
Village/Neighborhood:	Taunton
Local No:	
Year Constructed:	C 1872
Architect(s):	
Architectural Style(s):	Greek Revival
Use(s):	Single Family Dwelling House
Significance:	Architecture
Area(s):	
Designation(s):	



The Massachusetts Historical Commission (MHC) has converted this paper record to digital format as part of ongoing projects to scan records of the Inventory of Historic Assets of the Commonwealth and National Register of Historic Places nominations for Massachusetts. Efforts are ongoing and not all inventory or National Register records related to this resource may be available in digital format at this time.

The MACRIS database and scanned files are highly dynamic; new information is added daily and both database records and related scanned files may be updated as new information is incorporated into MHC files. Users should note that there may be a considerable lag time between the receipt of new or updated records by MHC and the appearance of related information in MACRIS. Users should also note that not all source materials for the MACRIS database are made available as scanned images. Users may consult the records, files and maps available in MHC's public research area at its offices at the State Archives Building, 220 Morrissey Boulevard, Boston, open M-F, 9-5.

Users of this digital material acknowledge that they have read and understood the MACRIS Information and Disclaimer (<http://mhc-macris.net/macrisdisclaimer.htm>)

Data available via the MACRIS web interface, and associated scanned files are for information purposes only. THE ACT OF CHECKING THIS DATABASE AND ASSOCIATED SCANNED FILES DOES NOT SUBSTITUTE FOR COMPLIANCE WITH APPLICABLE LOCAL, STATE OR FEDERAL LAWS AND REGULATIONS. IF YOU ARE REPRESENTING A DEVELOPER AND/OR A PROPOSED PROJECT THAT WILL REQUIRE A PERMIT, LICENSE OR FUNDING FROM ANY STATE OR FEDERAL AGENCY YOU MUST SUBMIT A PROJECT NOTIFICATION FORM TO MHC FOR MHC'S REVIEW AND COMMENT. You can obtain a copy of a PNF through the MHC web site (www.sec.state.ma.us/mhc) under the subject heading "MHC Forms."

Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on:

Tuesday, March 26, 2013 at 10:57 AM

FORM B - BUILDING

MASSACHUSETTS HISTORICAL COMMISSION
Office of the Secretary, State House, Boston

In Area no.

Form no.

256



Town Taunton

Address 19 Mason St.

Name

Present use Residence

Present owner David G. Seekell

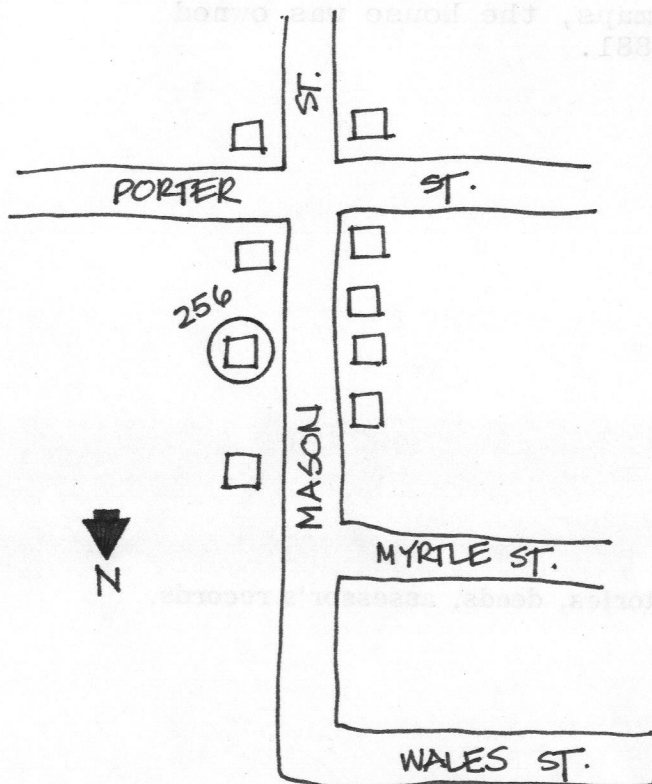
Description:

post-1871

Source Style; Maps

Greek Revival

4. Map. Draw sketch of building location in relation to nearest cross streets and other buildings. Indicate north.



Architect

Exterior wall fabric Clapboards

Outbuildings (describe)

Other features Corner pilasters, roof entablature, dormers. 2/2 sash windows;

Door surround enclosed paneled sidelights

Entrance porch and
Altered stoop added. Date c. 1960

Moved Date

5. Lot size:

One acre or less x Over one acre

Approximate frontage 80'

Approximate distance of building from street
15'

6. Recorded by T.W.

Organization T.C.H.S.

Date 2/80

(over)

7. Original owner (if known) _____

Original use _____

Subsequent uses (if any) and dates _____

8. Themes (check as many as applicable)

Aboriginal	_____	Conservation	_____	Recreation	_____
Agricultural	_____	Education	_____	Religion	_____
Architectural	<u>x</u>	Exploration/ settlement	_____	Science/ invention	_____
The Arts	_____	Industry	_____	Social/ humanitarian	_____
Commerce	_____	Military	_____	Transportation	_____
Communication	_____	Political	_____		
Community development	_____				

9. Historical significance (include explanation of themes checked above)

This Greek Revival Classic Cottage is unusual both for its late construction date (post-1871) and for its centrally-located urban site. Despite the addition of a new entrance porch and roof dormers, the structure exhibits Greek Revival details in its roof entablature, corner pilasters and characteristic door surround.

According to late 19th century maps, the house was owned by L.W. Maxim and J.W. Washburn in 1881.

10. Bibliography and/or references (such as local histories, deeds, assessor's records, early maps, etc.)

Beers, 1871
Walker, 1881
Bristol Co. Atlas of Surveys, 1895



APPENDIX F

Best Management Practice Plan

A Notice of Intent for a Remediation General Permit (RGP) under the National Pollutant Discharge Elimination System (NPDES) has been submitted to the US Environmental Protection Agency (EPA) in anticipation of temporary construction dewatering that may occur at the Parcel 24 site located in Boston, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

Construction dewatering effluent is anticipated to be pumped from localized sumps and trenches within the excavation and directly into a treatment system consisting of an settling tank and bag filters in series. The effluent will be discharged through hoses into dedicated storm drain located in Mason Street adjacent to the subject site. Based upon a review of the stormwater drain plans provided by the City of Taunton, the stormwater drains along Mason Street ultimately discharge into Mrytle Brook and its associated wetlands.

Discharge Monitoring and Compliance

Regular sampling and testing will be conducted at the influent to the system and the treated effluent as required by the RGP. This includes chemical testing required within days 1 and 3 of initial discharge and the monthly testing to be conducted through the end of the scheduled discharge.

Monitoring will include checking the condition of the treatment system, assessing the need for treatment system adjustments based on monitoring data, observing and recording daily flow rates and discharge quantities, and verifying the flow path of the discharged effluent.

The total monthly flow will be monitored by checking and documenting the flow through the flow meter to be installed on the system. Flow will be maintained below the "system design flow" by regularly monitoring flow and adjusting the amount of construction dewatering as needed.

Monthly monitoring reports will be compiled and maintained at the site

System Maintenance

A number of methods will be used to minimize the potential for violations for the term of this permit. Scheduled regular maintenance of the treatment system will be conducted to verify proper operation. Regular maintenance will include assessing the amount of sediment in the settling tank and the condition of the bag filters, pumps, and flow meters. Equipment will be monitored daily for potential issues or unscheduled maintenance requirements.



Employees who have direct or indirect responsibility for ensuring compliance with the RGP will be trained by the Contractor.

Miscellaneous Items

It is anticipated that the erosion control measures and the nature of the site will minimize potential runoff to or from the site. The project specifications also include requirements for erosion control. Site security for the treatment system will be covered within the overall site security plan.

No adverse affects on designated uses of surrounding surface water bodies is anticipated. The nearest surface water body is the Myrtle Brook which is located 300 feet to southeast of the subject site. During a majority of the dewatering activities, groundwater will be pumped through a treatment system consisting of a settling tank and bag filters in series prior to discharge into the City of Taunton storm drain system. However, during dewatering activities within the vicinity of monitoring well MW-5 which is located at the central portion of the subject site, groundwater will be pumped through granular activated carbon (GAC) filter which will be added after the bag filters.

Management of Treatment System Materials

Dewatering effluent will be pumped directly to the treatment system from the excavation with use of hoses and sumps to minimize handling. The Contractor will establish staging areas for equipment or materials storage that may be possible sources of pollution away from any dewatering activities, to the extent practicable.

Sediment contained in the settling tank and spent carbon from the GAC filter will be characterized and removed from the site to an appropriate receiving facility, in accordance with applicable laws and regulations.