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

CERTIFIED MAIL RETURN RECEIPT REQUESTED

November 21, 2012

Mark Theriault,
Assistant Vice President
80 Hayden Avenue, Suite 120
Lexington, MA 02421

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Former Boston Rubber Shoe Company site located at 99R and 101R, Washington Street in Melrose, MA 02176, Middlesex County; Authorization # MAG910559

Dear Mr. Theriault:

Based on the review of a Notice of Intent (NOI) submitted on behalf of SP5 Wood Alta Stone Place LLC by the firm Vertex Environmental Services, Inc., for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Owner and Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

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

Please note the enclosed checklist includes parameters that exceeded Appendix III limits. The checklist also includes other parameters 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 that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on a dilution factor range (DFR). With the absence of dilution to Spot Pond Brook, EPA determined that the DFR for each parameter is in the one and five (1-5) range. (See the RGP Appendix IV for ug/l, cadmium of 0.49 ug/L, trivalent chromium of 118.6 ug/L, copper of 12.6 ug/L, lead of 3.16 ug/L, nickel of 70.47 ug/L, silver of 2.9 ug/l, zinc of 161.8 ug/L and iron of 2,430 ug/L, are required to achieve permit compliance at your site. Please note that these limitations have increased by the reported dilution which in this case is 2.43. See footnote eleven (11) in the attached summary of monitoring parameters.

Finally, please note the checklist of 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 March 23, 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

Thelma Murphy, Manager
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
John V. Scenna, City of Melrose, DPW
Frank Calandra, VERTEX, Inc.

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**MAG910559**
Authorization Issued:	November 2012
Facility/Site Name:	Former Boston Rubber Shoe Company
Facility/Site Address:	99R and 101R Washington Street, Melrose, MA 02176, Middlesex County
	Email address of owner: mark.theriault&woodpartners.com
Legal Name of Operator:	SP5 Wood Alta Stone Place LLC
Operator contact name, title, and Address:	Mark Theriault, Assistant Vice President SP5 Wood Alta Stone Place LLC
	Email: same as owner
Estimated date of Completion:	3/23/2013
Category and Sub-Category:	III-Contaminated Construction Dewatering. Sub-category B. Known Contaminated Sites
RGP Termination Date:	September 10, 2015
Receiving Water:	Spot Pond Brook

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

	Parameter	**Effluent Limit/Method#/ML** (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
√	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing ** Me#160.2/ML5ug/L
	2. Total Residual Chlorine (TRC) [1]	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
√	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
	4. Cyanide (CN) [2, 3]	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L
√	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
√	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
√	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
√	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
√	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes	100 ug/L/ Me#8260C/ ML 2ug/L

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	(BTEX) [4]	
	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
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L

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

	Metal parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11/12]		Minimum level=ML
		Freshwater	Saltwater	
√	39. Antimony	13.6/ML 10		

	Metal parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11/12]		Minimum level=ML
		Freshwater	Saltwater	
√	40. Arsenic **	24.3/ML20	36/ML 20	
√	41. Cadmium **	0.49ML10	8.9/ML 10	
√	42. Chromium III (trivalent) **	118.6/ML15	100/ML 15	
	43. Chromium VI (hexavalent) **	11.4/ML10	50.3/ML 10	
√	44. Copper **	12.6/ML15	3.7/ML 15	
√	45. Lead **	3.16/ML20	8.5/ML 20	
	46. Mercury **	0.9/ML0.2	1.1/ML 0.2	
√	47. Nickel **	70.47/ML20	8.2/ML 20	
	48. Selenium **	5/ML20	71/ML 20	
√	49. Silver	2.9/ML10	2.2/ML 10	
√	50. Zinc **	161.8/ML15	85.6/ML 15	
√	51. Iron	2,430/ML 20		

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

Footnotes:

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

November 12, 2012

Mr. Victor Alvarez
United States EPA
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912
Attn: Remediation General Permit NOI Processing

RE: FMR Boston Rubber Shoe Company
Culvert at 99R and 101R Washington Street
Melrose, Massachusetts
RTN 3-30758

Dear Mr. Alvarez,

Vertex Environmental Services, Inc. (VERTEX) is pleased to present this Notice of Intent (NOI) for a Remediation General Permit (RGP) on behalf of SP5 Wood Alta Stone Place LLC (the Owner) at the property identified as FMR Boston Rubber Shoe Company located at 99R and 101R Washington Street in Melrose, Middlesex County, Massachusetts (the Property). A site locus map is provided in Figure 1. The NOI is provided in Appendix A.

General Facility/Site Information
During redevelopment of the Property as multi-family housing, a 380-foot long underground culvert (the Culvert) was identified along the eastern portion of the Property. A plan of the Property showing the location of the Culvert is provided in Figure 2. The culvert contains approximately two feet of particulate matter (solids that appear to have accumulated in the culvert over time) and several feet of standing water. Several samples of the particulate matter were collected in December 2011 to assess disposal options. Analytical results from samples of particulate matter indicate concentrations of various compounds exceeding applicable Massachusetts Contingency Plan (MCP) S-1 reportable concentrations (RCs). Concentrations of various volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and metals were detected above MCP RCS-1 criteria. Based on the RCS-1 exceedances, the Owner notified the Massachusetts Department of Environmental Protection (MassDEP) of the 120-day reporting condition on April 20, 2012, and MassDEP assigned RTN 3-30758 to the release.

To achieve a condition of No Significant Risk under the MCP, remediation of the Culvert is being conducted in accordance with a Remedial Action Measure (RAM). In addition, the remediation is being conducted as described in a PCB Risk-Based Remedial Action Plan (RAP) that was approved by EPA Region 1. The proposed remediation plan is to remove all the solids within the Culvert and dispose off site. To facilitate the removal of the solids, VERTEX proposes to collect and treat water that is removed from the Culvert prior to discharge to a nearby drainage swale under an RGP.

Discharge and Receiving Waters Information

As shown in Figure 3, the receiving water for the treated discharge is Spot Pond Brook, via a surface drainage swale. According to the MassDEP Division of Water Pollution Control, Spot Pond Brook is classified as Class B. The seven day-ten year low flow (7Q10) of the receiving water was taken from NPDES Permit MAG910511, dated December 13, 2011, which was previously authorized for discharge at the site into the same drainage swale. The 7Q10 flow was determined to be 0.32 cubic feet per second (cfs) with a 71% prediction error. This number was used to calculate the dilution factor (DF) as follows:

DF = (Qd + Qs)/Qd = (0.223 + 0.32)/0.223 = 2.43

Where: Qd = 100 gal/min x 0.00223 = 0.223 cfs
Qs = 0.32 cfs

Contaminant Information

Two samples were collected within the Culvert area by VERTEX on October 31, 2012 and submitted to Alpha Analytical of Westborough, Massachusetts for the analysis of parameters required for the RGP NOI. A copy of the laboratory report is provided in Appendix B.

To complete Section 3b of the NOI Form, the following table is presented to compare maximum influent metals concentrations to Appendix III Effluent Limits (Step 1). Metals that exceed Appendix III Effluent Limits are highlighted and then compared to the Appendix IV Metal Limits, which are calculated by multiplying the Appendix III Limit multiplied by the dilution factor (Step 2).

Metal	Appendix III Limit	Units	Max. Influent Conc	DF	Appendix IV Limit	Influent Conc. > Limit?
Antimony	5.6	ug/l	**95.9**	2.43	13.61	Y
Arsenic	10	ug/l	5.8			
Cadmium	0.2	ug/l	**1.9**	2.43	0.49	Y
Chromium III	48.8	ug/l	43.2			
Chromium VI	11.4	ug/l	ND(5)			
Copper	5.2	ug/l	**99.8**	2.43	12.64	Y
Lead	1.3	ug/l	**145.6**	2.43	3.16	Y
Mercury	0.9	ug/l	0.2			
Nickel	29	ug/l	**405.2**	2.43	70.47	Y
Selenium	5	ug/l	ND(2)			
Silver	1.2	ug/l	**14**	2.43	2.92	Y
Zinc	66.6	ug/l	**5,188**	2.43	161.8	Y
Iron	1,000	ug/l	**2,500**	2.43	2,430	Y

Based on the above table, untreated influent samples exceed RGP effluent discharge limits for the following metals: antimony, cadmium, copper, lead, nickel, silver, zinc, and iron.

Treatment System Information

A schematic diagram of the proposed water treatment system is provided in Figure 4. The construction dewatering pump will be set to minimize pumping of solids into the initial settling/weir tank. Water treatment, at a minimum, will include bag filters and two 2,000-lb granular activated carbon vessels connected in series. Treated water will be stored in four 21,000-gallon frac tanks to provide adequate storage prior to discharge. Frac tanks and dewatering system will be equipped with required fixtures, freeze protection, floats, switches, and alarms to continuously operate the dewatering system.

ESA and NHPA Eligibility

As demonstrated in the NOI for NPDES Permit MAG910511 dated December 13, 2011, which was previously authorized for discharge at the site into the same drainage swale, no endangered species, designated critical habitat, or national historic places were identified in proximity to the proposed discharge.

Closing

A copy of this NOI is being submitted concurrently to the City of Melrose Department of Public Works. If you have any questions or concerns, please contact Frank Calandra at (781) 952-6000.

Sincerely,

Vertex Environmental Services, Inc.

Frank Calandra, PE, LSP
Senior Project Manager

James B. O'Brien, LSP
President

Attachments:

Figure 1: Site Locus
Figure 2: Site Plan
Figure 3: Site Location and Outfall Map
Figure 4: Proposed Treatment System Schematic

Appendix A: Notice of Intent
Appendix B: Laboratory Analytical Report

cc: City of Melrose Public Works, Attn: John V. Scenna, Director

SOURCE: USGS BOSTON NORTH, MASSACHUSETTS 7.5 MINUTE QUADRANGLE (1991)

N

0 2000

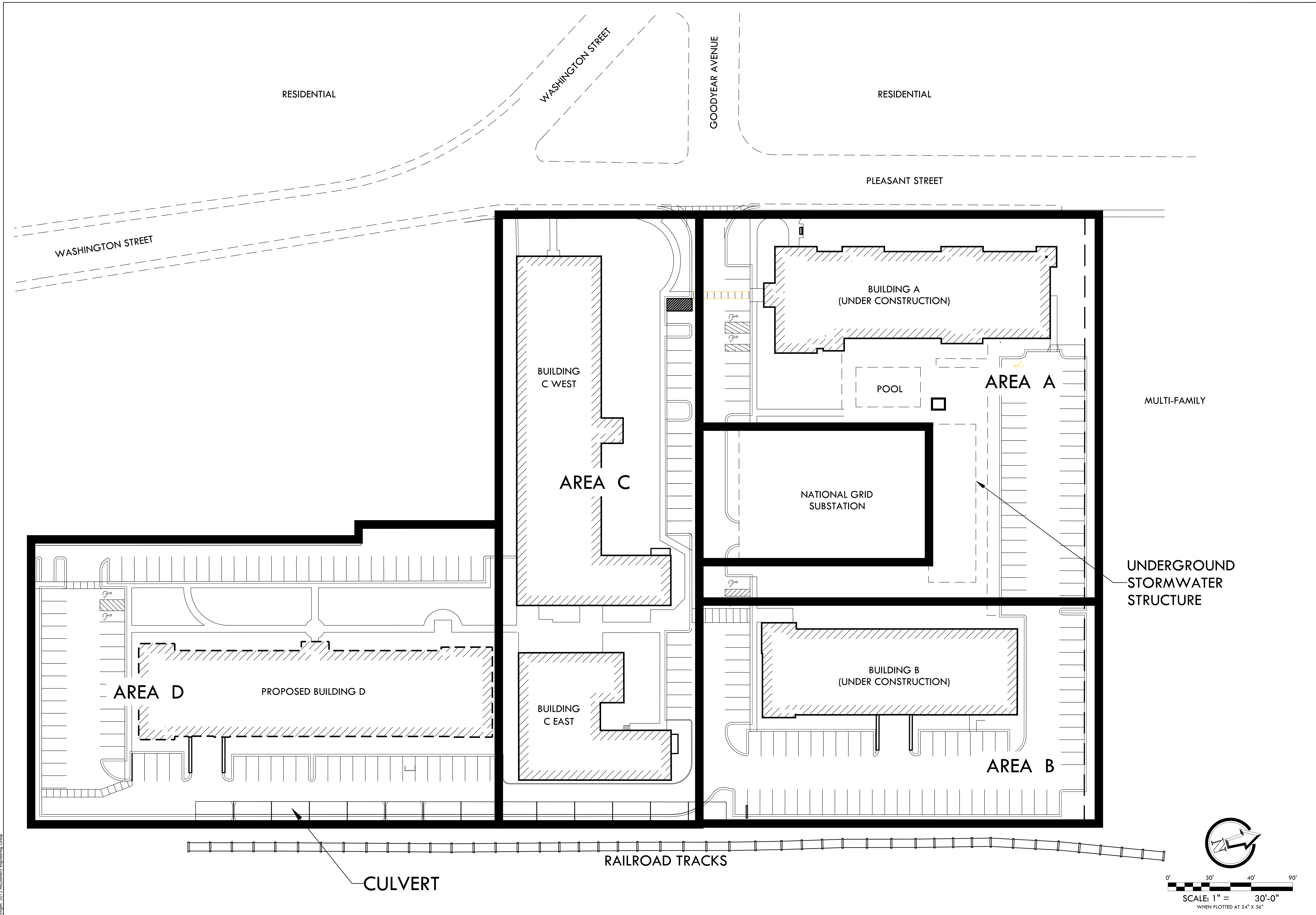
APPROXIMATE SCALE (FEET)

99R and 101R Washington Street
Melrose, Massachusetts

Figure 1
Site Locus Map

VERTEX®
Environmental Services, Inc.

PROJ. NO: 20329	D/B: TLD	February 2012



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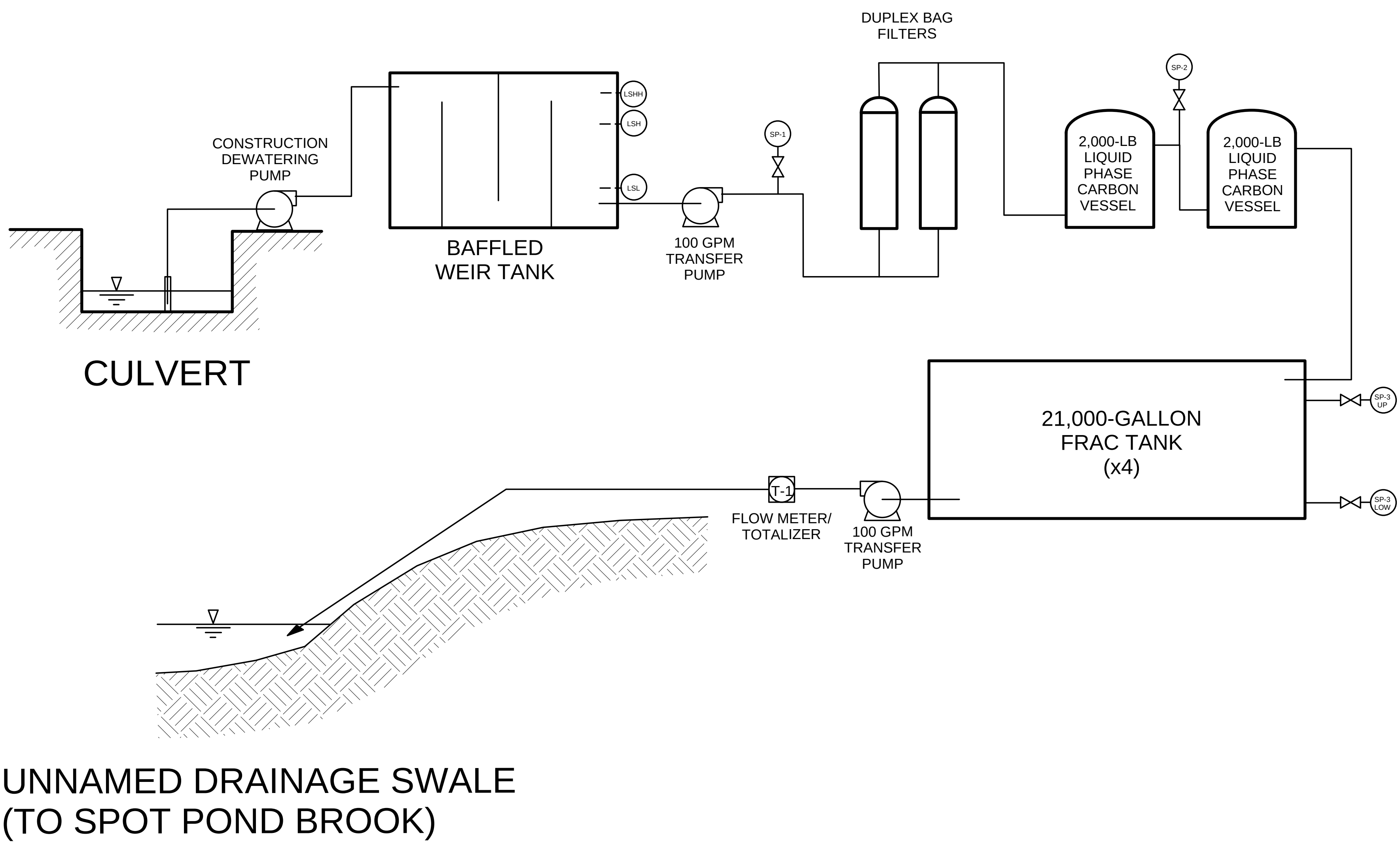
REVISIONS

PROPERTY PLAN
STONE PLACE
99R-101R WASHINGTON STREET
MELROSE, MASSACHUSETTS

File No.:	12033
Date:	OCT 2012
Drawn:	KHH
Checked:	SPK
Job No.:	12033

Figure 2

SITE LOCATION AND OUTFALL MAP **FMR Boston Rubber Shoe Company** **Culvert at 99R and 101R Washington Street** **Melrose, Massachusetts**	**SCALE: GRAPHIC** **November 9, 2012** **VERTEX Proj. No. 22248**	**VERTEX** **Environmental Services, Inc.** **FIGURE NO. 3**



PROPOSED TREATMENT SYSTEM SCHEMATIC

FMR Boston Rubber Shoe Company
Culvert at 99R and 101R Washington Street
Melrose, Massachusetts
RTN 3-30758

SCALE: NOT TO SCALE

November 9, 2012

VERTEX Proj. No. 22248

VERTEX

Environmental Services, Inc.

FIGURE NO. 4

APPENDIX A
NOTICE OF INTENT

Print Form

Remediation General Permit
Appendix V

Notice of Intent (NOI)
Suggested Forms & Instructions

I. Notice of Intent (NOI) Suggested Form and Instructions

In order to be covered by the remediation general permit (RGP), applicants must submit a completed Notice of Intent (NOI) to EPA Region I and the appropriate state agency. The owner or operator, as defined by 40 CFR § 122.2, means the owner or operator of any "facility or activity" subject to regulation under the NPDES program.

The following are three general "**operator**" scenarios (variations on any of these three are possible, especially as the number of owners and contractors increases):

▸ ***"****Owner" as "Operator" - sole permittee.* The property owner designs the structures and control systems for the site, develops and implements the BMPP, and serves as general contractor (or has an on-site representative with full authority to direct day-to-day operations). Under the definition of operator, in this case, the "Owner" would be considered the "operator" and therefore the only party that needs permit coverage. Everyone else working on the site may be considered subcontractors and do not need to apply for permit coverage.

▸ *"Contractor" as "Operator" - sole permittee.* The property owner hires a company (e.g., a contractor) to design the project and oversee all aspects, including preparation and implementation of the BMPP and compliance with the permit (e.g., a "turnkey" project). Here, the contractor would likely be the only party needing a permit. Similarly, EPA expects that property owners hiring a contractor or consultant to perform groundwater remediation work (e.g., due to a leaking fuel oil tank) would come under this type of scenario. EPA believes that the contractor, being a professional in the industry, should be the responsible entity rather than the individual. The contractor is better equipped to meet the requirements of both applying for permit coverage and developing and properly implementing the plans needed to comply with the permit. However, property owners would also meet the definition of "operator" and require permit coverage in instances where they perform any of the required tasks on their personal properties.

▸ *"Owner" <u>and</u> "Contractor" as "Operators" - co-permittees.* The owner retains control over any changes to site plans, BMPPs, or wastewater conveyance or control designs, but the contractor is responsible for conducting and overseeing the actual activities (e.g., excavation, installation and operation of treatment train, etc.) and daily implementation of BMPP and other permit conditions. In this case, <u>both</u> parties need to apply for coverage.

Generally, a person would not be considered an "operator," and subsequently would not need permit coverage, if: 1) that person is a subcontractor hired by, and under the supervision of, the owner or a general contractor (e.g., if the contractor directs the subcontractor's activities on-site, it is probably not an operator); or 2) the person's activities would otherwise result in the need for coverage under the RGP but another operator has legally assumed responsibility for the impacts of project activities.

A. Instructions for the Suggested Notice of Intent (NOI) - At a minimum, the Notice of Intent must include the following for each individual facility or site. Additional information may be attached as needed.

1. General facility/site information.

a) Provide the facility/site name, mailing address, and telephone and fax numbers. Provide the facility Standard Industrial Classification (SIC) code(s), which can be found online at http://www.osha.gov/pls/imis/sic_manual.html. Provide the site location, including longitude and latitude.
b) Provide the facility/site owner's name, address, email address, telephone and fax numbers, if different from the site information. Indicate whether the owner is a Federal, State/Tribal, private, or other entity.
c) Provide the site operator's (e.g., contractor's) name, mailing address, telephone and fax numbers, and email address if different from the owner's information.
d) For the site for which the application is being submitted, indicate whether:

1) a prior NPDES permit exclusion has been granted for the discharge (if so, provide the tracking number of the exclusion letter);
2) a prior NPDES application (Form 1 & 2C – for reference, please visit http://www.epa.gov/region1/npdes/epa_attach.html) has ever been filed for the discharge (if so, provide the tracking number and date that the application was submitted to EPA);
3) the discharge is a "new discharge" as defined by 40 CFR 122.2; and
4) for sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000 and exempt from state permitting.

e) Indicate whether there is any ongoing state permitting, licensing, or other action regarding the facility or site which is generating the discharge. If "yes," provide any site identification number assigned by the state of NH or MA, any permit or license number assigned, and the state agency contact information (e.g. name, location, telephone no.).
f) Indicate whether or not the facility is covered by other EPA permits including:

1) the Multi-Sector General Permit (MSGP) http://cfpub.epa.gov/npdes/stormwater/msgp.cfm;
2) the Final NPDES General Permit for Dewatering Activity Discharges in Massachusetts and New Hampshire http://www.epa.gov/region1/npdes/dewatering.html;
3) the EPA Construction General Permit http://cfpub.epa.gov/npdes/stormwater/cgp.cfm;
4) an individual NPDES permit; or
5) any other water quality-related individual or general permit.

If so, provide permit tracking number(s).

g) Indicate if the site/facility discharge(s) to an Area of Critical Environmental Concern (ACEC), as shown on the tables and maps in Appendix I.

h) Based on the nature of the facility/site and any historical sampling data, the applicant must indicate which of the sub-categories within which the potential discharge falls.

2. Discharge information.

a) Describe the discharge activities to be covered by the permit. Attach additional sheets as needed.
b) Provide the following information about each discharge:
1) the number of discharge points;
2) the maximum and average flow rate of the discharge in cubic feet per second. For the average flow magnitude, include the units and appropriate notation if this value is a calculated design value or estimate if technical/design information is not available;
3) the latitude and longitude of each discharge with an accuracy of 100 feet (see EPA's siting tool at: http://www.epa.gov/tri/report/siting_tool);
4) the total volume of potential discharge (gal), only if hydrostatic testing;
5) whether the discharge(s) is intermittent or seasonal and if ongoing.
c) Provide the expected start and end dates of discharge (month/day/year).
d) 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).

3. Contaminant information.

In order to complete the NOI, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for the parameters applicable to the sub-category into which the discharge falls, as listed in Appendix III of the permit and selected in Part 1 of the NOI form, except as noted below.

Permittees shall provide additional sampling results with the NOI if such sampling already exists, or if the permittee has reason to believe the site contains additional contaminants not listed in Appendix III for that sub-category or contains additional contaminants not included in Appendix III.

The applicant may use historical data as a substitute for the new sample if the data was collected no more than 2 years prior to the "Submittal of the NOI" and if collected pursuant to:
i. for sites in Massachusetts, 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E");
ii. for sites in New Hampshire, New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act;

a) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is believed present or believed absent in the potential discharge.

Based on the required sampling and analysis, the applicant must fill in the table, or provide a narrative description, with the following additional information for each chemical that is believed present (chemical that violate EPA's criteria limitations):

1) the number of samples taken (minimum of one sample for applicable parameters per Appendix III);
2) the type of sample (e.g. grab, composite, etc.);
3) the analytical method used, including the method number;
4) the minimum level (ML) of the method used (based on Appendix VI);
5) the maximum daily amount (concentration (ug/l) and mass (kg)) of each pollutant, based on the sampling data

    lb/day (pounds per day) equals flow (in million gallons per day, MGD) times concentration in milligrams per liter (mg/l) times 8.34.
    Example: 2.5 MGD x 30 mg/l TSS x 8.34 = 625.5 lb TSS/day
    MGD = gallons per minute (gpm) x 0.00144
    1 kg = 2.2 lbs

And;
6) the average daily amount (concentration and mass) of each pollutant, based on the sampling data.

If the results of any sampling indicate that pollutants exist in addition to those listed in Appendix III of the RGP of the permit, the applicant must also describe those contaminants on the NOI in boxes in section I.3.c.)on the line marked "Other," or use additional sheets as needed. Subsequently, EPA may require monitoring for such parameters or will decide if an individual permit is necessary.

c) Determination of Reasonable Potential and Allowable Dilution for Discharges of Metals:

If any *metals* are believed present in the potential discharge to freshwater[1], the applicant must follow the procedures below to determine the dilution factor for each metal.

Step 1: Initial Evaluation

1) The applicant must evaluate all metals believed present in the discharge subject to this permit, including "naturally occurring" metals such as dissolved and/or total Iron. Applicants must enter the highest detected concentration of the metal at zero dilution in the "Maximum value" column of the NOI.

2) Based on the maximum concentration of each metal, the applicant must perform an initial evaluation assuming zero dilution in the receiving water. The applicant must compare the metals concentrations in the untreated (intake) waters to the effluent limits contained in Appendix III.

[1]Dilution factors may be available for discharges to saline waters but only with approval of the flow modeling information from the State prior to the submission of the NOI.

i. If potential discharges (untreated influent) with metals contain concentrations above the concentration limits listed in Appendix III, applicant must proceed to step 2.
ii. If potential discharges (untreated influent) with metals contain concentrations below the concentrations listed in Appendix III, the applicant may skip step 2 and those metals will **not** be subject to permit limitations or monitoring requirements.

Step 2: Calculation of Dilution Factor

1) **For applicants in NH**: If a metal concentration in a potential discharge (untreated influent) to **freshwater** exceeds the limits in Appendix III with zero dilution, the applicant shall evaluate the potential concentration considering a dilution factor (DF) using the formula below. **For sites in New Hampshire, the applicant must contact NH DES to determine the 7Q10 and dilution factor.**

DF = [(Qd + Qs)/Qd] x 0.9

Where:	**DF**	**= Dilution Factor**
	Qd	**= Maximum flow rate of the discharge in cubic feet per second (cfs) (1.0 gpm = .00223 cfs)**
	Qs	**= Receiving water 7Q10 flow, in cfs, where 7Q10 is the annual minimum flow for 7 consecutive days with a recurrence interval of 10 years**
	0.9	**= Allowance for reserving 10% of the assets in the receiving stream as per Chapter ENV-Wq 1700, Surface Water Quality Regulations**

i. Using the DF calculated from the formula above, the applicant must refer to the corresponding dilution range column in Appendix IV. The applicant then compares the maximum concentration of the metal entered on the NOI to the corresponding total recoverable metals limits listed in Appendix IV. Please note that for this reissuance the applicant will be permitted to determine a limit using any fraction within the 1-5 dilution factor range times the metal limit (for all regulated metals). For example: if the DF is 1.5, the Iron limit is 1,500 ug/L; if the DF is 1.5, the antimony limit is 8.4, etc. All limits above a dilution factor of 5 are maintained.

1. If a metal concentration in the potential discharge (untreated influent) is less than the corresponding limit in Appendix IV, the metal will **not** be subject to permit limitations or monitoring requirements.
2. If a metal concentration in the potential discharge (untreated influent) is equal to or exceeds the corresponding limit in Appendix IV, the applicant must reduce it in the effluent to a concentration below the applicable total recoverable metals limit in Appendix IV prior to discharge.

ii. In either case, the applicant must submit the results of this calculation as part of the NOI. EPA and NH DES will review the proposed effluent limitations for each metal and approve or disapprove the limits in the notification of coverage letter to the applicant.

2) **For applicants in MA**: If a metal concentration in a potential discharge (untreated influent) to **freshwater** exceeds the limits in Appendix III with zero dilution, the applicant must evaluate the potential concentration considering a dilution factor (DF) using the formula below.

DF = (Qd + Qs)/Qd

Where: **DF** **= Dilution Factor**

Qd **= Maximum flow rate of the discharge in cubic feet per second (cfs) (1.0 gpm = .00223 cfs)**

Qs **= Receiving water 7Q10 flow (cfs) where 7Q10 is the minimum flow (cfs) for 7 consecutive days with a recurrence interval of 10 years**

i. The applicant may estimate the 7Q10 for receiving water by using available information such as nearby USGS stream gauging stations directly or by application of certain "flow factors," using historic streamflow publication information, calculations based on drainage area, information from state water quality offices, or other means. In many cases Massachusetts has calculated 7Q10 information using "flow factors" for a number of streams in the state. The source of the low flow value(s) used by the applicant must be included on NOI application form. Flow data can also be obtained from web applications such as the one located at: http://ma.water.usgs.gov/streamstats/.

ii. Using the DF calculated from the formula above, the applicant must refer to the corresponding dilution range column in Appendix IV. The applicant then shall compare the maximum concentration of each metal entered on the NOI to the corresponding total recoverable metals limit listed in Appendix IV. Please note that for this reissuance the applicant will be permitted to determine a limit using any fraction of the 0-5 of DF times the metal limit (for all regulated metals). For example: if the DF is 1.5, the Iron limit is 1,500 ug/L; if the DF is 1.5, the antimony limit is 8.4, etc. Not to exceed DF of 5.

1. If a metal concentration in the potential discharge (untreated influent) is less than the corresponding limit in Appendix IV, the metal will **not** be subject to permit limitations or monitoring requirements.
2. If a metal concentration in a potential discharge (untreated influent) is equal to or exceeds the corresponding limit in Appendix IV, the applicant must reduce it in the effluent to a concentration below the applicable total recoverable metals limit in Appendix IV prior to discharge.

iii. The applicant must submit the results of this calculation as part of the NOI. EPA (and MassDEP where the discharge is not covered by 310 CMR 40.0000) will review the proposed effluent limitations for each metal and approve or disapprove the limits in the notification of coverage letter to the applicant.

4. Treatment system information.

a) Provide a written description of the treatment train and how the system will be set up for each discharge and attach a schematic of the proposed or existing treatment system(s).
b) Identify each major treatment unit (e.g. frac tanks, filters, air stripper, liquid phase/vapor phase activated carbon, oil/water separators, etc.) by checking all that apply and describing any additional equipment not listed. Attach additional sheets as needed.
c) Provide the proposed average and maximum flow rates (in gallons per minute, gpm) for the discharge and the design flow rates (in gpm) of the treatment system. Clearly identify the component of the treatment with the most limited flow, i.e., the part of the treatment train that establishes the design flow.
d) Describe any chemical additives being used, or planned to be used, and attach MSDS sheets for each. EPA may request further information regarding the chemical composition of the additive, potential toxic effects, or other information to insure that approval of the use of the additive will not cause or contribute to a violation of State water quality standards. Approval of coverage under the RGP will constitute approval of the use of the chemical additive(s). If coverage of the discharge under the RGP has already been granted and the use of a chemical additive becomes necessary, the permittee must submit a Notice of Change (NOC).

5. Receiving surface water(s) information.

a) Identify the discharge pathway by checking whether it is discharged: directly to the receiving water (river, stream, or brook), within the facility (e.g., through a sewer drain), to a storm drain, to a wetland, or other receiving body.
b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters into which discharge will occur.
c) Provide a detailed map(s) indicating the location of the site and outfall(s) to the receiving water(s):

1) For multiple discharges, the discharges should be numbered sequentially.
2) In the case of indirect dischargers (to municipal storm sewer, etc) the map(s) must be sufficient to indicate the location of the discharge to the indirect conveyance and the discharge to the state classified 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 and the basin (for Massachusetts, the Surface Water Quality Standards (314 CMR 4.00) are available at http://www.mass.gov/dep/water/laws/regulati.htm#wqual) (for New Hampshire, contact the NH DES at (603) 271-2984).
e) Specify the reported seven day-ten year low flow (7Q10) of the receiving water (see Section I.A.3) c. above). In New Hampshire, the 7Q10 must be provided by to the applicant by the New Hampshire Department of Environmental Services**.**

f) Indicate whether the receiving water is a listed 303(d) water quality impaired or limited water and if so, for which pollutants (see Section IX of the Fact Sheet for additional information).
For MA, the most updated integrated list of waters (CWA 303(d) and 305(b)) is available at http://www.mass.gov/dep/water/resources/tmdls.htm#info.
For NH, the most updated integrated list of waters (CWA 303(d) and 305(b)) is available at http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm.
Also, indicate if there is a final TMDL for any of the listed pollutants. For MA, final TMDLs can be found at: http://www.mass.gov/dep/water/resources/tmdls.htm and for NH, final TMDLs can be found at http://des.nh.gov/organization/divisions/water/wmb/tmdl/index.htm. For more information, contact the states at: New Hampshire Department of Environmental Services, Watershed Management Bureau at 603-271-3503 or the Massachusetts Department of Environmental Protection at 508-767-2796 or 508-767-2873.

6. <u>ESA and NHPA Eligibility</u>.
As required in Parts I.A.4 and Appendix VII the operator of a site/facility must ensure that the potential discharge will not adversely affect endangered species, designated critical habitat, or national historic places that are in proximity to the potential discharge. If the potential discharge is to certain water bodies, the applicant must also submit a formal certification with the NOI that indicates the consultation, with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (the Services), resulted in either a no jeopardy opinion or a written concurrence on a finding that the discharge is not likely to adversely affect any endangered species or critical habitat. Facilities should begin the consultation as early in the process as possible.
a) Using the instructions in Appendix VII and information in Appendix II, indicate under which criterion listed you are eligible for coverage under this general permit.
b) If you selected criterion D or F, indicate if consultation with the federal services has been completed or if it is underway.
c) If consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, indicate if a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat was received.
d) Attach documentation of ESA eligibility as described below and required in Appendix VII, Part I.C, Step 4.

Criterion A - No federally-listed threatened or endangered species or federally-designated critical habitat are present: A copy of the most current county species list pages for the county(ies) where your site or facility and discharges are located. You must also include a statement on how you determined that no listed species or critical habitat are in proximity to your site or facility or discharge locations.

Criterion B – Section 7 consultation completed with the Service(s) on a prior project: A copy of the USFWS and/or NOAA Fisheries, as appropriate, biological opinion or concurrence on a finding of "unlikely to adversely effect" regarding the ESA Section 7 consultation.

Criterion C – Activities are covered by a Section 10 Permit: A copy of the USFWS and/or the NOAA Fisheries, as appropriate, letter transmitting the ESA Section 10 authorization.

Criterion D - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" federally-listed species or federally-designated critical habitat (not including the four species of concern identified in Section I of Appendix I): A copy of the USFWS and/or the NOAA Fisheries, as appropriate, letter or memorandum concluding that the discharge is consistent with the general permit's "not likely to adversely affect" determination.

Criterion E – Activities are covered by certification of eligibility: A copy of the documents originally used by the other operator of your site or facility (or area including your site) to satisfy the documentation requirement of Criteria A, B, C or D.

Criterion F - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" species of concern, as identified in Section I of Appendix I: A copy of the USFWS and/or the NOAA Fisheries, as appropriate, concurrence with the applicant's determination that the discharge is "not likely to adversely affect" listed species.

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

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. Applicants should provide any supplemental information needed to meet the requirements of the permit, including any analytical data used to support the application, and any certification(s) required.

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.*

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**: FMR Boston Rubber Shoe Company

Facility/site mailing address:

Location of **facility/site**:
longitude: -71.070467
latitude: 42.443292

Facility SIC code(s): 1522

Street: 99R and 101R Washington Street

b) Name of **facility/site owner:**

Town: Melrose

Email address of facility/site owner: mark.theriault@woodpartners.com

State: MA | Zip: 02176 | County: Middlesex

Telephone no. of facility/site **owner**: 978-369-8111

Fax no. of facility/site **owner**: 781-861-0729

Owner is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ⦿ 4. Other ○ if so, describe:

Address of **owner** (if different from site):

Street: 80 Hayden Ave Suite 120

Town: Lexington | State: MA | Zip: 02421 | County: Middlesex

c) Legal name of **operator**: SP5 Wood Alta Stone Place LLC

Operator telephone no: 978-369-8111

Operator fax no.: 781-861-0729 | **Operator** email: mark.theriault@woodpartners.c

Operator contact name and title: Mark Theriault, Assistant Vice President (mark.theriault@woodpartners.com)

Address of **operator** (if different from owner): Street:

Town: | State: | Zip: | County:

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

e)	f)
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: MAR10DW03 4. Individual NPDES permit? Y ○ N ●, if Y, number: 5. any other water quality related individual or general permit? Y ● N ○, if Y, number: MAG910511

g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y ○ N ●

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

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

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

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

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

The water in the culvert and rinsate water from surface-cleaning the concrete bottom and the stone mortared walls of the culvert will either be removed from the culvert and treated and discharged off site under a RGP. This is a known contaminated site with MCP Site RTN 3-30758

b) Provide the following information about each discharge:

1) Number of discharge points: 1

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow 0.223 (100 gpm) Is maximum flow a **design value**? Y ◉ N ○
Average flow (include units) 0.112 (50 gpm) Is average flow a design value or estimate? estimate

3) Latitude and longitude of each discharge within 100 feet:
pt.1: lat 42deg26'28.95"N long 71deg04'12.69"W 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 11/23/2012 end 3/23/2013

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).

3. Contaminant information.

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☒	2	grab	30,2540D	5,000 ug/l	85,000 ug/l	46.27	72,500 ug/l	19.73
2. Total Residual Chlorine (TRC)		☒	☐	2	grab	30,4500CL-D	20 ug/l	0	0	0	0
3. Total Petroleum Hydrocarbons (TPH)		☐	☒	2	grab	74,1664A	4,000 ug/l	21,000 ug/l	11.43	14,650 ug/l	3.99
4. Cyanide (CN)	57125	☒	☐	2	grab	30,4500CN-CE	5 ug/l	0	0	0	0
5. Benzene (B)	71432	☐	☒	2	grab	1,8260C	2.50 ug/l	1.6 ug/l	0.00087	1.6 ug/l	0.00044
6. Toluene (T)	108883	☐	☒	2	grab	1,8260C	19 ug/l	530 ug/l	0.288	283 ug/l	0.03851
7. Ethylbenzene (E)	100414	☐	☒	2	grab	1,8260C	2.5 ug/l	8.9 ug/l	0.00484	5.9 ug/l	0.00161
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☐	☒	2	grab	1,8260C	5 ug/l	150 ug/l	0.082	81 ug/l	0.022
9. Total BTEX [2]	n/a	☐	☒					688.9 ug/l	0.376	371.5 ug/l	0.05055
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	2	grab	14,504.1	0.010 ug/l	0	0	0	0
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	2	grab	1,8260C	5.0 ug/l	0	0	0	0
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	2	grab	1,8260C	50 ug/l	0	0	0	0

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

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

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐	2	grab	1,8260C	10 ug/L	0	0	0	0
14. Naphthalene	91203	☐	☒	2	grab	1,8260C	12 ug/L	19 ug/L	0.010	19 ug/L	0.005
15. Carbon Tetrachloride	56235	☒	☐	2	grab	1,8260C	2.5 ug/l	0	0	0	0
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	2	grab	1,8260C	12 ug/l	0	0	0	0
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	2	grab	1,8260C	12 ug/l	0	0	0	0
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	2	grab	1,8260C	12 ug/l	0	0	0	0
18a. Total dichlorobenzene		☒	☐					0	0	0	0
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	2	grab	1,8260C	3.8 ug/l	0	0	0	0
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	2	grab	1,8260C	2.5 ug/l	0	0	0	0
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	2	grab	1,8260C	2.5 ug/l	0	0	0	0
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	2	grab	1,8260C	2.5 ug/l	0	0	0	0
23. Methylene Chloride	75092	☒	☐	2	grab	1,8260C	15 ug/l	0	0	0	0
24. Tetrachloroethene (PCE)	127184	☒	☐	2	grab	1,8260C	2.5 ug/l	0	0	0	0
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	2	grab	1,8260C	2.5 ug/l	0	0	0	0
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	2	grab	1,8260C	3.8 ug/l	0	0	0	0
27. Trichloroethene (TCE)	79016	☒	☐	2	grab	1,8260C	2.5 ug/l	0	0	0	0

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☒	☐	2	grab	1,8260C	5.0 ug/l	0	0	0	0
29. Acetone	67641	☐	☒	2	grab	1,8260C	5-25 ug/l	27 ug/l	0.015	23.5 ug/l	0.006
30. 1,4 Dioxane	123911	☒	☐	2	grab	1,8260C	3 ug/l	0	0	0	0
31. Total Phenols	108952	☒	☐	2	grab	1,8270D	50 ug/l	0	0	0	0
32. Pentachlorophenol (PCP)	87865	☐	☒	2	grab	1,8270D	4-20 ug/l	72 ug/l	0.039	41 ug/l	0.011
33. Total Phthalates (Phthalate esters) [4]		☐	☒	2	grab	1,8270D	50 ug/l	75 ug/l	0.041	75 ug/l	0.020
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	2	grab	1,8270D	30 ug/l	0	0	0	0
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	2	grab	1,8270D	5 ug/l	0	0	0	0
a. Benzo(a) Anthracene	56553	☒	☐	2	grab	1,8270D	5 ug/l	0	0	0	0
b. Benzo(a) Pyrene	50328	☒	☐	2	grab	1,8270D	5 ug/l	0	0	0	0
c. Benzo(b)Fluoranthene	205992	☒	☐	2	grab	1,8270D	5 ug/l	0	0	0	0
d. Benzo(k)Fluoranthene	207089	☒	☐	2	grab	1,8270D	5 ug/l	0	0	0	0
e. Chrysene	21801	☒	☐	2	grab	1,8270D	5 ug/l	0	0	0	0
f. Dibenzo(a,h)anthracene	53703	☒	☐	2	grab	1,8270D	5 ug/l	0	0	0	0
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	2	grab	1,8270D	5 ug/l	0	0	0	0
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☐	☒	2	grab	1,8270-D SIM	5 ug/l	16 ug/l	0.009	16 ug/l	0.004

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value concentration (ug/l)	Maximum daily value mass (kg)	Average daily value concentration (ug/l)	Average daily value mass (kg)
h. Acenaphthene	83329	☒	☐	2	grab	1,8270-D SIM	5 ug/l	0	0	0	0
i. Acenaphthylene	208968	☒	☐	2	grab	1,8270-D SIM	5 ug/l	0	0	0	0
j. Anthracene	120127	☒	☐	2	grab	1,8270-D SIM	5 ug/l	0	0	0	0
k. Benzo(ghi) Perylene	191242	☒	☐	2	grab	1,8270-D SIM	5 ug/l	0	0	0	0
l. Fluoranthene	206440	☒	☐	2	grab	1,8270-D SIM	5 ug/l	0	0	0	0
m. Fluorene	86737	☒	☐	2	grab	1,8270-D SIM	5 ug/l	0	0	0	0
n. Naphthalene	91203	☐	☒	2	grab	1,8270-D SIM	5 ug/l	16 ug/l	0.009	16 ug/l	0.004
o. Phenanthrene	85018	☒	☐	2	grab	1,8270-D SIM	5 ug/l	0	0	0	0
p. Pyrene	129000	☒	☐	2	grab	1,8270-D SIM	5 ug/l	0	0	0	0
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☐	☒	2	grab	5,608	0.250 ug/l	3.40 ug/l	0.002	2.105 ug/l	0.001
38. Chloride	16887006	☐	☒	2	grab	44,300.0	0.50 ug/l	44,000 ug/l	0.024	32,500 ug/l	0.009
39. Antimony	7440360	☐	☒	2	grab	1,6020A	5 ug/l	95.9 ug/l	0.052	63.55 ug/l	0.017
40. Arsenic	7440382	☐	☒	2	grab	1,6020A	2.5 ug/l	5.8 ug/l	0.003	5.2 ug/l	0.0014
41. Cadmium	7440439	☐	☒	2	grab	1,6020A	1 ug/l	1.9 ug/l	0.001	1.9 ug/l	0.0005
42. Chromium III (trivalent)	16065831	☐	☒	2	grab	1,6020A	5 ug/l	43.2 ug/l	0.024	24.15 ug/l	0.007
43. Chromium VI (hexavalent)	18540299	☒	☐	2	grab	30,3500CR-D	10 ug/l	0	0	0	0
44. Copper	7440508	☐	☒	2	grab	1,6020A	5 ug/l	99.8 ug/l	0.054	56.45 ug/l	0.015
45. Lead	7439921	☐	☒	2	grab	1,6020A	2.5 ug/l	145.6 ug/l	0.079	87.3 ug/l	0.024
46. Mercury	7439976	☐	☒	2	grab	EPA 245.1	0.2 ug/l	0.2 ug/l	0.0001	0.2 ug/l	0.00005
47. Nickel	7440020	☐	☒	2	grab	1,6020A	2.5 ug/l	405.2 ug/l	0.221	362.5 ug/l	0.099
48. Selenium	7782492	☒	☐	2	grab	1,6020A	25 ug/l	0	0	0	0
49. Silver	7440224	☐	☒	2	grab	1,6020A	2.0 ug/l	14.0 ug/l	0.008	14.0 ug/l	0.004
50. Zinc	7440666	☐	☒	2	grab	1,6020A	250 ug/l	5,188 ug/l	2.82	3,835 ug/l	1.04
51. Iron	7439896	☐	☒	2	grab	1,6020A	500 ug/l	2,500 ug/l	1.36	2,050 ug/l	0.56
Other (describe):		☐	☐								

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

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

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y ⦿ N ◯	If yes, which metals? antimony, cadmium, copper, lead, nickel, silver, zinc, iron
Step 2: For any metals which exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal: antimony DF: 2.43 Metal: cadmium, copper DF: 2.43 Metal: lead, nickel DF: 2.43 Metal: silver, zinc, iron DF: 2.43 Etc.	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y ⦿ N ◯ If Y, list which metals: antimony, cadmium, copper, lead, nickel, silver, zinc, iron

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

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

Treatment will be comprised of a in-line weir tank to knock out sediments, bag filters, and two in-series granular activated carbon vessels prior to pumping into 20,000-gallon frac tanks prior to discharge.

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

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system:
Average flow rate of discharge 50 gpm Maximum flow rate of treatment system 100 gpm
Design flow rate of treatment system 50 gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):
Not applicable

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

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

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
The water will discharge to a surface drainage swale that ultimately discharges into Spot Pond Brook.

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 Class B

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 0.32 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.

5e) Source of 7Q10 of 0.32cfs: Authorized NPDES Permit #MAG910511

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: FRM Boston Rubber Shoe Company

Operator signature: Mark [signature]

Printed Name &Title: Mark Theriault, Assistant Vice President

Date: November 9, 2012

B. Submission of NOI to EPA - All operators applying for coverage under this General Permit must submit a completed Notice of Intent (NOI) to EPA. Signed and completed NOI forms and attachments must be submitted to EPA-NE at:

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

or electronically mailed to NPDES.Generalpermits@epa.gov

or faxed to the EPA Office at 617-918-0505

If filling out the suggested NOI form electronically on EPA's website, the signature page must be signed and faxed or mailed to EPA at the fax number and/or address listed above.

1. Filing with the states - A copy of any NOI form filed with EPA-NE must also be filed with state agencies. The state agency may elect to develop a state specific form or other information requirements.

a) Discharges in Massachusetts - In addition to the NOI, permit applicants must submit copies of the State Application Form BRPWM 12, Request for General Permit coverage for the RGP. The application form and the Transmittal Form for Permit Application and Payment may be obtained from the Massachusetts Department of Environmental Protection (MassDEP) website at www.state.ma.us/dep. Municipalities are fee-exempt, but should send a copy of the transmittal form to that address for project tracking purposes. All applicants should keep a copy of the transmittal form and a copy of the application package for their records.

1) A copy of the NOI, the transmittal form, a copy of the check, and Form BRPWM 12 should be sent to:

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street, 2nd floor
Worcester, MA 01608

2) A copy of the transmittal form and the appropriate fee should be sent to:

Massachusetts Department of Environmental Protection
P.O. Box 4062
Boston, MA 02111

Please note: Applicants for discharges in Massachusetts should note that under 310 CMR 40.000, *as a matter of state law*, the general permit only applies to discharges that are **not** subject to the

Massachusetts Contingency Plan (MCP) and 310 CMR 40.000. Therefore, discharges subject to the MCP are **not** required to fill out and submit the State Application Form BRPWM 12 or pay the state fees. However, they must submit a NOI to EPA.

b) Discharges in New Hampshire - applicants must provide a copy of the Notice of Intent to:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
P.O. Box 95
Concord, New Hampshire 03302-0095.

2. Filing with Municipalities - A copy of the NOI must be submitted to the municipality in which the proposed discharge would be located.

APPENDIX B
LABORATORY ANALYTICAL REPORT

ANALYTICAL REPORT

Lab Number:	L1219666
Client:	Vertex Environmental Services, Inc. 1 Congress Street 10th Floor Boston, MA 02114
ATTN:	Frank Calandra
Phone:	(781) 952-6000
Project Name:	MELROSE
Project Number:	22248
Report Date:	11/02/12

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: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1219666-01	CULVERT-WATER-DS	72 STONE PLACE	10/31/12 08:45
L1219666-02	CULVERT-WATER-VS	72 STONE PLACE	10/31/12 09:15

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. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Case Narrative (continued)

Semivolatile Organics

L1219666-01 and -02 have elevated detection limits due to the dilutions required by the sample matrix.

The WG571125-2/-3 LCS/LCSD recoveries, associated with L1219666-01 and -02, are below the acceptance criteria for Benzidine (2%/7%) and Pyridine (LCS at 7%); however, they have been identified as "difficult" analytes. The results of the associated samples are reported.

Semivolatile Organics-SIM

L1219666-01 and -02 have elevated detection limits due to the dilutions required by the sample matrix.

The surrogate recoveries for L1219666-01 are below the acceptance criteria for 2-Fluorophenol, Phenol-d6, Nitrobenzene-d5, 2-Fluorobiphenyl, 2,4,6-Tribromophenol and 4-Terphenyl-d14 (all at 0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

PCBs

The WG571128-4 Laboratory Duplicate RPD, performed on L1219666-01, is outside the acceptance criteria for Aroclor 1254 (107%).

Metals

L1219666-01 and -02 have elevated detection limits due to the dilutions required by matrix interferences encountered during the 6020 analysis.

The WG571038-4 MS recovery, performed on L1219666-01, is above the acceptance criteria for Cadmium (128%). A post digestion spike was performed with an acceptable recovery of 105%.

The WG571038-3 Laboratory Duplicate RPD, performed on L1219666-01, is outside the acceptance criteria for Chromium (22%). The elevated RPD has been attributed to the non-homogeneous nature of the sample utilized for the Laboratory Duplicate.

TPH

The WG571224-4 MS recovery (8%), performed on L1219666-02, is below the acceptance criteria; however,

Case Narrative (continued)

the associated LCS recovery was within criteria. No further action was taken.

Chlorine, Total Residual

WG571053: A Laboratory Duplicate could not be performed due to insufficient sample volume available for analysis.

Phenolics, Total

The WG571203-3 Laboratory Duplicate RPD (22%), performed on L1219666-01, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the sample utilized for the Laboratory Duplicate.

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 A. Simmons Elizabeth Simmons

Title: Technical Director/Representative Date: 11/02/12

ORGANICS

VOLATILES

Project Name:	MELROSE	**Lab Number:**	L1219666
Project Number:	22248	**Report Date:**	11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-01	Date Collected:	10/31/12 08:45
Client ID:	CULVERT-WATER-DS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C-SIM(M)		
Analytical Date:	11/02/12 13:42		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	--	1

Project Name: MELROSE **Lab Number:** L1219666

Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-01	Date Collected:	10/31/12 08:45
Client ID:	CULVERT-WATER-DS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	11/01/12 13:14
Analytical Date:	11/02/12 08:06		
Analyst:	SH		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Microextractables by GC - Westborough Lab						
1,2-Dibromoethane	ND		ug/l	0.010	--	1

Project Name: MELROSE

Project Number: 22248

Lab Number: L1219666

Report Date: 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-01 D2	Date Collected:	10/31/12 08:45
Client ID:	CULVERT-WATER-DS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	11/02/12 15:12		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Toluene	530		ug/l	19	--	25
Carbon disulfide	760		ug/l	120	--	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	113		70-130

Project Name: MELROSE **Lab Number:** L1219666

Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-01 D	Date Collected:	10/31/12 08:45
Client ID:	CULVERT-WATER-DS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	11/02/12 14:37		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	15	--	5
1,1-Dichloroethane	ND		ug/l	3.8	--	5
Chloroform	ND		ug/l	3.8	--	5
Carbon tetrachloride	ND		ug/l	2.5	--	5
1,2-Dichloropropane	ND		ug/l	8.8	--	5
Dibromochloromethane	ND		ug/l	2.5	--	5
1,1,2-Trichloroethane	ND		ug/l	3.8	--	5
Tetrachloroethene	ND		ug/l	2.5	--	5
Chlorobenzene	ND		ug/l	2.5	--	5
Trichlorofluoromethane	ND		ug/l	12	--	5
1,2-Dichloroethane	ND		ug/l	2.5	--	5
1,1,1-Trichloroethane	ND		ug/l	2.5	--	5
Bromodichloromethane	ND		ug/l	2.5	--	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	--	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	--	5
1,1-Dichloropropene	ND		ug/l	12	--	5
Bromoform	ND		ug/l	10	--	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	--	5
Benzene	ND		ug/l	2.5	--	5
Toluene	550	E	ug/l	3.8	--	5
Ethylbenzene	8.9		ug/l	2.5	--	5
Chloromethane	ND		ug/l	12	--	5
Bromomethane	ND		ug/l	5.0	--	5
Vinyl chloride	ND		ug/l	5.0	--	5
Chloroethane	ND		ug/l	5.0	--	5
1,1-Dichloroethene	ND		ug/l	2.5	--	5
trans-1,2-Dichloroethene	ND		ug/l	3.8	--	5
Trichloroethene	ND		ug/l	2.5	--	5
1,2-Dichlorobenzene	ND		ug/l	12	--	5
1,3-Dichlorobenzene	ND		ug/l	12	--	5
1,4-Dichlorobenzene	ND		ug/l	12	--	5

Project Name: MELROSE | **Lab Number:** L1219666

Project Number: 22248 | **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-01 D	Date Collected:	10/31/12 08:45
Client ID:	CULVERT-WATER-DS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	5.0	--	5
p/m-Xylene	110		ug/l	5.0	--	5
o-Xylene	35		ug/l	5.0	--	5
Xylenes, Total	150		ug/l	5.0	--	5
cis-1,2-Dichloroethene	ND		ug/l	2.5	--	5
Dibromomethane	ND		ug/l	25	--	5
1,4-Dichlorobutane	ND		ug/l	25	--	5
1,2,3-Trichloropropane	ND		ug/l	25	--	5
Styrene	ND		ug/l	5.0	--	5
Dichlorodifluoromethane	ND		ug/l	25	--	5
Acetone	27		ug/l	25	--	5
Carbon disulfide	810	E	ug/l	25	--	5
2-Butanone	ND		ug/l	25	--	5
Vinyl acetate	ND		ug/l	25	--	5
4-Methyl-2-pentanone	ND		ug/l	25	--	5
2-Hexanone	ND		ug/l	25	--	5
Ethyl methacrylate	ND		ug/l	25	--	5
Acrylonitrile	ND		ug/l	25	--	5
Bromochloromethane	ND		ug/l	12	--	5
Tetrahydrofuran	ND		ug/l	25	--	5
2,2-Dichloropropane	ND		ug/l	12	--	5
1,2-Dibromoethane	ND		ug/l	10	--	5
1,3-Dichloropropane	ND		ug/l	12	--	5
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	--	5
Bromobenzene	ND		ug/l	12	--	5
n-Butylbenzene	ND		ug/l	2.5	--	5
sec-Butylbenzene	ND		ug/l	2.5	--	5
tert-Butylbenzene	ND		ug/l	12	--	5
o-Chlorotoluene	ND		ug/l	12	--	5
p-Chlorotoluene	ND		ug/l	12	--	5
1,2-Dibromo-3-chloropropane	ND		ug/l	12	--	5
Hexachlorobutadiene	ND		ug/l	2.5	--	5
Isopropylbenzene	2.6		ug/l	2.5	--	5
p-Isopropyltoluene	ND		ug/l	2.5	--	5
Naphthalene	19		ug/l	12	--	5
n-Propylbenzene	ND		ug/l	2.5	--	5
1,2,3-Trichlorobenzene	ND		ug/l	12	--	5
1,2,4-Trichlorobenzene	ND		ug/l	12	--	5
1,3,5-Trimethylbenzene	ND		ug/l	12	--	5

Project Name: MELROSE **Lab Number:** L1219666
Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-01 D	Date Collected:	10/31/12 08:45
Client ID:	CULVERT-WATER-DS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/l	12	--	5
trans-1,4-Dichloro-2-butene	ND		ug/l	12	--	5
Ethyl ether	ND		ug/l	12	--	5
Tert-Butyl Alcohol	ND		ug/l	50	--	5
Tertiary-Amyl Methyl Ether	ND		ug/l	10	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	114		70-130

Project Name: MELROSE **Lab Number:** L1219666

Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-02	Date Collected:	10/31/12 09:15
Client ID:	CULVERT-WATER-VS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	11/02/12 14:11		
Analyst:	PD		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	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	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	1.6		ug/l	0.50	--	1
Toluene	36		ug/l	0.75	--	1
Ethylbenzene	2.9		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1

Project Name:	MELROSE	**Lab Number:**	L1219666
Project Number:	22248	**Report Date:**	11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-02	Date Collected:	10/31/12 09:15
Client ID:	CULVERT-WATER-VS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	10		ug/l	1.0	--	1
o-Xylene	2.3		ug/l	1.0	--	1
Xylenes, Total	12		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	20		ug/l	5.0	--	1
Carbon disulfide	34		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	2.5	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1

Project Name:	MELROSE	**Lab Number:**	L1219666
Project Number:	22248	**Report Date:**	11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-02	Date Collected:	10/31/12 09:15
Client ID:	CULVERT-WATER-VS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	113		70-130

Project Name: MELROSE **Lab Number:** L1219666
Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-02	Date Collected:	10/31/12 09:15
Client ID:	CULVERT-WATER-VS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C-SIM(M)		
Analytical Date:	11/02/12 14:14		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	--	1

Project Name:	MELROSE	**Lab Number:**	L1219666
Project Number:	22248	**Report Date:**	11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-02	Date Collected:	10/31/12 09:15
Client ID:	CULVERT-WATER-VS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	11/01/12 13:14
Analytical Date:	11/02/12 08:21		
Analyst:	SH		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Microextractables by GC - Westborough Lab						
1,2-Dibromoethane	ND		ug/l	0.010	--	1

Project Name: MELROSE **Lab Number:** L1219666
Project Number: 22248 **Report Date:** 11/02/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 11/02/12 07:19
Analyst: SH
Extraction Date: 11/01/12 13:14

Parameter	Result	Qualifier	Units	RL	MDL
Microextractables by GC - Westborough Lab for sample(s): 01-02 Batch: WG571240-1					
1,2-Dibromoethane	ND		ug/l	0.010	--

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C-SIM(M)
Analytical Date: 11/02/12 13:09
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG571559-3					
1,4-Dioxane	ND		ug/l	3.0	--

Project Name: MELROSE **Lab Number:** L1219666
Project Number: 22248 **Report Date:** 11/02/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/02/12 09:44
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG571572-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--

Project Name: MELROSE **Lab Number:** L1219666
Project Number: 22248 **Report Date:** 11/02/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/02/12 09:44
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG571572-3					
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--

Project Name: MELROSE **Lab Number:** L1219666
Project Number: 22248 **Report Date:** 11/02/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/02/12 09:44
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG571572-3					
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	110		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG571240-2								
1,2-Dibromoethane	115		-		70-130	-		20
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG571559-1 WG571559-2								
1,4-Dioxane	86		87		70-130	1		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG571572-1 WG571572-2								
Methylene chloride	91		94		70-130	3		20
1,1-Dichloroethane	96		99		70-130	3		20
Chloroform	106		108		70-130	2		20
Carbon tetrachloride	110		114		63-132	4		20
1,2-Dichloropropane	90		98		70-130	9		20
Dibromochloromethane	96		100		63-130	4		20
1,1,2-Trichloroethane	92		90		70-130	2		20
Tetrachloroethene	102		101		70-130	1		20
Chlorobenzene	97		98		75-130	1		25
Trichlorofluoromethane	107		111		62-150	4		20
1,2-Dichloroethane	111		116		70-130	4		20
1,1,1-Trichloroethane	109		114		67-130	4		20
Bromodichloromethane	103		110		67-130	7		20
trans-1,3-Dichloropropene	96		98		70-130	2		20
cis-1,3-Dichloropropene	98		100		70-130	2		20
1,1-Dichloropropene	100		105		70-130	5		20
Bromoform	89		93		54-136	4		20
1,1,2,2-Tetrachloroethane	87		89		67-130	2		20
Benzene	95		99		70-130	4		25
Toluene	94		93		70-130	1		25
Ethylbenzene	98		97		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248
Lab Number: L1219666
Report Date: 11/02/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG571572-1 WG571572-2								
Chloromethane	86		86		64-130	0		20
Bromomethane	138		**140**	Q	39-139	1		20
Vinyl chloride	79		84		55-140	6		20
Chloroethane	85		90		55-138	6		20
1,1-Dichloroethene	94		97		61-145	3		25
trans-1,2-Dichloroethene	96		98		70-130	2		20
Trichloroethene	101		104		70-130	3		25
1,2-Dichlorobenzene	91		96		70-130	5		20
1,3-Dichlorobenzene	90		98		70-130	9		20
1,4-Dichlorobenzene	90		95		70-130	5		20
Methyl tert butyl ether	101		104		63-130	3		20
p/m-Xylene	99		100		70-130	1		20
o-Xylene	99		99		70-130	0		20
cis-1,2-Dichloroethene	98		104		70-130	6		20
Dibromomethane	103		107		70-130	4		20
1,4-Dichlorobutane	84		88		70-130	5		20
1,2,3-Trichloropropane	93		98		64-130	5		20
Styrene	99		100		70-130	1		20
Dichlorodifluoromethane	70		71		36-147	1		20
Acetone	81		91		58-148	12		20
Carbon disulfide	88		92		51-130	4		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG571572-1 WG571572-2								
2-Butanone	69		78		63-138	12		20
Vinyl acetate	102		103		70-130	1		20
4-Methyl-2-pentanone	88		92		59-130	4		20
2-Hexanone	75		85		57-130	13		20
Ethyl methacrylate	89		92		70-130	3		20
Acrylonitrile	87		94		70-130	8		20
Bromochloromethane	105		108		70-130	3		20
Tetrahydrofuran	84		100		58-130	17		20
2,2-Dichloropropane	110		112		63-133	2		20
1,2-Dibromoethane	95		98		70-130	3		20
1,3-Dichloropropane	93		95		70-130	2		20
1,1,1,2-Tetrachloroethane	104		104		64-130	0		20
Bromobenzene	94		96		70-130	2		20
n-Butylbenzene	91		95		53-136	4		20
sec-Butylbenzene	92		96		70-130	4		20
tert-Butylbenzene	94		98		70-130	4		20
o-Chlorotoluene	92		95		70-130	3		20
p-Chlorotoluene	91		97		70-130	6		20
1,2-Dibromo-3-chloropropane	91		101		41-144	10		20
Hexachlorobutadiene	92		100		63-130	8		20
Isopropylbenzene	90		95		70-130	5		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG571572-1 WG571572-2								
p-Isopropyltoluene	94		98		70-130	4		20
Naphthalene	78		86		70-130	10		20
n-Propylbenzene	90		95		69-130	5		20
1,2,3-Trichlorobenzene	86		90		70-130	5		20
1,2,4-Trichlorobenzene	86		94		70-130	9		20
1,3,5-Trimethylbenzene	94		98		64-130	4		20
1,2,4-Trimethylbenzene	94		99		70-130	5		20
trans-1,4-Dichloro-2-butene	72		75		70-130	4		20
Ethyl ether	95		99		59-134	4		20
tert-Butyl Alcohol	81		89		70-130	9		20
Tertiary-Amyl Methyl Ether	97		102		66-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	115		111		70-130
Toluene-d8	100		98		70-130
4-Bromofluorobenzene	98		99		70-130
Dibromofluoromethane	110		109		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571240-3 QC Sample: L1219666-01 Client ID: CULVERT-WATER-DS												
1,2-Dibromoethane	ND	0.262	0.332	127		-	-		70-130	-		20

SEMIVOLATILES

Project Name: MELROSE **Lab Number:** L1219666

Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-01 D	Date Collected:	10/31/12 08:45
Client ID:	CULVERT-WATER-DS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	11/01/12 00:16
Analytical Date:	11/01/12 14:52		
Analyst:	RC		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	200	--	10
1,2,4-Trichlorobenzene	ND		ug/l	50	--	10
Bis(2-chloroethyl)ether	ND		ug/l	20	--	10
1,2-Dichlorobenzene	ND		ug/l	20	--	10
1,3-Dichlorobenzene	ND		ug/l	20	--	10
1,4-Dichlorobenzene	ND		ug/l	20	--	10
3,3'-Dichlorobenzidine	ND		ug/l	50	--	10
2,4-Dinitrotoluene	ND		ug/l	50	--	10
2,6-Dinitrotoluene	ND		ug/l	50	--	10
Azobenzene	ND		ug/l	20	--	10
4-Chlorophenyl phenyl ether	ND		ug/l	20	--	10
4-Bromophenyl phenyl ether	ND		ug/l	20	--	10
Bis(2-chloroisopropyl)ether	ND		ug/l	20	--	10
Bis(2-chloroethoxy)methane	ND		ug/l	50	--	10
Hexachlorocyclopentadiene	ND		ug/l	200	--	10
Isophorone	ND		ug/l	50	--	10
Nitrobenzene	ND		ug/l	20	--	10
NDPA/DPA	110		ug/l	20	--	10
Bis(2-ethylhexyl)phthalate	ND		ug/l	30	--	10
Butyl benzyl phthalate	ND		ug/l	50	--	10
Di-n-butylphthalate	75		ug/l	50	--	10
Di-n-octylphthalate	ND		ug/l	50	--	10
Diethyl phthalate	ND		ug/l	50	--	10
Dimethyl phthalate	ND		ug/l	50	--	10
Aniline	21		ug/l	20	--	10
4-Chloroaniline	ND		ug/l	50	--	10
2-Nitroaniline	ND		ug/l	50	--	10
3-Nitroaniline	ND		ug/l	50	--	10
4-Nitroaniline	ND		ug/l	50	--	10
Dibenzofuran	ND		ug/l	20	--	10
n-Nitrosodimethylamine	ND		ug/l	20	--	10

Project Name: MELROSE **Lab Number:** L1219666

Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-01 D	Date Collected:	10/31/12 08:45
Client ID:	CULVERT-WATER-DS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	50	--	10
p-Chloro-m-cresol	ND		ug/l	20	--	10
2-Chlorophenol	ND		ug/l	20	--	10
2,4-Dichlorophenol	ND		ug/l	50	--	10
2,4-Dimethylphenol	ND		ug/l	50	--	10
2-Nitrophenol	ND		ug/l	100	--	10
4-Nitrophenol	ND		ug/l	100	--	10
2,4-Dinitrophenol	ND		ug/l	200	--	10
4,6-Dinitro-o-cresol	ND		ug/l	100	--	10
Phenol	ND		ug/l	50	--	10
2-Methylphenol	ND		ug/l	50	--	10
3-Methylphenol/4-Methylphenol	ND		ug/l	50	--	10
2,4,5-Trichlorophenol	ND		ug/l	50	--	10
Benzoic Acid	ND		ug/l	500	--	10
Benzyl Alcohol	ND		ug/l	20	--	10
Carbazole	ND		ug/l	20	--	10
Pyridine	ND		ug/l	50	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	33		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	79		41-149

Project Name: MELROSE **Lab Number:** L1219666

Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-01 D	Date Collected:	10/31/12 08:45
Client ID:	CULVERT-WATER-DS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	11/01/12 00:16
Analytical Date:	11/01/12 19:08		
Analyst:	AS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	5.0	--	25
2-Chloronaphthalene	ND		ug/l	5.0	--	25
Fluoranthene	ND		ug/l	5.0	--	25
Hexachlorobutadiene	ND		ug/l	12	--	25
Naphthalene	16		ug/l	5.0	--	25
Benzo(a)anthracene	ND		ug/l	5.0	--	25
Benzo(a)pyrene	ND		ug/l	5.0	--	25
Benzo(b)fluoranthene	ND		ug/l	5.0	--	25
Benzo(k)fluoranthene	ND		ug/l	5.0	--	25
Chrysene	ND		ug/l	5.0	--	25
Acenaphthylene	ND		ug/l	5.0	--	25
Anthracene	ND		ug/l	5.0	--	25
Benzo(ghi)perylene	ND		ug/l	5.0	--	25
Fluorene	ND		ug/l	5.0	--	25
Phenanthrene	ND		ug/l	5.0	--	25
Dibenzo(a,h)anthracene	ND		ug/l	5.0	--	25
Indeno(1,2,3-cd)Pyrene	ND		ug/l	5.0	--	25
Pyrene	ND		ug/l	5.0	--	25
1-Methylnaphthalene	6.2		ug/l	5.0	--	25
2-Methylnaphthalene	9.7		ug/l	5.0	--	25
Pentachlorophenol	72		ug/l	20	--	25
Hexachlorobenzene	ND		ug/l	20	--	25
Hexachloroethane	ND		ug/l	20	--	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**0**	Q	21-120
Phenol-d6	**0**	Q	10-120
Nitrobenzene-d5	**0**	Q	23-120
2-Fluorobiphenyl	**0**	Q	15-120
2,4,6-Tribromophenol	**0**	Q	10-120
4-Terphenyl-d14	**0**	Q	41-149

Project Name:	MELROSE	**Lab Number:**	L1219666
Project Number:	22248	**Report Date:**	11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-02 D	Date Collected:	10/31/12 09:15
Client ID:	CULVERT-WATER-VS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	11/01/12 00:16
Analytical Date:	11/01/12 15:19		
Analyst:	RC		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	200	--	10
1,2,4-Trichlorobenzene	ND		ug/l	50	--	10
Bis(2-chloroethyl)ether	ND		ug/l	20	--	10
1,2-Dichlorobenzene	ND		ug/l	20	--	10
1,3-Dichlorobenzene	ND		ug/l	20	--	10
1,4-Dichlorobenzene	ND		ug/l	20	--	10
3,3'-Dichlorobenzidine	ND		ug/l	50	--	10
2,4-Dinitrotoluene	ND		ug/l	50	--	10
2,6-Dinitrotoluene	ND		ug/l	50	--	10
Azobenzene	ND		ug/l	20	--	10
4-Chlorophenyl phenyl ether	ND		ug/l	20	--	10
4-Bromophenyl phenyl ether	ND		ug/l	20	--	10
Bis(2-chloroisopropyl)ether	ND		ug/l	20	--	10
Bis(2-chloroethoxy)methane	ND		ug/l	50	--	10
Hexachlorocyclopentadiene	ND		ug/l	200	--	10
Isophorone	ND		ug/l	50	--	10
Nitrobenzene	ND		ug/l	20	--	10
NDPA/DPA	ND		ug/l	20	--	10
Bis(2-ethylhexyl)phthalate	ND		ug/l	30	--	10
Butyl benzyl phthalate	ND		ug/l	50	--	10
Di-n-butylphthalate	ND		ug/l	50	--	10
Di-n-octylphthalate	ND		ug/l	50	--	10
Diethyl phthalate	ND		ug/l	50	--	10
Dimethyl phthalate	ND		ug/l	50	--	10
Aniline	ND		ug/l	20	--	10
4-Chloroaniline	ND		ug/l	50	--	10
2-Nitroaniline	ND		ug/l	50	--	10
3-Nitroaniline	ND		ug/l	50	--	10
4-Nitroaniline	ND		ug/l	50	--	10
Dibenzofuran	ND		ug/l	20	--	10
n-Nitrosodimethylamine	ND		ug/l	20	--	10

Project Name: MELROSE **Lab Number:** L1219666

Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-02 D	Date Collected:	10/31/12 09:15
Client ID:	CULVERT-WATER-VS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	50	--	10
p-Chloro-m-cresol	ND		ug/l	20	--	10
2-Chlorophenol	ND		ug/l	20	--	10
2,4-Dichlorophenol	ND		ug/l	50	--	10
2,4-Dimethylphenol	ND		ug/l	50	--	10
2-Nitrophenol	ND		ug/l	100	--	10
4-Nitrophenol	ND		ug/l	100	--	10
2,4-Dinitrophenol	ND		ug/l	200	--	10
4,6-Dinitro-o-cresol	ND		ug/l	100	--	10
Phenol	ND		ug/l	50	--	10
2-Methylphenol	ND		ug/l	50	--	10
3-Methylphenol/4-Methylphenol	ND		ug/l	50	--	10
2,4,5-Trichlorophenol	ND		ug/l	50	--	10
Benzoic Acid	ND		ug/l	500	--	10
Benzyl Alcohol	ND		ug/l	20	--	10
Carbazole	ND		ug/l	20	--	10
Pyridine	ND		ug/l	50	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	**121**	Q	10-120
4-Terphenyl-d14	105		41-149

Project Name: MELROSE **Lab Number:** L1219666

Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-02 D	Date Collected:	10/31/12 09:15
Client ID:	CULVERT-WATER-VS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	11/01/12 00:16
Analytical Date:	11/01/12 15:11		
Analyst:	AS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	1.0	--	5
2-Chloronaphthalene	ND		ug/l	1.0	--	5
Fluoranthene	ND		ug/l	1.0	--	5
Hexachlorobutadiene	ND		ug/l	2.5	--	5
Naphthalene	ND		ug/l	1.0	--	5
Benzo(a)anthracene	ND		ug/l	1.0	--	5
Benzo(a)pyrene	ND		ug/l	1.0	--	5
Benzo(b)fluoranthene	ND		ug/l	1.0	--	5
Benzo(k)fluoranthene	ND		ug/l	1.0	--	5
Chrysene	ND		ug/l	1.0	--	5
Acenaphthylene	ND		ug/l	1.0	--	5
Anthracene	ND		ug/l	1.0	--	5
Benzo(ghi)perylene	ND		ug/l	1.0	--	5
Fluorene	ND		ug/l	1.0	--	5
Phenanthrene	ND		ug/l	1.0	--	5
Dibenzo(a,h)anthracene	ND		ug/l	1.0	--	5
Indeno(1,2,3-cd)Pyrene	ND		ug/l	1.0	--	5
Pyrene	ND		ug/l	1.0	--	5
1-Methylnaphthalene	ND		ug/l	1.0	--	5
2-Methylnaphthalene	ND		ug/l	1.0	--	5
Pentachlorophenol	10		ug/l	4.0	--	5
Hexachlorobenzene	ND		ug/l	4.0	--	5
Hexachloroethane	ND		ug/l	4.0	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	77		41-149

Project Name: MELROSE **Lab Number:** L1219666
Project Number: 22248 **Report Date:** 11/02/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/01/12 10:54
Analyst: RC

Extraction Method: EPA 3510C
Extraction Date: 11/01/12 00:16

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG571125-1					
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Isophorone	ND		ug/l	5.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA	ND		ug/l	2.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--

Project Name:	MELROSE	**Lab Number:**	L1219666
Project Number:	22248	**Report Date:**	11/02/12

Method Blank Analysis
Batch Quality Control

Analytical Method:	1,8270D	Extraction Method:	EPA 3510C
Analytical Date:	11/01/12 10:54	Extraction Date:	11/01/12 00:16
Analyst:	RC		

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG571125-1					
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	32		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	49		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	64		10-120
4-Terphenyl-d14	78		41-149

Project Name: MELROSE **Lab Number:** L1219666
Project Number: 22248 **Report Date:** 11/02/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 11/01/12 13:32
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 11/01/12 00:16

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG571126-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
1-Methylnaphthalene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: MELROSE **Lab Number:** L1219666
Project Number: 22248 **Report Date:** 11/02/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 11/01/12 13:32
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 11/01/12 00:16

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG571126-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	31		21-120
Phenol-d6	20		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	53		15-120
2,4,6-Tribromophenol	52		10-120
4-Terphenyl-d14	60		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG571125-2 WG571125-3								
Benzidine	**2**	Q	**7**	Q	10-75	**100**	Q	30
1,2,4-Trichlorobenzene	65		63		39-98	3		30
Bis(2-chloroethyl)ether	61		62		40-140	2		30
1,2-Dichlorobenzene	59		60		40-140	2		30
1,3-Dichlorobenzene	59		59		40-140	0		30
1,4-Dichlorobenzene	57		59		36-97	3		30
3,3'-Dichlorobenzidine	76		78		40-140	3		30
2,4-Dinitrotoluene	96		**102**	Q	24-96	6		30
2,6-Dinitrotoluene	101		106		40-140	5		30
Azobenzene	82		84		40-140	2		30
4-Chlorophenyl phenyl ether	84		87		40-140	4		30
4-Bromophenyl phenyl ether	92		96		40-140	4		30
Bis(2-chloroisopropyl)ether	59		61		40-140	3		30
Bis(2-chloroethoxy)methane	70		69		40-140	1		30
Hexachlorocyclopentadiene	47		44		40-140	7		30
Isophorone	76		77		40-140	1		30
Nitrobenzene	62		63		40-140	2		30
NitrosoDiPhenylAmine(NDPA)/DPA	88		92		40-140	4		30
Bis(2-Ethylhexyl)phthalate	97		103		40-140	6		30
Butyl benzyl phthalate	91		94		40-140	3		30
Di-n-butylphthalate	92		97		40-140	5		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG571125-2 WG571125-3								
Di-n-octylphthalate	85		91		40-140	7		30
Diethyl phthalate	87		93		40-140	7		30
Dimethyl phthalate	85		89		40-140	5		30
Aniline	**23**	Q	**27**	Q	40-140	16		30
4-Chloroaniline	42		40		40-140	5		30
2-Nitroaniline	93		99		52-143	6		30
3-Nitroaniline	63		66		25-145	5		30
4-Nitroaniline	83		88		51-143	6		30
Dibenzofuran	80		83		40-140	4		30
n-Nitrosodimethylamine	37		39		22-74	5		30
2,4,6-Trichlorophenol	93		94		30-130	1		30
P-Chloro-M-Cresol	84		86		23-97	2		30
2-Chlorophenol	66		66		27-123	0		30
2,4-Dichlorophenol	82		81		30-130	1		30
2,4-Dimethylphenol	75		74		30-130	1		30
2-Nitrophenol	79		82		30-130	4		30
4-Nitrophenol	42		38		10-80	10		30
2,4-Dinitrophenol	62		64		20-130	3		30
4,6-Dinitro-o-cresol	84		86		20-164	2		30
Phenol	32		32		12-110	0		30
2-Methylphenol	66		64		30-130	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG571125-2 WG571125-3								
3-Methylphenol/4-Methylphenol	63		61		30-130	3		30
2,4,5-Trichlorophenol	98		103		30-130	5		30
Benzoic Acid	24		19		10-164	23		30
Benzyl Alcohol	55		55		26-116	0		30
Carbazole	84		87		55-144	4		30
Pyridine	**7**	Q	13		10-66	**65**	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	46		44		21-120
Phenol-d6	33		30		10-120
Nitrobenzene-d5	69		66		23-120
2-Fluorobiphenyl	84		82		15-120
2,4,6-Tribromophenol	90		93		10-120
4-Terphenyl-d14	89		90		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG571126-2 WG571126-3								
Acenaphthene	57		54		37-111	5		40
2-Chloronaphthalene	51		52		40-140	2		40
Fluoranthene	74		70		40-140	6		40
Hexachlorobutadiene	41		43		40-140	5		40
Naphthalene	46		48		40-140	4		40
Benzo(a)anthracene	72		66		40-140	9		40
Benzo(a)pyrene	63		59		40-140	7		40
Benzo(b)fluoranthene	61		63		40-140	3		40
Benzo(k)fluoranthene	78		63		40-140	21		40
Chrysene	63		60		40-140	5		40
Acenaphthylene	59		59		40-140	0		40
Anthracene	68		63		40-140	8		40
Benzo(ghi)perylene	68		62		40-140	9		40
Fluorene	68		63		40-140	8		40
Phenanthrene	65		61		40-140	6		40
Dibenzo(a,h)anthracene	67		62		40-140	8		40
Indeno(1,2,3-cd)Pyrene	68		63		40-140	8		40
Pyrene	70		66		26-127	6		40
1-Methylnaphthalene	48		49		40-140	2		40
2-Methylnaphthalene	51		51		40-140	0		40
Pentachlorophenol	66		63		9-103	5		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG571126-2 WG571126-3								
Hexachlorobenzene	58		55		40-140	5		40
Hexachloroethane	47		47		40-140	0		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	37		36		21-120
Phenol-d6	25		25		10-120
Nitrobenzene-d5	60		58		23-120
2-Fluorobiphenyl	52		53		15-120
2,4,6-Tribromophenol	66		61		10-120
4-Terphenyl-d14	71		67		41-149

PCBS

Project Name: MELROSE **Lab Number:** L1219666

Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-01	Date Collected:	10/31/12 08:45
Client ID:	CULVERT-WATER-DS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	11/01/12 00:16
Analytical Date:	11/01/12 15:44	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	11/01/12
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	11/01/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.250	--	1
Aroclor 1221	ND		ug/l	0.250	--	1
Aroclor 1232	ND		ug/l	0.250	--	1
Aroclor 1242	ND		ug/l	0.250	--	1
Aroclor 1248	ND		ug/l	0.250	--	1
Aroclor 1254	3.40		ug/l	0.250	--	1
Aroclor 1260	ND		ug/l	0.250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	49		30-150
Decachlorobiphenyl	55		30-150

Project Name:	MELROSE	**Lab Number:**	L1219666
Project Number:	22248	**Report Date:**	11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-02	Date Collected:	10/31/12 09:15
Client ID:	CULVERT-WATER-VS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	11/01/12 00:16
Analytical Date:	11/01/12 15:57	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	11/01/12
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	11/01/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.250	--	1
Aroclor 1221	ND		ug/l	0.250	--	1
Aroclor 1232	ND		ug/l	0.250	--	1
Aroclor 1242	ND		ug/l	0.250	--	1
Aroclor 1248	ND		ug/l	0.250	--	1
Aroclor 1260	ND		ug/l	0.250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	68		30-150
Decachlorobiphenyl	74		30-150

Project Name: MELROSE **Lab Number:** L1219666
Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-02	Date Collected:	10/31/12 09:15
Client ID:	CULVERT-WATER-VS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	11/01/12 00:16
Analytical Date:	11/01/12 15:57	Cleanup Method1:	EPA 3665A
Analyst:	KB	Cleanup Date1:	11/01/12
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	11/01/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1254	0.810		ug/l	0.250	--	1

2,4,5,6-Tetrachloro-m-xylene	68		30-150
Decachlorobiphenyl	74		30-150

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 11/01/12 14:52
Analyst: KB

Extraction Method: EPA 608
Extraction Date: 11/01/12 00:16
Cleanup Method1: EPA 3665A
Cleanup Date1: 11/01/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 11/01/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG571128-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	67		30-150
Decachlorobiphenyl	84		30-150

Matrix Spike Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248
Lab Number: L1219666
Report Date: 11/02/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571128-3 QC Sample: L1219666-01 Client ID: CULVERT-WATER-DS												
Aroclor 1016	ND	2	1.30	65		-	-		40-140	-		50
Aroclor 1260	ND	2	1.70	85		-	-		40-140	-		50

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	71				30-150
Decachlorobiphenyl	76				30-150

Lab Control Sample Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG571128-2								
Aroclor 1016	65		-		40-140	-		50
Aroclor 1260	63		-		40-140	-		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	74				30-150
Decachlorobiphenyl	90				30-150

Lab Duplicate Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571128-4 QC Sample: L1219666-01 Client ID: CULVERT-WATER-DS						
Aroclor 1016	ND	ND	ug/l	NC		50
Aroclor 1221	ND	ND	ug/l	NC		50
Aroclor 1232	ND	ND	ug/l	NC		50
Aroclor 1242	ND	ND	ug/l	NC		50
Aroclor 1248	ND	ND	ug/l	NC		50
Aroclor 1254	3.40	11.2	ug/l	**107**	Q	50
Aroclor 1260	ND	ND	ug/l	NC		50

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	49		94		30-150
Decachlorobiphenyl	55		102		30-150

METALS

Project Name:	MELROSE	**Lab Number:**	L1219666
Project Number:	22248	**Report Date:**	11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-01	Date Collected:	10/31/12 08:45
Client ID:	CULVERT-WATER-DS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Iron, Total	1.6		mg/l	0.05	--	1	10/31/12 17:45	11/01/12 21:15	EPA 3005A	19,200.7	BM
Mercury, Total	0.0002		mg/l	0.0002	--	1	11/01/12 17:40	11/02/12 07:45	EPA 245.1	3,245.1	JH

Project Name:	MELROSE	**Lab Number:**	L1219666
Project Number:	22248	**Report Date:**	11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-01 D	Date Collected:	10/31/12 08:45
Client ID:	CULVERT-WATER-DS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	0.0312		mg/l	0.0050	--	5	10/31/12 17:45	11/01/12 10:18	EPA 3005A	1,6020A	AK
Arsenic, Total	0.0058		mg/l	0.0025	--	5	10/31/12 17:45	11/01/12 10:18	EPA 3005A	1,6020A	AK
Cadmium, Total	ND		mg/l	0.00100	--	5	10/31/12 17:45	11/01/12 10:18	EPA 3005A	1,6020A	AK
Chromium, Total	0.0051		mg/l	0.0050	--	5	10/31/12 17:45	11/01/12 10:18	EPA 3005A	1,6020A	AK
Copper, Total	0.0131		mg/l	0.0050	--	5	10/31/12 17:45	11/01/12 10:18	EPA 3005A	1,6020A	AK
Lead, Total	0.0290		mg/l	0.0025	--	5	10/31/12 17:45	11/01/12 10:18	EPA 3005A	1,6020A	AK
Nickel, Total	0.3198		mg/l	0.0025	--	5	10/31/12 17:45	11/01/12 10:18	EPA 3005A	1,6020A	AK
Selenium, Total	ND		mg/l	0.025	--	5	10/31/12 17:45	11/01/12 10:18	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.0020	--	5	10/31/12 17:45	11/01/12 10:18	EPA 3005A	1,6020A	AK
Zinc, Total	5.188		mg/l	0.2500	--	25	10/31/12 17:45	11/01/12 10:31	EPA 3005A	1,6020A	AK

Project Name: MELROSE **Lab Number:** L1219666
Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID: L1219666-02 Date Collected: 10/31/12 09:15
Client ID: CULVERT-WATER-VS Date Received: 10/31/12
Sample Location: 72 STONE PLACE Field Prep: Not Specified
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Iron, Total	2.5		mg/l	0.05	--	1	10/31/12 17:45	11/01/12 21:27	EPA 3005A	19,200.7	BM
Mercury, Total	ND		mg/l	0.00020	--	1	11/01/12 17:40	11/02/12 07:47	EPA 245.1	3,245.1	JH

Project Name: MELROSE **Lab Number:** L1219666
Project Number: 22248 **Report Date:** 11/02/12

SAMPLE RESULTS

Lab ID:	L1219666-02 D	Date Collected:	10/31/12 09:15
Client ID:	CULVERT-WATER-VS	Date Received:	10/31/12
Sample Location:	72 STONE PLACE	Field Prep:	Not Specified
Matrix:	Water		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	0.0959		mg/l	0.0050	--	5	10/31/12 17:45	11/01/12 10:29	EPA 3005A	1,6020A	AK
Arsenic, Total	0.0046		mg/l	0.0025	--	5	10/31/12 17:45	11/01/12 10:29	EPA 3005A	1,6020A	AK
Cadmium, Total	0.0019		mg/l	0.0010	--	5	10/31/12 17:45	11/01/12 10:29	EPA 3005A	1,6020A	AK
Chromium, Total	0.0432		mg/l	0.0050	--	5	10/31/12 17:45	11/01/12 10:29	EPA 3005A	1,6020A	AK
Copper, Total	0.0998		mg/l	0.0050	--	5	10/31/12 17:45	11/01/12 10:29	EPA 3005A	1,6020A	AK
Lead, Total	0.1456		mg/l	0.0025	--	5	10/31/12 17:45	11/01/12 10:29	EPA 3005A	1,6020A	AK
Nickel, Total	0.4052		mg/l	0.0025	--	5	10/31/12 17:45	11/01/12 10:29	EPA 3005A	1,6020A	AK
Selenium, Total	ND		mg/l	0.025	--	5	10/31/12 17:45	11/01/12 10:29	EPA 3005A	1,6020A	AK
Silver, Total	0.0140		mg/l	0.0020	--	5	10/31/12 17:45	11/01/12 10:29	EPA 3005A	1,6020A	AK
Zinc, Total	2.482		mg/l	0.0500	--	5	10/31/12 17:45	11/01/12 10:29	EPA 3005A	1,6020A	AK

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG571038-1										
Antimony, Total	ND		mg/l	0.0010	--	1	10/31/12 17:45	11/01/12 11:12	1,6020A	AK
Arsenic, Total	ND		mg/l	0.0005	--	1	10/31/12 17:45	11/01/12 11:12	1,6020A	AK
Cadmium, Total	ND		mg/l	0.0002	--	1	10/31/12 17:45	11/01/12 11:12	1,6020A	AK
Chromium, Total	ND		mg/l	0.0010	--	1	10/31/12 17:45	11/01/12 11:12	1,6020A	AK
Copper, Total	ND		mg/l	0.0010	--	1	10/31/12 17:45	11/01/12 11:12	1,6020A	AK
Lead, Total	ND		mg/l	0.0005	--	1	10/31/12 17:45	11/01/12 11:12	1,6020A	AK
Nickel, Total	ND		mg/l	0.0005	--	1	10/31/12 17:45	11/01/12 11:12	1,6020A	AK
Selenium, Total	ND		mg/l	0.005	--	1	10/31/12 17:45	11/01/12 11:12	1,6020A	AK
Silver, Total	ND		mg/l	0.0004	--	1	10/31/12 17:45	11/01/12 11:12	1,6020A	AK
Zinc, Total	ND		mg/l	0.0100	--	1	10/31/12 17:45	11/01/12 11:12	1,6020A	AK

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG571039-1										
Iron, Total	ND		mg/l	0.05	--	1	10/31/12 17:45	11/01/12 21:00	19,200.7	BM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-02 Batch: WG571278-1										
Mercury, Total	ND		mg/l	0.0002	--	1	11/01/12 17:40	11/02/12 07:17	3,245.1	JH

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG571038-2								
Antimony, Total	96		-		80-120	-		
Arsenic, Total	102		-		80-120	-		
Cadmium, Total	107		-		80-120	-		
Chromium, Total	100		-		80-120	-		
Copper, Total	108		-		80-120	-		
Lead, Total	106		-		80-120	-		
Nickel, Total	102		-		80-120	-		
Selenium, Total	110		-		80-120	-		
Silver, Total	107		-		80-120	-		
Zinc, Total	110		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG571039-2								
Iron, Total	110		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01-02 Batch: WG571278-2								
Mercury, Total	91		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571038-4 QC Sample: L1219666-01 Client ID: CULVERT-WATER-DS												
Antimony, Total	0.0312	0.5	0.5344	101		-	-		80-120	-		20
Arsenic, Total	0.0058	0.12	0.1337	106		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.0654	**128**	Q	-	-		80-120	-		20
Chromium, Total	0.0051	0.2	0.1977	96		-	-		80-120	-		20
Copper, Total	0.0131	0.25	0.2800	107		-	-		80-120	-		20
Lead, Total	0.0290	0.51	0.5702	106		-	-		80-120	-		20
Nickel, Total	0.3198	0.5	0.8781	112		-	-		80-120	-		20
Selenium, Total	ND	0.12	0.111	92		-	-		80-120	-		20
Silver, Total	ND	0.05	0.0518	104		-	-		80-120	-		20
Zinc, Total	5.188	0.5	5.744	111		-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571039-4 QC Sample: L1219666-01 Client ID: CULVERT-WATER-DS												
Iron, Total	1.6	1	2.5	90		-	-		75-125	-		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571278-4 QC Sample: L1219364-01 Client ID: MS Sample												
Mercury, Total	0.0012	0.001	0.0015	**22**	Q	-	-		70-130	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571038-3 QC Sample: L1219666-01 Client ID: CULVERT-WATER-DS						
Antimony, Total	0.0312	0.0300	mg/l	4		20
Arsenic, Total	0.0058	0.0057	mg/l	2		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.0051	0.0064	mg/l	**22**	Q	20
Copper, Total	0.0131	0.0150	mg/l	13		20
Lead, Total	0.0290	0.0304	mg/l	5		20
Nickel, Total	0.3198	0.3599	mg/l	12		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571038-3 QC Sample: L1219666-01 Client ID: CULVERT-WATER-DS						
Zinc, Total	5.188	5.250	mg/l	1		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571039-3 QC Sample: L1219666-01 Client ID: CULVERT-WATER-DS						
Iron, Total	1.6	1.6	mg/l	0		20
Total Metals - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571278-3 QC Sample: L1219364-01 Client ID: DUP Sample						
Mercury, Total	0.0012	0.0012	mg/l	0		20

INORGANICS
&
MISCELLANEOUS

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

SAMPLE RESULTS

Lab ID: L1219666-01
Client ID: CULVERT-WATER-DS
Sample Location: 72 STONE PLACE
Matrix: Water

Date Collected: 10/31/12 08:45
Date Received: 10/31/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	60		mg/l	5.0	NA	1	-	11/01/12 14:10	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	11/01/12 10:20	11/02/12 12:33	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	10/31/12 16:31	30,4500CL-D	EL
TPH	8.30		mg/l	4.40	--	1.1	11/01/12 10:00	11/02/12 09:30	74,1664A	JO
Phenolics, Total	0.16		mg/l	0.03	--	1	11/01/12 12:00	11/01/12 14:15	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	10/31/12 23:00	10/31/12 23:13	30,3500CR-D	EL
Anions by Ion Chromatography - Westborough Lab										
Chloride	44		mg/l	0.50	--	1	-	11/01/12 17:21	44,300.0	AU

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

SAMPLE RESULTS

Lab ID: L1219666-02
Client ID: CULVERT-WATER-VS
Sample Location: 72 STONE PLACE
Matrix: Water

Date Collected: 10/31/12 09:15
Date Received: 10/31/12
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	85		mg/l	10	NA	2	-	11/01/12 14:10	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	11/01/12 10:20	11/02/12 12:36	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	10/31/12 16:31	30,4500CL-D	EL
TPH	21.0		mg/l	4.00	--	1	11/01/12 10:00	11/02/12 09:30	74,1664A	JO
Phenolics, Total	0.05		mg/l	0.03	--	1	11/01/12 12:00	11/01/12 14:16	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	10/31/12 23:00	10/31/12 23:14	30,3500CR-D	EL
Anions by Ion Chromatography - Westborough Lab										
Chloride	21		mg/l	0.50	--	1	-	11/01/12 17:33	44,300.0	AU

Project Name: MELROSE **Lab Number:** L1219666
Project Number: 22248 **Report Date:** 11/02/12

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG571053-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	10/31/12 16:31	30,4500CL-D	EL
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG571121-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	10/31/12 23:00	10/31/12 23:12	30,3500CR-D	EL
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG571189-1										
Cyanide, Total	ND		mg/l	0.005	--	1	11/01/12 10:20	11/02/12 12:31	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG571194-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	11/01/12 14:10	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG571203-1										
Phenolics, Total	ND		mg/l	0.03	--	1	11/01/12 12:00	11/01/12 14:14	4,420.1	MP
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG571224-1										
TPH	ND		mg/l	4.00	--	1	11/01/12 10:00	11/02/12 09:30	74,1664A	JO
Anions by Ion Chromatography - Westborough Lab for sample(s): 01-02 Batch: WG571391-1										
Chloride	ND		mg/l	0.50	--	1	-	11/01/12 16:33	44,300.0	AU

Lab Control Sample Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG571053-2								
Chlorine, Total Residual	93		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG571121-2								
Chromium, Hexavalent	96		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG571189-2								
Cyanide, Total	99		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG571203-2								
Phenolics, Total	102		-		82-111	-		12
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG571224-2								
TPH	80		-		64-132	-		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 Batch: WG571391-2								
Chloride	100		-		90-110	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248
Lab Number: L1219666
Report Date: 11/02/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571121-4 QC Sample: L1219666-02 Client ID: CULVERT-WATER-VS												
Chromium, Hexavalent	ND	0.1	0.095	95		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571189-3 QC Sample: L1219666-01 Client ID: CULVERT-WATER-DS												
Cyanide, Total	ND	0.2	0.213	106		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571203-4 QC Sample: L1219705-01 Client ID: MS Sample												
Phenolics, Total	0.13	0.8	1.0	110		-	-		77-124	-		12
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571224-4 QC Sample: L1219666-02 Client ID: CULVERT-WATER-VS												
TPH	21.0	20.8	22.6	**8**	Q	-	-		64-132	-		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571391-3 QC Sample: L1219673-02 Client ID: MS Sample												
Chloride	270	100	370	100		-	-		40-151	-		18

Lab Duplicate Analysis
Batch Quality Control

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571121-3 QC Sample: L1219666-02 Client ID: CULVERT-WATER-VS						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571189-4 QC Sample: L1219666-01 Client ID: CULVERT-WATER-DS						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571194-2 QC Sample: L1219666-02 Client ID: CULVERT-WATER-VS						
Solids, Total Suspended	85	82	mg/l	4		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571203-3 QC Sample: L1219666-01 Client ID: CULVERT-WATER-DS						
Phenolics, Total	0.16	0.20	mg/l	**22**	Q	12
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571224-3 QC Sample: L1219666-01 Client ID: CULVERT-WATER-DS						
TPH	8.30	ND	mg/l	NC		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG571391-4 QC Sample: L1219673-02 Client ID: DUP Sample						
Chloride	270	270	mg/l	0		18

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

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
C	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1219666-01A	Vial HCl preserved	A	N/A	5.9	Y	Absent	8260-SIM(14),8260(14)
L1219666-01B	Vial HCl preserved	A	N/A	5.9	Y	Absent	8260-SIM(14),8260(14)
L1219666-01C	Vial HCl preserved	A	N/A	5.9	Y	Absent	8260-SIM(14),8260(14)
L1219666-01D	Plastic 500ml unpreserved	C	7	2.4	Y	Absent	CL-300(28),TRC-4500(1)
L1219666-01E	Plastic 500ml unpreserved	C	7	2.4	Y	Absent	HEXCR-3500(1)
L1219666-01F	Plastic 250ml NaOH preserved	C	>12	2.4	Y	Absent	TCN-4500(14)
L1219666-01G	Amber 1000ml HCl preserved	C	N/A	2.4	Y	Absent	TPH-1664(28)
L1219666-01H	Amber 1000ml HCl preserved	C	N/A	2.4	Y	Absent	TPH-1664(28)
L1219666-01I	Amber 1000ml H2SO4 preserved	C	<2	2.4	Y	Absent	TPHENOL-420(28)
L1219666-01J	Plastic 1000ml unpreserved	C	7	2.4	Y	Absent	TSS-2540(7)
L1219666-01K	Plastic 500ml HNO3 preserved	C	<2	2.4	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1219666-01L	Vial Na2S2O3 preserved	A	N/A	5.9	Y	Absent	504(14)
L1219666-01M	Vial Na2S2O3 preserved	A	N/A	5.9	Y	Absent	504(14)
L1219666-01N	Amber 1000ml unpreserved	C	7	2.4	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1219666-01O	Amber 1000ml unpreserved	B	7	3.2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1219666-01P	Amber 1000ml Na2S2O3	C	7	2.4	Y	Absent	PCB-608(7)
L1219666-01Q	Amber 1000ml Na2S2O3	B	7	3.2	Y	Absent	PCB-608(7)
L1219666-01R	Amber 1000ml unpreserved	B	7	3.2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1219666-01S	Amber 1000ml unpreserved	C	7	2.4	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1219666-02A	Vial HCl preserved	A	N/A	5.9	Y	Absent	8260-SIM(14),8260(14)
L1219666-02B	Vial HCl preserved	A	N/A	5.9	Y	Absent	8260-SIM(14),8260(14)

*Values in parentheses indicate holding time in days

Project Name: MELROSE
Project Number: 22248

Lab Number: L1219666
Report Date: 11/02/12

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1219666-02C	Vial HCl preserved	A	N/A	5.9	Y	Absent	8260-SIM(14),8260(14)
L1219666-02D	Plastic 500ml unpreserved	A	7	5.9	Y	Absent	CL-300(28),TRC-4500(1)
L1219666-02E	Plastic 500ml unpreserved	A	7	5.9	Y	Absent	HEXCR-3500(1)
L1219666-02F	Plastic 250ml NaOH preserved	A	>12	5.9	Y	Absent	TCN-4500(14)
L1219666-02G	Amber 1000ml HCl preserved	B	N/A	3.2	Y	Absent	TPH-1664(28)
L1219666-02H	Amber 1000ml HCl preserved	B	N/A	3.2	Y	Absent	TPH-1664(28)
L1219666-02I	Amber 1000ml H2SO4 preserved	B	<2	3.2	Y	Absent	TPHENOL-420(28)
L1219666-02J	Plastic 1000ml unpreserved	A	7	5.9	Y	Absent	TSS-2540(7)
L1219666-02K	Plastic 500ml HNO3 preserved	A	<2	5.9	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1219666-02L	Vial Na2S2O3 preserved	A	N/A	5.9	Y	Absent	504(14)
L1219666-02M	Vial Na2S2O3 preserved	A	N/A	5.9	Y	Absent	504(14)
L1219666-02N	Amber 1000ml unpreserved	B	7	3.2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1219666-02O	Amber 1000ml unpreserved	B	7	3.2	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1219666-02P	Amber 1000ml Na2S2O3	A	7	5.9	Y	Absent	PCB-608(7)
L1219666-02Q	Amber 1000ml Na2S2O3	B	7	3.2	Y	Absent	PCB-608(7)
L1219666-02R	Amber 1000ml unpreserved	A	7	5.9	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1219666-02S	Amber 1000ml unpreserved	A	7	5.9	Y	Absent	8270TCL(7),8270TCL-SIM(7)

*Values in parentheses indicate holding time in days

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:	MELROSE	**Lab Number:**	L1219666
Project Number:	22248	**Report Date:**	11/02/12

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

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

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

4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.

5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).

14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

74 Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

LIMITATION OF LIABILITIES

Certificate/Approval Program Summary

Last revised August 16, 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, Nickel, Selenium, Silver, Sodium, Thallium, 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) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

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, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

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, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

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, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8082, 8330, 8151A, 8260B, 8270C, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9030B, 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, 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, SW-846 6010B, 6010C, 6020, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9030B, 9040B, 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, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8082A, 8081A, 8081B, 8151A, 8330, 8270C-SIM, 8270D-SIM.)

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

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, 245.1, 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, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 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, 2540G, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 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, 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, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

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

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7471A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: 200.7, 200.8, 245.2, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 3501., 350.2, 353.2, 420.1, 6010B, 6010C, 6020, 6020A, 7196A, 7470A, 9010B, 9030B, 9040B, Lachat 10-107-06-2-D, NJ-EPH, 2120B, 2310B, 2320B, 2340B, 2510C, 2540B, 2540C, 3500Cr-D, 436C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330, 8015B,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010B, 6010C, 6020A, 7196A, 7471A, 7471B, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, NJ-EPH.)

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

Texas Commisson 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.***
Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 2..08, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5035, 3540C, 3546, 3550, 3580, 3630C, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B 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, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 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 Methylnapthalenes, Total Dimethylnaphthalenes, 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. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

Serial No:11021216:31

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 10/31/12

ALPHA Job #: L1219666

Client Information

Client: VERTEX
Address: One Congress St Boston MA
Phone: 781-952-6000
Fax:
Email: skeohane
❑ These samples have been previously analyzed by Alpha

Project Information

Project Name: Melrose
Project Location: 72 Store Place
Project #: 22248
Project Manager: F Calandra
ALPHA Quote #:

Turn-Around Time

❑ Standard ☒ RUSH (only confirmed if pre-approved!)
Date Due: 48-hr Time:

Report Information - Data Deliverables

❑ FAX ☒ EMAIL
☒ ADEx ❑ Add'l Deliverables

Billing Information

❑ Same as Client info PO #: 22248

Regulatory Requirements/Report Limits

State /Fed Program NPDES | Criteria

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?

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)

ANALYSIS: NPDES RGP

SAMPLE HANDLING
Filtration
❑ Done
☒ Not needed
❑ Lab to do
Preservation
❑ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NPDES RGP	Sample Specific Comments	TOTAL # BOTTLES
19666.1	Culvert-Water-DS	10/31/12	8:45	Water	SK	✓		
.2	Culvert-Water-US	10/31/12	9:15	Water	SK	✓		

Container Type
Preservative

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	10/31/12 11:45	[signature]	10/31/12 1130
[signature]	10/31/12 1355	[signature]	10/31/12 1355

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.

FORM NO: 01-01 (rev. 18-Jan-2010)