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

CERTIFIED MAIL RETURN RECEIPT REQUESTED

JUN 2 8 2011

Patrick D. Corcoran
License Site Professional
EnviroTrack Ltd.
2 Merchant Street, Suite 2
Sharon, MA 02067

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Hess Petroleum Retail Station#21224 site located at 468 West Street, Amherst Massachusetts, Hampshire County; Authorization # MAG910493

Dear Mr. Corcoran:

Based on the review of a Notice of Intent (NOI) submitted on behalf of Hess Corporation by your firm EnviroTrac, for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

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

Please note the enclosed checklist includes parameters that you have marked believed present.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on selected dilution ranges and technology-based ceiling limitations. For each parameter the dilution factor 53 for this site is within a dilution range greater than fifty to one hundred (>50-100) established in the RGP. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limits for arsenic of 500ug/L and iron of 5,000ug/L are required to achieve permit compliance at your site.

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 07/31/2011. If for any reason the discharge terminates sooner or at the reported time, 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,

David M. Webster, Chief
Industrial Permits Branch

Enclosure

cc: Kathleen Keohane, MassDEP

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**MAG910493 - New**
Authorization Issued:	June, 2011
Facility/Site Name:	Hess-branded Petroleum Retail Station#21224
Facility/Site Address:	486 West Street Amherst, MA 01002-2965, Hampshire County
	Email address of owner: mmatric@hess.com
Legal Name of Operator:	EnviroTrack Ltd.
Operator contact name, title, and Address:	Patrick D. Corcoran, LSP, 2 Merchant Street Ste. 2, Sharon, MA 02067
	Email:Patrick@envirotrack.com
Estimated Date of Completion:	07/31/2011
Category and Sub-Category:	Category I. Petroleum Related Sites. Sub-category A. Gasoline Only Sites.
Receiving Water:	Plum Brook to Fort River

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#60.2/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 (BTEX) [4]	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)
	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
	a. Benzo(a) Anthracene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	b. Benzo(a) Pyrene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	c. Benzo(b)Fluoranthene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	d. Benzo(k)Fluoranthene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	e. Chrysene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	f. Dibenzo(a,h)anthracene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	g. Indeno(1,2,3-cd) Pyrene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
	h. Acenaphthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	i. Acenaphthylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	j. Anthracene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	l. Fluoranthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	m. Fluorene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	n. Naphthalene [5]	20 ug/l / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	o. Phenanthrene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) [8, 9]	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
√	38. Chloride	Monitor only/Me# 300.0/ ML 0.1ug/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			
	39. Antimony	5.6/ML 10			
√	40. Arsenic **	500/ML20			

	Metal parameter	Total Recoverable Metal Limit @ H [10]= 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) [11/12]		Minimum level=ML	
		Freshwater			
	41. Cadmium **	0.2/ML10			
	42. Chromium III (trivalent) **	48.8/ML15			
	43. Chromium VI (hexavalent) **	11.4/ML10			
	44. Copper **	5.2/ML15			
	45. Lead **	1.3/ML20			
	46. Mercury **	0.9/ML0.2			
	47. Nickel **	29/ML20			
	48. Selenium **	5/ML20			
	49. Silver	1.2/ML10			
	50. Zinc **	66.6/ML15			
√	51. Iron	5,000/ML 20			

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

Footnotes:

[1] Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).

[2] Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.
[3] Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).
[4] BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.
[5] Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.
[6] The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[7] Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
[8] In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "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

June 14, 2011

United States Environmental Protection Agency
RGP – NOI Processing
1 Congress Street
Boston, Massachusetts 02114-2023

Re: Remediation General Permit (RGP) – Notice of Intent (NOI)
Hess-branded Petroleum Retail Station #21224
468 West Street
Amherst, Massachusetts 01002-2965
MassDEP RTN 1-18197

To Whom It May Concern:

At the request of Hess Corporation (Hess), EnviroTrac Ltd (EnviroTrac) is submitting the attached Remediation General Permit (RGP) – Notice of Intent (NOI) for the above-referenced location, referred to as the site. The NOI form is included as Attachment A. The site is currently a Hess-branded retail petroleum station. Temporary construction dewatering is required to facilitate the repair or replacement of an underground storage tank (UST). Based on gauging of monitoring wells at the site, the depth to groundwater is 1 to 5 feet below ground surface (bgs). Excavation to approximately 4 feet bgs is required for the UST repair or replacement. The locations of the site and discharge receiving water (Plum Brook) are depicted on **Figure 1**. A site sketch, which depicts the existing site features and the catch basin which represents the proposed discharge point, is attached as **Figure 2**.

During construction dewatering, groundwater will be pumped from the excavation into a fractionation tank for settlement, and then treated through two bag filters (arranged in series), a greensand filter, two 700-pound liquid phase carbon units (arranged in series), and two cartridge filter (arranged in series). A schematic drawing is included as **Figure 3**. The treated effluent will be discharged via the catch basin to the north of the site property, which discharges to a swale located approximately 250 feet north of the site. The swale drains to Plum Brook, a tributary of the Fort River. The design flow of the treatment system is 50 gallons per minute (50 gpm), and the average discharge rate of treated groundwater is anticipated to be 30 gpm.

On November 8, 2010, February 9, 2011, May 13, 2011 and June 7, 2011, groundwater samples were obtained from an on-site monitoring well. Based on data collected in November 2010, concentrations of extractable petroleum hydrocarbons meet RGP effluent limitations. Based on analytical data collected on February 9, May 13 and June 6, 2011, total suspended solids (TSS), chloride, benzene, methyl tert butyl ether (MTBE), tert butyl alcohol (TBA), butyl benzyl phthalate, bis (2-ethylhexyl phthalate), arsenic, and iron were detected. Compounds reported at concentrations exceeding the applicable Effluent Limitations published in Appendix

III of the RGP for Discharges in Massachusetts included TSS and iron. Analytical data is summarized in **Table 1**. The laboratory analytical reports for May and June 2011 supporting this submittal are included in **Attachment B**.

Plum Brook and the Fort River are both located in a National Heritage & Endangered Species Program Estimated Rare Wetland Habitat associated with the dwarf wedge mussel. Therefore, as specified in the RGP, a consultation with the U.S. Fish and Wildlife Service was conducted. The U.S. Fish and Wildlife Service determined that given the distance between the treated discharge and the Fort River, adverse effects are not anticipated and further consultation is not required. According to the National Park Service's National Register Information System (NRIS) (http://www.nr.nps.gov/), the nearest listed historical site is the Baird House located on Shays Street, approximately one half-mile north of the site. The Massachusetts Historical Commission's Massachusetts Cultural Resource Information System (MACRIS) (http://www.sec.state.ma.us/mhc/) listed more than 900 sites in Amherst. The nearest Massachusetts-listed site, Aaron Merrick House at 441 West Street, is located approximately 200 feet northwest of the site. Based on the distances to the site, the discharge will not likely adversely affect the historical sites. Copies of the U.S. Fish and Wildlife determination letter, NRIS, and MACRIS listings are included in **Attachment C**.

The excavation and dewatering will be conducted as an Immediate Response Action (IRA) in accordance with provisions of the Massachusetts Contingency Plan (MCP) as set forth at 310 CMR 40.0424. Therefore, completion and submittal of Massachusetts Department of Environmental Protection (MassDEP) Application Form BRPWM 12 or payment of a fee to the Commonwealth of Massachusetts for the proposed discharge are not required.

If you have any questions or require further information, please contact the undersigned at (781) 793-0074.

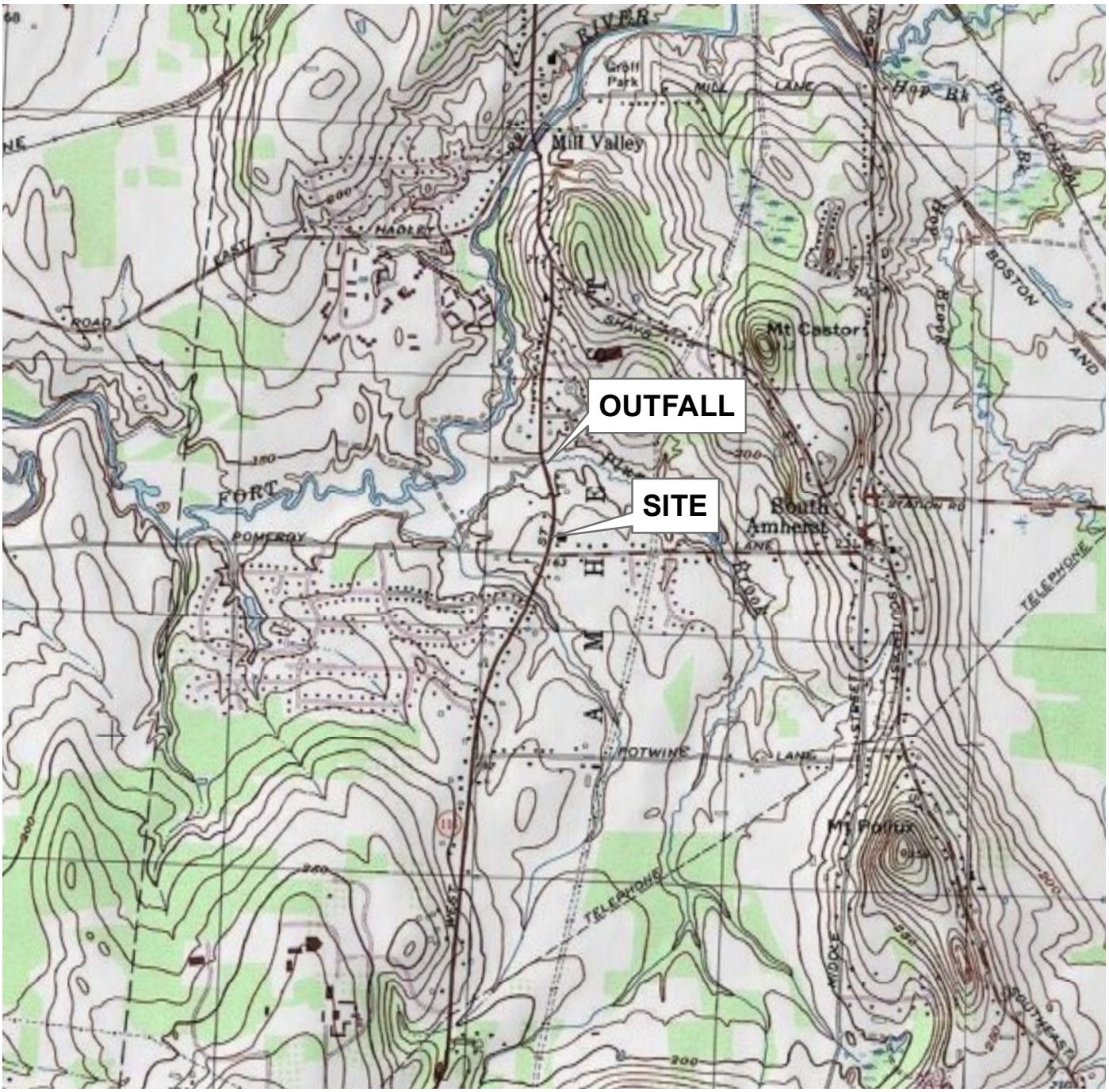
Sincerely,
EnviroTrac Ltd.

Patrick D. Corcoran, LSP
Senior Project Manager

cc.: MassDEP Western Regional Office
Stephanie O'Keeffe, Chair, City of Amherst Select Board
City of Amherst Conservation Commission
M. Matri, Hess

EnviroTrac
Environmental Services

FIGURES



Scale: 1:24,000

Hess Station #21224
468 West Street
Amherst, MA 01002-2965

FIGURE 1

SITE LOCUS MAP
UNITED STATES GEOLOGICAL SURVEY
MT. HOLYOKE AND BELCHERTOWN, MA QUADRANGLES

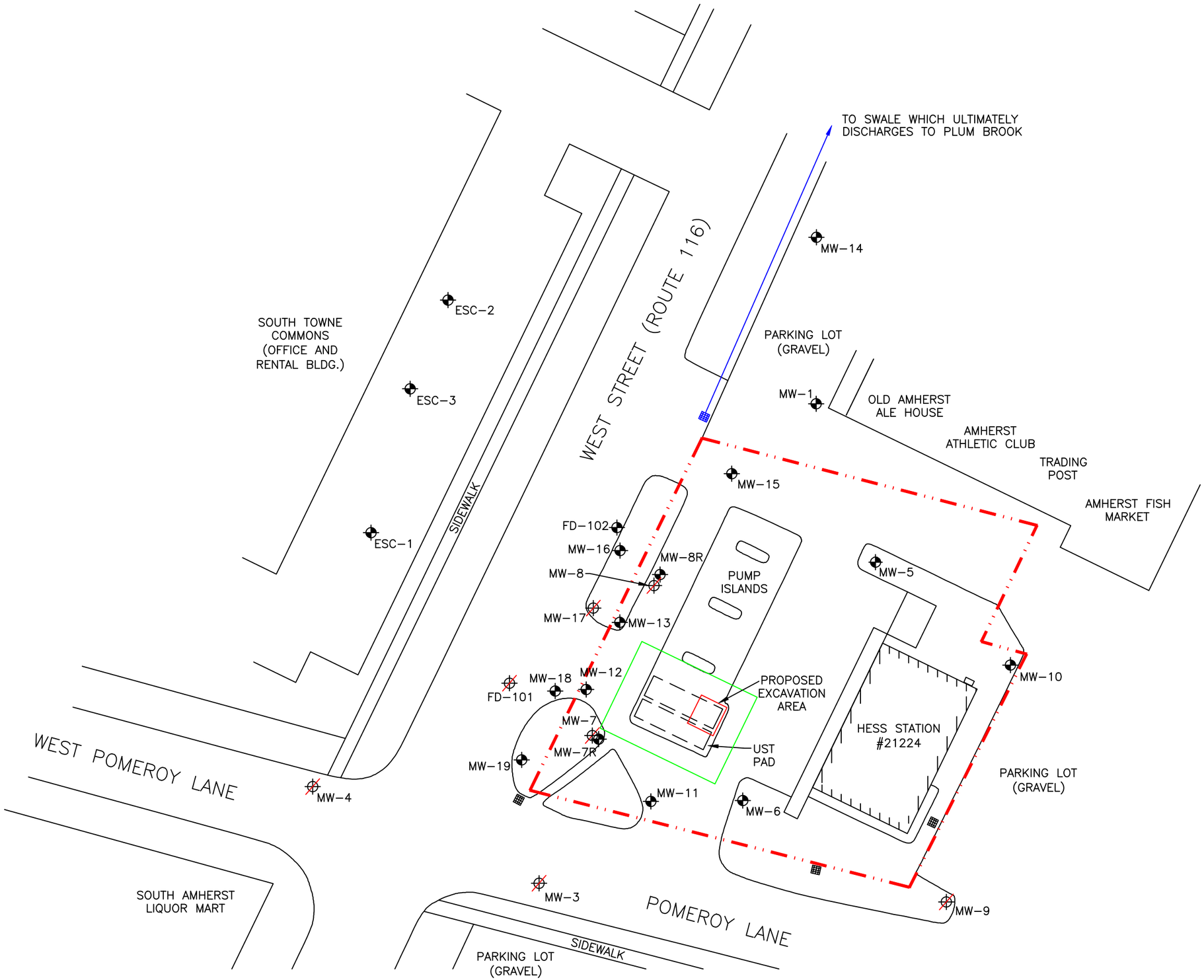
Contour Interval: 10 ft.

Latitude/Longitude:

42° 20' 30" North
72° 20' 34" North

N
W E
S

EnviroTrac
Environmental Services



BASED ON FIGURE ENTITLED "SITE PLAN," DELTA CONSULTANTS, DATED 11/23/06.
ALL LOCATIONS APPROXIMATE.
NOT FOR CONSTRUCTION PURPOSES.

LEGEND:

- = MONITORING WELL
- = DESTROYED MONITORING WELL
- = CATCH BASIN
- = PROPOSED DISCHARGE LOCATION
- PROPERTY LINE (APPROX.)
- DISPOSAL SITE (APPROX.)

0 20FT 40

APPROX. SCALE

DRAWN BY: PDC
DRAWING DATE: 05/25/2011

FIGURE: 2

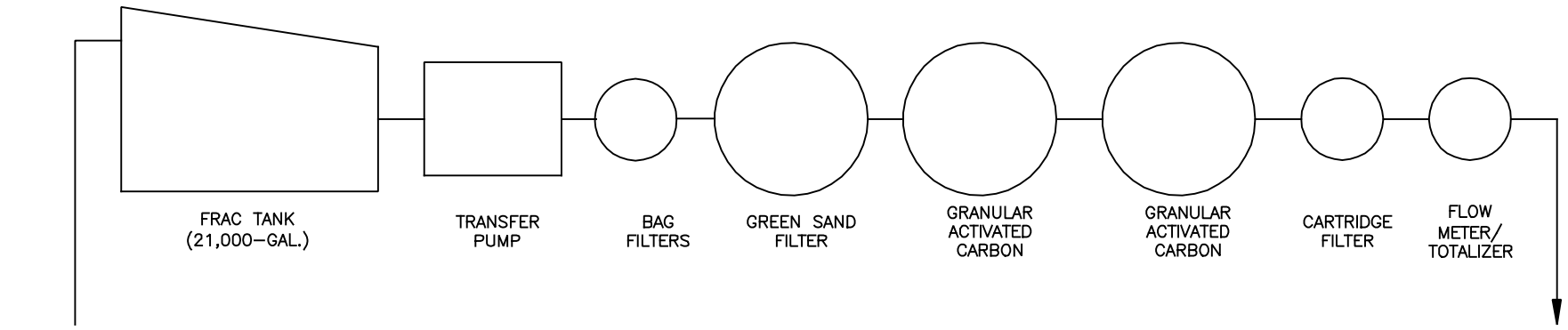
DRAWING TITLE

SITE PLAN

PROJECT NAME

HESS STATION #21224
468 WEST STREET
AMHERST, MASSACHUSETTS

EnviroTrac
ENVIRONMENTAL SERVICES
1400 PROVIDENCE HIGHWAY SUITE 2100, NORWOOD, MA
PHONE: (781)769-5005 FAX: (781)769-9345



PROCESS FLOW DIAGRAM
DEWATERING TREATMENT SYSTEM (TYP.)

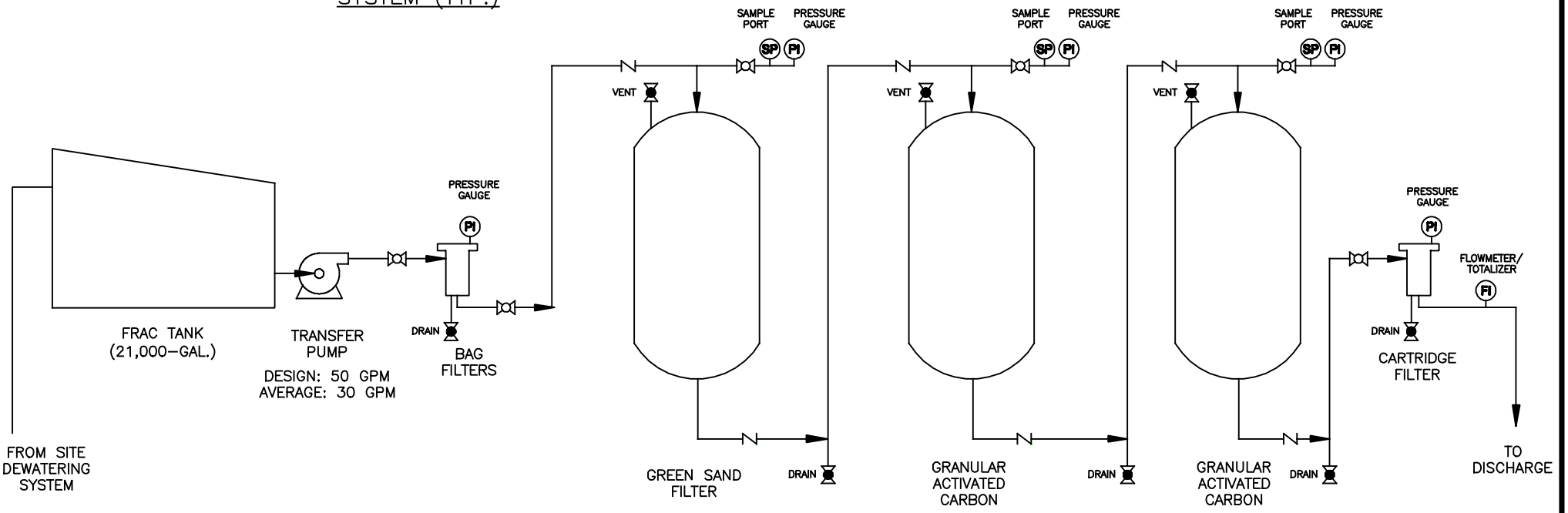


FIGURE # 3	PROCESS FLOW DIAGRAM	HESS STATION #21224 468 WEST STREET AMHERST, MASSACHUSETTS	EnviroTrac 2 Merchant Street, Suite 2, Sharon, Massachusetts PHONE: (781) 793-0074 FAX: (781) 793-7877
	CREATED BY: PDC DATE: 02/29/08 / NOT TO SCALE / REVISED BY: RP DATE: 06/06/2011		

TABLE

TABLE 1
SUMMARY OF GROUNDWATER ANALYTICAL DATA

Hess Station #21224
468 West Street
Amherst, Massachusetts

Sample ID	MW-12				RGP
	11/08/2010	02/09/2011	05/13/2011	06/07/2011	Discharge Limit
Volatile Organic Compounds (µg/L)					
C5-C8 Aliphatics	<50	<50	--	--	NE
C9-C12 Aliphatics	<50	<50	--	--	NE
C9-C10 Aromatics	<50	<50	--	--	NE
Benzene	2.2	4.7	3.8	--	5
Toluene	<2.0	<2.0	<1.0	--	NE
Ethylbenzene	<2.0	<2.0	<1.0	--	NE
Xylenes	<4.0	<4.0	<1.0	--	NE
Total BTEX	2.2	4.7	3.8	--	100
Naphthalene	<3.0	<3.0	--	--	20
Acetone	--	--	<5.0	--	NE
2-Butanone	--	--	<5.0	--	NE
1,2,4-Trimethylbenzene	--	--	<5.0	--	NE
Methyl tert butyl ether	12.3	8.4	4.0	--	70.0
Tert butyl alcohol	--	--	733	--	NE
Butyl benzyl phthalate	--	--	7.1	--	NE
bis(2-ethylhexyl)phthalate	--	--	2.8	--	6.0
All other VOCs	--	--	ND	--	NE
Extractable Petroleum Hydrocarbons (µg/L)					
C9-C18 Aliphatics	<110	--	--	--	NE
C19-C36 Aliphatics	<110	--	--	--	NE
C11-C22 Aromatics	<110	--	--	--	NE
Acenaphthene	<0.12	--	--	--	NE
Acenaphthylene	<0.12	--	--	--	NE
Anthracene	<0.12	--	--	--	NE
Benzo(g,h,i)perylene	<0.12	--	--	--	NE
Fluoranthene	<0.12	--	--	--	NE
Fluorene	<0.12	--	--	--	NE
Phenanthrene	<0.059	--	--	--	NE
Pyrene	<0.12	--	--	--	NE
Total Group II PAHs	ND	--	--	--	100
Benzo(a)anthracene	<0.059	--	--	--	0.0038
Benzo(a)pyrene	<0.12	--	--	--	0.0038
Benzo(b)fluoranthene	<0.059	--	--	--	0.0038
Benzo(k)fluoranthene	<0.12	--	--	--	0.0038
Chrysene	<0.12	--	--	--	0.0038
Dibenzo(a,h)anthracene	<0.12	--	--	--	0.0038
Indeno(1,2,3-cd)pyrene	<0.12	--	--	--	0.0038
2-Methylnaphthalene	<0.24	--	--	--	NE
1,2-Dibromoethane	<0.016	--	<2.0	--	0.05
Total Metals (µg/L)					
Iron	--	--	**12,400**	--	5,000
Lead	--	--	<5.0	--	8.5
Zinc	--	--	<20	--	85.6
Arsenic	--	--	9.5	--	36.0
General Chemistry (mg/L)					
Chloride	--	--	4,100	--	NE
Total Suspended Solids	--	--	**35.0**	--	30
Total Residual Chlorine	--	--	--	<0.050	11

NOTES:
RGP is Remediation General Permit
PAHs is Polycyclic Aromatic Hydrocarbons
mg/L is milligrams per liter
µg/L is micrograms per liter
< Indicates that the compound was not detected at the laboratory detection limit listed.
ND is not detected
NE is not established
Group II PAHs include: acenaphthene, acenaphthylene, anthracene, benzo(g,h,i)perylene, fluoranthene, fluorene, phenanthrene, and pyrene

EnviroTrac Environmental Services

ATTACHMENT A

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**: Hess Petroleum Retail Sta. #21224		**Facility/site** mailing address:		
Location of **facility/site**: longitude: -72.52 latitude: 42.34	Facility SIC code(s): 5541	Street: 468 West Street		
b) Name of **facility/site owner:** Hess Corporation, attn. Michael Matri		Town: Amherst		
Email address of facility/site owner: mmatri@hess.com		State: MA	Zip: 01002-2965	County: Hampshire
Telephone no. of facility/site **owner**: (750) 732-6432				
Fax no. of facility/site **owner**:		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):				
Street: 1 Hess Plaza				
Town: Woodbridge	State: MA	Zip: 07095	County: Middlesex	
c) Legal name of **operator**: EnviroTrac Ltd.	**Operator** telephone no: (781) 793-0074			
	Operator fax no.: (781) 793-7877	**Operator** email: patrickc@envirotrac.com		
Operator contact name and title: Patrick D. Corcoran, LSP				
Address of **operator** (if different from owner):	Street: 2 Merchant St., Ste. 2			
Town: Sharon	State: MA	Zip: 02067	County: Norfolk	

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

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

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

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

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

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

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

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

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

Approx. 30 gpm of groundwater will be pumped into a fractionation tank, bag filters, one greensand filter, and two 1,000-pound liquid phase carbon units arranged in series. The effluent will be discharged to a catch basin that ultimately discharges to Plum Brook.

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: 0.111 Is maximum flow a **design value**? Y ◉ N ○
Average flow (include units) 0.067 Is average flow a design value or estimate? Estimate

3) Latitude and longitude of each discharge within 100 feet:
pt.1: lat. 42.34 long. -72.52 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 06/20/2011 end 07/31/2011

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). See attached figure.

3. Contaminant information.

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☒	1	Grab	160.2	4000	35000	9.55	3500	5.73
2. Total Residual Chlorine (TRC)		☒	☐	1	Grab	330.4	50	0	0	0	0
3. Total Petroleum Hydrocarbons (TPH)		☐	☒	1	Grab	VPH	100	301	8.22E-2	301	4.93E-2
4. Cyanide (CN)	57125	☒	☐	1	Grab	335.4	10	0	0	0	0
5. Benzene (B)	71432	☐	☒	1	Grab	8260B	0.50	4.7	1.28E-3	4.7	7.69E-4
6. Toluene (T)	108883	☒	☐	1	Grab	8260B	1.0	0	0	0	0
7. Ethylbenzene (E)	100414	☒	☐	1	Grab	8260B	1.0	0	0	0	0
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	Grab	8260B	2.0	0	0	0	0
9. Total BTEX [2]	n/a	☐	☒	1	Grab	8260B	N/A	4.7	1.28E-3	4.7	7.69E-4
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	1	Grab	504	0.017	0	0	0	0
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☐	☒	1	Grab	8260B	1.0	12.3	3.36E-3	12.3	2.0E-3
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☐	☒	1	Grab	8260B	100	733	2.0E-1	733	1.2E-1

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

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

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐	1	Grab	8260B	2.0	0	0	0	0
14. Naphthalene	91203	☒	☐	1	Grab	8260B	5.0	0	0	0	
15. Carbon Tetrachloride	56235	☒	☐	1	Grab	8260B	1.0	0	0	0	0
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	Grab	8260B	1.0	0	0	0	0
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	Grab	8260B	1.0	0	0	0	0
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	Grab	8260B	1.0	0	0	0	0
18a. Total dichlorobenzene		☒	☐	1	Grab	8260B	1.0	0	0	0	0
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	1	Grab	8260B	1.0	0	0	0	0
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	Grab	8260B	1.0	0	0	0	0
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	1	Grab	8260B	1.0	0	0	0	0
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	1	Grab	8260B	1.0	0	0	0	0
23. Methylene Chloride	75092	☒	☐	1	Grab	8260B	2.0	0	0	0	0
24. Tetrachloroethene (PCE)	127184	☒	☐	1	Grab	8260B	1.0	0	0	0	0
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	Grab	8260B	1.0	0	0	0	0
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	Grab	8260B	1.0	0	0	0	0
27. Trichloroethene (TCE)	79016	☒	☐	1	Grab	8260B	1.0	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	☒	☐	1	Grab	8260B	1.0	0	0	0	0
29. Acetone	67641	☒	☐	1	Grab	8260B	5.0	0	0	0	0
30. 1,4 Dioxane	123911	☒	☐	1	Grab	8260B	25	0	0	0	0
31. Total Phenols	108952	☒	☐	1	Grab	8270C	5.6	0	0	0	0
32. Pentachlorophenol (PCP)	87865	☒	☐	1	Grab	8270C	11	0	0	0	0
33. Total Phthalates (Phthalate esters) [4]		☒	☐	1	Grab	8270C	N/A	0	0	0	0
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☐	☒	1	Grab	8270C	2.2	2.8	7.64E-4	2.8	4.58E-4
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	Grab	8270C	N/A	0	0	0	0
a. Benzo(a) Anthracene	56553	☒	☐	1	Grab	8270C	5.3	0	0	0	0
b. Benzo(a) Pyrene	50328	☒	☐	1	Grab	8270C	5.3	0	0	0	0
c. Benzo(b)Fluoranthene	205992	☒	☐	1	Grab	8270C	5.3	0	0	0	0
d. Benzo(k)Fluoranthene	207089	☒	☐	1	Grab	8270C	5.3	0	0	0	0
e. Chrysene	21801	☒	☐	1	Grab	8270C	5.3	0	0	0	0
f. Dibenzo(a,h)anthracene	53703	☒	☐	1	Grab	8270C	5.3	0	0	0	0
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	1	Grab	8270C	5.3	0	0	0	0
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	Grab	8270C	5.3	0	0	0	0

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐	1	Grab	8270C	5.3	0	0	0	0
i. Acenaphthylene	208968	☒	☐	1	Grab	8270C	5.3	0	0	0	0
j. Anthracene	120127	☒	☐	1	Grab	8270C	5.3	0	0	0	0
k. Benzo(ghi) Perylene	191242	☒	☐	1	Grab	8270C	5.3	0	0	0	0
l. Fluoranthene	206440	☒	☐	1	Grab	8270C	5.3	0	0	0	0
m. Fluorene	86737	☒	☐	1	Grab	8270C	5.3	0	0	0	0
n. Naphthalene	91203	☒	☐	1	Grab	8270C	5.3	0	0	0	0
o. Phenanthrene	85018	☒	☐	1	Grab	8270C	5.3	0	0	0	0
p. Pyrene	129000	☒	☐	1		8270C	5.3	0	0	0	0
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	Grab	8082	290	0	0	0	0
38. Chloride	16887006	☐	☒	1	Grab	SM21 4500 CL C	200	4100	11.19	4100	6.72
39. Antimony	7440360	☒	☐	1	Grab	6010B	6.0	0	0	0	0
40. Arsenic	7440382	☐	☒	1	Grab	6010B	4.0	9.5	2.59E-3	9.5	1.55E-3
41. Cadmium	7440439	☒	☐	1	Grab	6010B	4.0	0	0	0	0
42. Chromium III (trivalent)	16065831	☒	☐	1	Grab	6010B	10	0	0	0	0
43. Chromium VI (hexavalent)	18540299	☒	☐	1	Grab	7196A	10	0	0	0	0
44. Copper	7440508	☒	☐	1	Grab	6010B	25	0	0	0	0
45. Lead	7439921	☒	☐	1	Grab	6010B	5.0	0	0	0	0
46. Mercury	7439976	☒	☐	1	Grab	SW7470A	0.20	0	0	0	0
47. Nickel	7440020	☒	☐	1	Grab	6010B	40	0	0	0	0
48. Selenium	7782492	☒	☐	1	Grab	6010B	10	0	0	0	0
49. Silver	7440224	☒	☐	1	Grab	6010B	5.0	0	0	0	0
50. Zinc	7440666	☒	☐	1	Grab	6010B	20	0	0	0	0
51. Iron	7439896	☐	☒	1	Grab	6010B	100	12400	33.85	12400	20.31
Other (describe):		☐	☐								

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

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

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y◉ N○	If yes, which metals? Fe and As
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: Fe DF: 53 Metal: As DF: 53 Metal: DF: Metal: DF: Etc.	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y◉ N○ If Y, list which metals: Fe

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:

Approx. 30 gpm of groundwater will be pumped into a fractionation tank, bag filters, one greensand filter, and two 1,000-pound liquid phase carbon units arranged in series. See attached process flow diagram.

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):	Greensand filter		

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 30 gpm Maximum flow rate of treatment system 50 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):

No chemical additives will be used.

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

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

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

Treated water will be discharged to a storm drain north of the facility. Storm drain system ultimately discharges to Plum 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 5.8 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.

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:	Hess Petroleum Retail Station #21224, 468 West Street, Amherst, MA
Operator signature:	
Printed Name &Title:	Patrick D. Corcoran, LSP; Senior Project Manager
Date:	06/14/2011

Remediation General Permit – Notice of Intent
Maximum Daily Value and Dilution Factor Calculations

Maximum Daily Value

To calculate the maximum daily value in kilograms of each parameter believed to be present the following formula was used:

0.072 MGD * concentration of parameter in mg/L * 8.34 = kg

Example:

Total BTEX:

0.072 MGD * 0.047 mg/L * 8.34 = 1.28E-3 kg

Dilution Factor

To calculate the dilution factor the following formula was used:

DF = (Qd +Qs)/Qd where: Qd = Maximum flow rate of discharge in cubic feet per second (cfs)
Qs = Receiving water 7Q10 flow in cfs

DF = (0.1115 cfs + 5.8 cfs) / 0.1115 cfs = 53.02

Note: The 7Q10 of the Fort River at Amherst, MA was obtained from the USGS Water Quality Annual Statistic for Massachusetts at Gage # 01171300 Fort River near Amherst, MA. The lowest average monthly discharge of 5.8 cfs was taken from the year (1981) with the lowest average yearly discharge between 1967 and 1996.

ATTACHMENT B

New England ACCUTEST LABORATORIES

12/16/10

Technical Report for

EnviroTrac

Hess:#21224 468 West St Amherst MA

Accutest Job Number: M95681

Sampling Date: 11/08/10

Report to:

EnviroTrac

patrickc@envirotrac.com

ATTN: Patrick Corcoran

Total number of pages in report: **69**

ACCREDITED IN ACCORDANCE WITH nelac

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

Reza Tand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

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Sample Summary

EnviroTrac

Job No: M95681

Hess:#21224 468 West St Amherst MA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M95681-1	11/08/10	15:30	RSDT	11/08/10	AQ	Ground Water	MW-1
M95681-1F	11/08/10	15:30	RSDT	11/08/10	AQ	Groundwater Filtered	MW-1
M95681-2	11/08/10	10:10	RSDT	11/08/10	AQ	Ground Water	MW-4
M95681-2F	11/08/10	10:10	RSDT	11/08/10	AQ	Groundwater Filtered	MW-4
M95681-3	11/08/10	09:55	RSDT	11/08/10	AQ	Ground Water	MW-5
M95681-3F	11/08/10	09:55	RSDT	11/08/10	AQ	Groundwater Filtered	MW-5
M95681-4	11/08/10	10:57	RSDT	11/08/10	AQ	Ground Water	MW-7R
M95681-4F	11/08/10	10:57	RSDT	11/08/10	AQ	Groundwater Filtered	MW-7R
M95681-5	11/08/10	14:00	RSDT	11/08/10	AQ	Ground Water	MW-8R
M95681-5F	11/08/10	14:00	RSDT	11/08/10	AQ	Groundwater Filtered	MW-8R
M95681-6	11/08/10	12:47	RSDT	11/08/10	AQ	Ground Water	MW-11
M95681-6F	11/08/10	12:47	RSDT	11/08/10	AQ	Groundwater Filtered	MW-11
M95681-7	11/08/10	11:40	RSDT	11/08/10	AQ	Ground Water	MW-12

Sample Summary
(continued)

EnviroTrac

Job No: M95681

Hess:#21224 468 West St Amherst MA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M95681-7F	11/08/10	11:40	RSDT	11/08/10	AQ	Groundwater Filtered	MW-12
M95681-8	11/08/10	12:15	RSDT	11/08/10	AQ	Ground Water	MW-13
M95681-8F	11/08/10	12:15	RSDT	11/08/10	AQ	Groundwater Filtered	MW-13
M95681-9	11/08/10	13:30	RSDT	11/08/10	AQ	Ground Water	MW-14
M95681-10	11/08/10	14:05	RSDT	11/08/10	AQ	Ground Water	MW-19
M95681-11	11/08/10	11:00	RSDT	11/08/10	AQ	Ground Water	FD-102

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	EnviroTrac	**Job No**	M95681
Site:	Hess:#21224 468 West St Amherst MA	**Report Date**	12/16/2010 11:58:49 AM

11 Sample(s) were collected on 11/08/2010 and were received at Accutest on 11/08/2010 properly preserved, at 1 Deg. C and intact. These Samples received an Accutest job number of M95681. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix AQ **Batch ID:** OP23271

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M95702-6AMS, M95702-6AMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MSD for Benzo(g,h,i)perylene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene are outside control limits for sample OP23271-MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.
- Initial calibration verification standard MSF2461-ICV2461 for Acenaphthylene exceed 30% Difference.
- Only PAHs requested.
- Continuing calibration check standard MSF2443-CC2401 for Benzo[k]fluoranthene exceed 20% Difference. This check standard met MCP criteria.
- Quadratic regression is employed for compound Indeno[1,2,3-cd]pyrene, Dibenz[a,h]anthracene, Benzo[g,h,i]perylene, 2-Methylnaphthalene from Initial calibration standard MSF2401-ICC2401.

Volatiles by GC By Method EPA 504

Matrix AQ **Batch ID:** OP23261

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) M95397-26MS, M95397-26MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Volatiles by GC By Method MADEP VPH REV 1.1

Matrix AQ **Batch ID:** GAB3373

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

Matrix AQ **Batch ID:** GAB3377

- All samples were analyzed within the recommended method holding time.
- Sample(s) M95665-4MS, M95665-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Ethylbenzene, m,p-Xylene, o-Xylene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- M95665-4MS for 2,5-Dibromotoluene: Outside control limits due to possible matrix interference.

Volatiles by GC By Method SW846 8015

Matrix	AQ	Batch ID:	GBA882

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M95681-8DUP were used as the QC samples indicated.

Extractables by GC By Method MADEP EPH REV 1.1

Matrix	AQ	Batch ID:	OP23359

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Only EPH range reported.
- M95681-4 through M95681-7 for 1-Chlorooctadecane: Outside control limits due to possible matrix interference. Confirmed by refractionation.
- OP23359-BS for C11-C22 Aromatics (Unadj.): Aromatic breakthrough (naphthalene and/or 2-methylnaphthalene) exceeded 5% method limit. Results confirmed by refractionation.

Metals By Method SW846 6010B

Matrix	AQ	Batch ID:	MP16228

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M95639-3DUP, M95639-3MS, M95639-3SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Iron, Manganese are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- Only selected metals requested.

Wet Chemistry By Method ASTM516-90,02

Matrix	AQ	Batch ID:	GN33463

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M95593-3DUP, M95593-3MS were used as the QC samples for Sulfate.

Matrix	AQ	Batch ID:	GN33499

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M95708-1DUP, M95708-1MS were used as the QC samples for Sulfate.

Wet Chemistry By Method EPA 353.2

Matrix AQ **Batch ID:** GP12252

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M95681-5MS, M95681-5DUP were used as the QC samples for Nitrogen, Nitrite.
- RPD(s) for Duplicate for Nitrogen, Nitrite are outside control limits for sample GP12252-D1. RPD acceptable due to low duplicate and sample concentrations.

Matrix AQ **Batch ID:** GP12305

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M95680-2DUP, M95680-2MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.

Matrix AQ **Batch ID:** R27706

- M95681-2 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix AQ **Batch ID:** R27707

- M95681-3 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix AQ **Batch ID:** R27708

- M95681-5 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix AQ **Batch ID:** R27709

- M95681-8 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix AQ **Batch ID:** R27714

- M95681-4 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Wet Chemistry By Method SM21 2320B

Matrix AQ **Batch ID:** GN33476

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M95680-2DUP, M95680-2MS were used as the QC samples for Alkalinity, Total as CaCO3.

Wet Chemistry By Method SM21 4500 S F

Matrix AQ **Batch ID:** GN33391

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M95681-2MS, M95681-3DUP were used as the QC samples for Sulfide.

Matrix AQ **Batch ID:** GN33404

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M95680-2DUP, M95680-2MS were used as the QC samples for Sulfide.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M95681).

New England ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	M95681-1	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F51207.D	1	12/01/10	PR	11/11/10	OP23271	MSF2462
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.13	ug/l	
208-96-8	Acenaphthylene	ND	0.13	ug/l	
120-12-7	Anthracene	ND	0.13	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.063	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.13	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.063	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.13	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.13	ug/l	
218-01-9	Chrysene	ND	0.13	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.13	ug/l	
206-44-0	Fluoranthene	ND	0.13	ug/l	
86-73-7	Fluorene	ND	0.13	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.13	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.25	ug/l	
91-20-3	Naphthalene	ND	0.13	ug/l	
85-01-8	Phenanthrene	ND	0.063	ug/l	
129-00-0	Pyrene	ND	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		30-130%
321-60-8	2-Fluorobiphenyl	86%		30-130%
1718-51-0	Terphenyl-d14	84%		30-130%

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

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	M95681-1	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB61407.D	1	11/16/10	WS	n/a	n/a	GAB3373
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	88%		70-130%
615-59-8	2,5-Dibromotoluene	82%		70-130%

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

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	M95681-1	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	EPA 504 EPA 504	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62177.D	1	11/13/10	SL	11/10/10	OP23261	GYZ2643
Run #2							

	Initial Volume	Final Volume
Run #1	33.5 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.016	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	96%		59-170%
460-00-4	Bromofluorobenzene (S)	94%		59-170%

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

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	M95681-1	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP EPH REV 1.1 SW846 3510C	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2562.D	1	12/05/10	JD	11/18/10	OP23359	GBI96
Run #2							

	Initial Volume	Final Volume
Run #1	850 ml	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	120	ug/l	
	C9-C18 Aliphatics	ND	120	ug/l	
	C19-C36 Aliphatics	ND	120	ug/l	
	C11-C22 Aromatics	ND	120	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		40-140%
321-60-8	2-Fluorobiphenyl	100%		40-140%
3386-33-2	1-Chlorooctadecane	46%		40-140%
580-13-2	2-Bromonaphthalene	86%		40-140%

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

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	M95681-1F	**Date Sampled:**	11/08/10
Matrix:	AQ - Groundwater Filtered	**Date Received:**	11/08/10
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA12427
(2) Prep QC Batch: MP16228

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	M95681-2	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	SW846 8015	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GBA14236.D	1	11/10/10	AF	n/a	n/a	GBA882
Run #2							

CAS No.	Compound	Result	RL	Units	Q
74-82-8	Methane	171	0.30	ug/l	

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

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	M95681-2	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	214	5.0	mg/l	1	11/18/10	SA	SM21 2320B
Nitrogen, Nitrate [a]	0.67	0.11	mg/l	1	11/20/10 11:29	CF	EPA 353.2
Nitrogen, Nitrate + Nitrite	0.69	0.10	mg/l	1	11/20/10 11:29	CF	EPA 353.2
Nitrogen, Nitrite	0.019	0.010	mg/l	1	11/09/10 16:24	MC	EPA 353.2
Sulfate	35.4	5.0	mg/l	1	11/17/10	BF	ASTM516-90,02
Sulfide	< 2.0	2.0	mg/l	1	11/10/10	BF	SM21 4500 S F

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	M95681-2F	**Date Sampled:**	11/08/10
Matrix:	AQ - Groundwater Filtered	**Date Received:**	11/08/10
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	6830	100	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]
Manganese	1240	15	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA12427
(2) Prep QC Batch: MP16228

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	M95681-3	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	SW846 8015	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GBA14235.D	1	11/10/10	AF	n/a	n/a	GBA882
Run #2							

CAS No.	Compound	Result	RL	Units	Q
74-82-8	Methane	24.1	0.30	ug/l	

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

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	M95681-3	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	123	5.0	mg/l	1	11/18/10	SA	SM21 2320B
Nitrogen, Nitrate [a]	< 0.11	0.11	mg/l	1	11/20/10 11:30	CF	EPA 353.2
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	11/20/10 11:30	CF	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	11/09/10 16:25	MC	EPA 353.2
Sulfate	13.5	5.0	mg/l	1	11/17/10	BF	ASTM516-90,02
Sulfide	< 2.0	2.0	mg/l	1	11/10/10	BF	SM21 4500 S F

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	M95681-3F	**Date Sampled:**	11/08/10
Matrix:	AQ - Groundwater Filtered	**Date Received:**	11/08/10
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	753	100	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]
Manganese	11500	15	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA12427
(2) Prep QC Batch: MP16228

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-7R		
Lab Sample ID:	M95681-4	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F51208.D	1	12/01/10	PR	11/11/10	OP23271	MSF2462
Run #2							

	Initial Volume	Final Volume
Run #1	870 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.11	ug/l	
208-96-8	Acenaphthylene	ND	0.11	ug/l	
120-12-7	Anthracene	ND	0.11	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.057	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.057	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	ug/l	
218-01-9	Chrysene	ND	0.11	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	ug/l	
206-44-0	Fluoranthene	ND	0.11	ug/l	
86-73-7	Fluorene	ND	0.11	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.23	ug/l	
91-20-3	Naphthalene	ND	0.11	ug/l	
85-01-8	Phenanthrene	ND	0.057	ug/l	
129-00-0	Pyrene	ND	0.11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		30-130%
321-60-8	2-Fluorobiphenyl	80%		30-130%
1718-51-0	Terphenyl-d14	74%		30-130%

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

Report of Analysis

Client Sample ID:	MW-7R		
Lab Sample ID:	M95681-4	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB61408.D	1	11/17/10	WS	n/a	n/a	GAB3373
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.4	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	94%		70-130%
615-59-8	2,5-Dibromotoluene	87%		70-130%

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

Report of Analysis

Client Sample ID:	MW-7R		
Lab Sample ID:	M95681-4	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	EPA 504 EPA 504	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62178.D	1	11/13/10	SL	11/10/10	OP23261	GYZ2643
Run #2							

	Initial Volume	Final Volume
Run #1	33.8 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.016	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	116%		59-170%
460-00-4	Bromofluorobenzene (S)	109%		59-170%

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

Report of Analysis

Client Sample ID:	MW-7R		
Lab Sample ID:	M95681-4	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	SW846 8015	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GBA14234.D	1	11/10/10	AF	n/a	n/a	GBA882
Run #2							

CAS No.	Compound	Result	RL	Units	Q
74-82-8	Methane	7.94	0.30	ug/l	

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

Report of Analysis

Client Sample ID:	MW-7R		
Lab Sample ID:	M95681-4	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP EPH REV 1.1 SW846 3510C	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2563.D	1	12/05/10	JD	11/18/10	OP23359	GBI96
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	110	ug/l	
	C9-C18 Aliphatics	ND	110	ug/l	
	C19-C36 Aliphatics	ND	110	ug/l	
	C11-C22 Aromatics	ND	110	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	91%		40-140%
321-60-8	2-Fluorobiphenyl	111%		40-140%
3386-33-2	1-Chlorooctadecane	16% [a]		40-140%
580-13-2	2-Bromonaphthalene	105%		40-140%

(a) Outside control limits due to possible matrix interference. Confirmed by refractionation.

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

Report of Analysis

Client Sample ID:	MW-7R		
Lab Sample ID:	M95681-4	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	176	5.0	mg/l	1	11/18/10	SA	SM21 2320B
Nitrogen, Nitrate [a]	7.6	0.51	mg/l	1	11/20/10 11:43	CF	EPA 353.2
Nitrogen, Nitrate + Nitrite	7.7	0.50	mg/l	5	11/20/10 11:43	CF	EPA 353.2
Nitrogen, Nitrite	0.087	0.010	mg/l	1	11/09/10 16:27	MC	EPA 353.2
Sulfate	27.4	5.0	mg/l	1	11/20/10	SA	ASTM516-90,02
Sulfide	< 2.0	2.0	mg/l	1	11/11/10	BF	SM21 4500 S F

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-7R		
Lab Sample ID:	M95681-4F	**Date Sampled:**	11/08/10
Matrix:	AQ - Groundwater Filtered	**Date Received:**	11/08/10
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	< 100	100	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]
Manganese	3570	15	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA12427
(2) Prep QC Batch: MP16228

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-8R		
Lab Sample ID:	M95681-5	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F51209.D	1	12/01/10	PR	11/11/10	OP23271	MSF2462
Run #2							

	Initial Volume	Final Volume
Run #1	850 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.12	ug/l	
208-96-8	Acenaphthylene	ND	0.12	ug/l	
120-12-7	Anthracene	ND	0.12	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.059	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.12	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.059	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.12	ug/l	
218-01-9	Chrysene	ND	0.12	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	ug/l	
206-44-0	Fluoranthene	ND	0.12	ug/l	
86-73-7	Fluorene	ND	0.12	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.12	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.24	ug/l	
91-20-3	Naphthalene	ND	0.12	ug/l	
85-01-8	Phenanthrene	ND	0.059	ug/l	
129-00-0	Pyrene	ND	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		30-130%
321-60-8	2-Fluorobiphenyl	78%		30-130%
1718-51-0	Terphenyl-d14	77%		30-130%

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

Report of Analysis

Client Sample ID:	MW-8R		
Lab Sample ID:	M95681-5	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB61409.D	1	11/17/10	WS	n/a	n/a	GAB3373
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	21.2	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	102%		70-130%
615-59-8	2,5-Dibromotoluene	95%		70-130%

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

Report of Analysis

Client Sample ID:	MW-8R		
Lab Sample ID:	M95681-5	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	EPA 504 EPA 504	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62179.D	1	11/13/10	SL	11/10/10	OP23261	GYZ2643
Run #2							

	Initial Volume	Final Volume
Run #1	33.0 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.016	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	115%		59-170%
460-00-4	Bromofluorobenzene (S)	88%		59-170%

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

Report of Analysis

Client Sample ID:	MW-8R		
Lab Sample ID:	M95681-5	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	SW846 8015	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GBA14233.D	1	11/10/10	AF	n/a	n/a	GBA882
Run #2							

CAS No.	Compound	Result	RL	Units	Q
74-82-8	Methane	17.8	0.30	ug/l	

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

Report of Analysis

Client Sample ID:	MW-8R		
Lab Sample ID:	M95681-5	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP EPH REV 1.1 SW846 3510C	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2564.D	1	12/05/10	JD	11/18/10	OP23359	GBI96
Run #2							

	Initial Volume	Final Volume
Run #1	890 ml	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	110	ug/l	
	C9-C18 Aliphatics	ND	110	ug/l	
	C19-C36 Aliphatics	ND	110	ug/l	
	C11-C22 Aromatics	ND	110	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	66%		40-140%
321-60-8	2-Fluorobiphenyl	104%		40-140%
3386-33-2	1-Chlorooctadecane	27% [a]		40-140%
580-13-2	2-Bromonaphthalene	92%		40-140%

(a) Outside control limits due to possible matrix interference. Confirmed by refractionation.

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

Report of Analysis

Client Sample ID:	MW-8R		
Lab Sample ID:	M95681-5	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	464	5.0	mg/l	1	11/18/10	SA	SM21 2320B
Nitrogen, Nitrate [a]	0.52	0.11	mg/l	1	11/20/10 11:35	CF	EPA 353.2
Nitrogen, Nitrate + Nitrite	0.53	0.10	mg/l	1	11/20/10 11:35	CF	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	11/09/10 16:22	MC	EPA 353.2
Sulfate	64.8	10	mg/l	2	11/20/10	SA	ASTM516-90,02
Sulfide	< 2.0	2.0	mg/l	1	11/11/10	BF	SM21 4500 S F

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-8R		
Lab Sample ID:	M95681-5F	**Date Sampled:**	11/08/10
Matrix:	AQ - Groundwater Filtered	**Date Received:**	11/08/10
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	< 100	100	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]
Manganese	11300	15	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA12427
(2) Prep QC Batch: MP16228

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	M95681-6	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F51210.D	1	12/01/10	PR	11/11/10	OP23271	MSF2462
Run #2							

	Initial Volume	Final Volume
Run #1	820 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.12	ug/l	
208-96-8	Acenaphthylene	ND	0.12	ug/l	
120-12-7	Anthracene	ND	0.12	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.061	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.12	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.061	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.12	ug/l	
218-01-9	Chrysene	ND	0.12	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	ug/l	
206-44-0	Fluoranthene	ND	0.12	ug/l	
86-73-7	Fluorene	ND	0.12	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.12	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.24	ug/l	
91-20-3	Naphthalene	ND	0.12	ug/l	
85-01-8	Phenanthrene	ND	0.061	ug/l	
129-00-0	Pyrene	ND	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		30-130%
321-60-8	2-Fluorobiphenyl	78%		30-130%
1718-51-0	Terphenyl-d14	83%		30-130%

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

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	M95681-6	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB61466.D	1	11/19/10	WS	n/a	n/a	GAB3377
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	6.3	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	90%		70-130%
615-59-8	2,5-Dibromotoluene	83%		70-130%

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

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	M95681-6	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	EPA 504 EPA 504	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62180.D	1	11/13/10	SL	11/10/10	OP23261	GYZ2643
Run #2							

	Initial Volume	Final Volume
Run #1	32.2 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.016	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	86%		59-170%
460-00-4	Bromofluorobenzene (S)	76%		59-170%

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

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	M95681-6	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP EPH REV 1.1 SW846 3510C	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2565.D	1	12/05/10	JD	11/18/10	OP23359	GBI96
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	110	ug/l	
	C9-C18 Aliphatics	ND	110	ug/l	
	C19-C36 Aliphatics	ND	110	ug/l	
	C11-C22 Aromatics	ND	110	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		40-140%
321-60-8	2-Fluorobiphenyl	99%		40-140%
3386-33-2	1-Chlorooctadecane	33% [a]		40-140%
580-13-2	2-Bromonaphthalene	84%		40-140%

(a) Outside control limits due to possible matrix interference. Confirmed by refractionation.

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

Report of Analysis

Client Sample ID:	MW-11		
Lab Sample ID:	M95681-6F	**Date Sampled:**	11/08/10
Matrix:	AQ - Groundwater Filtered	**Date Received:**	11/08/10
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA12427
(2) Prep QC Batch: MP16228

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	M95681-7	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F51211.D	1	12/01/10	PR	11/11/10	OP23271	MSF2462
Run #2							

	Initial Volume	Final Volume
Run #1	850 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.12	ug/l	
208-96-8	Acenaphthylene	ND	0.12	ug/l	
120-12-7	Anthracene	ND	0.12	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.059	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.12	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.059	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.12	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.12	ug/l	
218-01-9	Chrysene	ND	0.12	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.12	ug/l	
206-44-0	Fluoranthene	ND	0.12	ug/l	
86-73-7	Fluorene	ND	0.12	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.12	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.24	ug/l	
91-20-3	Naphthalene	ND	0.12	ug/l	
85-01-8	Phenanthrene	ND	0.059	ug/l	
129-00-0	Pyrene	ND	0.12	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		30-130%
321-60-8	2-Fluorobiphenyl	73%		30-130%
1718-51-0	Terphenyl-d14	70%		30-130%

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

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	M95681-7	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB61467.D	1	11/19/10	WS	n/a	n/a	GAB3377
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	2.2	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	12.3	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	55.2	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	94%		70-130%
615-59-8	2,5-Dibromotoluene	87%		70-130%

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

Report of Analysis

Client Sample ID: MW-12
Lab Sample ID: M95681-7
Matrix: AQ - Ground Water
Method: EPA 504 EPA 504
Project: Hess:#21224 468 West St Amherst MA

Date Sampled: 11/08/10
Date Received: 11/08/10
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ62181.D	1	11/13/10	SL	11/10/10	OP23261	GYZ2643
Run #2							

	Initial Volume	Final Volume
Run #1	33.4 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
106-93-4	1,2-Dibromoethane	ND	0.016	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	Bromofluorobenzene (S)	95%		59-170%
460-00-4	Bromofluorobenzene (S)	86%		59-170%

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

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	M95681-7	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP EPH REV 1.1 SW846 3510C	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BI2566.D	1	12/05/10	JD	11/18/10	OP23359	GBI96
Run #2							

	Initial Volume	Final Volume
Run #1	880 ml	2.0 ml
Run #2		

Extractable TPHC Ranges

CAS No.	Compound	Result	RL	Units	Q
	C11-C22 Aromatics (Unadj.)	ND	110	ug/l	
	C9-C18 Aliphatics	ND	110	ug/l	
	C19-C36 Aliphatics	ND	110	ug/l	
	C11-C22 Aromatics	ND	110	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		40-140%
321-60-8	2-Fluorobiphenyl	119%		40-140%
3386-33-2	1-Chlorooctadecane	37% [a]		40-140%
580-13-2	2-Bromonaphthalene	108%		40-140%

(a) Outside control limits due to possible matrix interference. Confirmed by refractionation.

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

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	M95681-7F	**Date Sampled:**	11/08/10
Matrix:	AQ - Groundwater Filtered	**Date Received:**	11/08/10
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA12427
(2) Prep QC Batch: MP16228

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	M95681-8	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB61468.D	1	11/19/10	WS	n/a	n/a	GAB3377
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	24.6	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	437	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	13.3	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	724	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	292	50	ug/l	
	C9- C10 Aromatics (Unadj.)	161	50	ug/l	
	C5- C8 Aliphatics	286	50	ug/l	
	C9- C12 Aliphatics	92.4	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	97%		70-130%
615-59-8	2,5-Dibromotoluene	90%		70-130%

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

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	M95681-8	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	SW846 8015	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GBA14231.D	1	11/10/10	AF	n/a	n/a	GBA882
Run #2							

CAS No.	Compound	Result	RL	Units	Q
74-82-8	Methane	310	0.30	ug/l	

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

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	M95681-8	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	317	5.0	mg/l	1	11/18/10	SA	SM21 2320B
Nitrogen, Nitrate [a]	0.30	0.11	mg/l	1	11/20/10 11:36	CF	EPA 353.2
Nitrogen, Nitrate + Nitrite	0.31	0.10	mg/l	1	11/20/10 11:36	CF	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	11/09/10 16:30	MC	EPA 353.2
Sulfate	62.2	25	mg/l	5	11/20/10	SA	ASTM516-90,02
Sulfide	< 2.0	2.0	mg/l	1	11/11/10	BF	SM21 4500 S F

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	M95681-8F	**Date Sampled:**	11/08/10
Matrix:	AQ - Groundwater Filtered	**Date Received:**	11/08/10
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Iron	7080	100	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]
Lead	< 5.0	5.0	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]
Manganese	5070	15	ug/l	1	11/10/10	11/11/10	DA	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA12427
(2) Prep QC Batch: MP16228

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-14		
Lab Sample ID:	M95681-9	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB61469.D	1	11/19/10	WS	n/a	n/a	GAB3377
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	86%		70-130%
615-59-8	2,5-Dibromotoluene	80%		70-130%

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

Report of Analysis

Client Sample ID:	MW-19		
Lab Sample ID:	M95681-10	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB61470.D	1	11/19/10	WS	n/a	n/a	GAB3377
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	5.2	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	87%		70-130%
615-59-8	2,5-Dibromotoluene	82%		70-130%

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

Report of Analysis

Client Sample ID:	FD-102		
Lab Sample ID:	M95681-11	**Date Sampled:**	11/08/10
Matrix:	AQ - Ground Water	**Date Received:**	11/08/10
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB61471.D	1	11/19/10	WS	n/a	n/a	GAB3377
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	84%		70-130%
615-59-8	2,5-Dibromotoluene	80%		70-130%

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

New England ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- EPH Form
- VPH Form

Parameter Certifications

Job Number: M95681
Account: ENVTRAC EnviroTrac
Project: Hess:#21224 468 West St Amherst MA

The following parameters included in this report are certified by the state of MA.

Parameter	CAS#	Method	Mat	Certification Status
1,2-Dibromoethane	106-93-4	**EPA 504**	AQ	Accutest is certified for this parameter.
Alkalinity, Total as CaCO3		**SM21 2320B**	AQ	Accutest is certified for this parameter.
Nitrogen, Nitrate	14797-55-8	**EPA 353.2**	AQ	Accutest is certified for this parameter.
Nitrogen, Nitrate + Nitrite		**EPA 353.2**	AQ	Accutest is certified for this parameter.
Sulfate	14808-79-8	**ASTM516-90,02**	AQ	Accutest is certified for this parameter.

CHAIN OF CUSTODY

ACCUTEST Laboratories

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: M95681
ACCUTEST QUOTE #:

CLIENT INFORMATION
NAME: EnviroTrac Ltd.
ADDRESS: 2 Merchant St. suite2
CITY: Sharon STATE: MA ZIP: 02067
SEND REPORT TO: Patrick Corcoran
PHONE #: 781-793-0074

FACILITY INFORMATION
PROJECT NAME: Hess 21224
LOCATION: 468 West St. Amherst, MA
PROJECT NO.:
FAX #: 781-793-7877

MATRIX CODES
DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	ANALYTICAL: VPH	EDB	EPH	SIM PAHs	Dissolved Pb+Mn	Dissolved Lead	Nitrate nitrogen	Nitrite N. nitrogen	Sulfide + Sulfide	Total Alkalinity as CaCO3	Methane	LAB USE ONLY
-1	MW-1	11/8/10	330p	RS/DT	GW	9	X		X		X	X	X	X	X		X						
-2F	MW-4		1000			5		X	X		X					X		X	X	X	X	X	
-3F	MW-5		955a			5		X	X		X					X		X	X	X	X	X	
-4F	MW-7R		1057a			14		X	X		X	X	X	X	X	X	X	X	X	X	X	X	
-5F	MW-8R		200p			14		X	X		X	X	X	X	X	X	X	X	X	X	X	X	
-6F	MW-12		1247p			9			X		X	X	X	X	X		X						
-7F	MW-13		1140a			9			X		X	X	X	X	X		X						
-8F	MW-13		1245p			7		X	X		X	X				X		X	X	X	X	X	
-9	MW-14		130p			2						X											
-10	MW-19		205p			2						X											LGA/IIA/SAr
-11	FD-102		1100a			2						X											3N3

DATA TURNAROUND INFORMATION
- [x] 14 DAYS STANDARD — APPROVED BY:
- [ ] 7 DAYS *RUSH*
- [ ] 48 HOUR EMERGENCY
- [ ] OTHER

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION
- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [ ] OTHER (SPECIFY) MCP Report

COMMENTS/REMARKS
- Bill EnviroTrac direct station #21224
- Dissolved Metals samples field filtered prior to preservation
- Must meet ~~RGP~~ GW-1 Standards

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:
1.	11/8/10	1. E1	2.	11/8/10 17:10	2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE	ON ICE / TEMPERATURE
5.		5.		☐	☑ 0.4, 1.0 °C

M95681: Chain of Custody
Page 1 of 2

MCP Analytical Services Request Form

Attach to Chain-of-Custody Form for Data Set

Client Name: EnviroTrac Ltd.	Project Name: Hess # 21224 Amherst
Project Location: 468 West Street, Amherst	MCP RTN[1]: 1-0786

Applicable Samples: All

General Questions:

Is MCP Presumptive Certainty status being requested for the referenced data set*? * *Laboratory must use approved MCP Analytical Protocols*	(Yes[2]) No
Were all samples that comprise this data set collected in appropriate containers as specified in WSC-CAM-VII A, Appendix VII A-1 for requested analytes?	(Yes) No
Were all samples preserved as specified in WSC-CAM-VII A, Appendix VII A-1 for requested analytes?	(Yes) No
Were all samples placed in a cooler with ice?	(Yes) No
Are any of the soil/sediment samples in the data set preserved by freezing or do any require freezing (< -7°C) by the laboratory (within 48 hours of the time of collection)?	Yes (No)
Should the laboratory report the standard CAM analyte list for the requested analytical protocols?	(Yes) No[3]
Should protocol-specific CAM reporting limits be used for all requested aqueous samples? ***If lower reporting limits are required, please specify.*** GW-1/GW-2/GW-3 Standards	(Yes) No
Should protocol-specific CAM reporting limits be used for all requested soil/sediment samples? ***If lower reporting limits are required, please specify.*** N/A	Yes No
Are Matrix Spikes (MS) or MS Duplicates required for this data set?	Yes[4] (No)
Has adequate sample volume been provided for the MS/MSD?	Yes No
Have the samples which require MS or MS Duplicate analysis been identified?	Yes No
Are any of the samples in the data set characterized as "drinking water" as described in WSC-CAM-VII A, Section 2.5? No	
If **YES,** samples identified as "drinking water" must be analyzed using MCP Analytical Methods and require the reporting of Tentatively Identified Compounds (TICs), if GC/MS analyses requested.	Yes No
Are Field Duplicate Samples provided and identified for all "drinking water" samples*? **** Analysis required only if a target analyte is detected above the RL in the original sample.***	Yes No
Are Trip Blanks provided and identified for all "drinking water" samples submitted for VOCs and VPH *? **** Analysis required only if a target analyte is detected above the RL in any of the associated samples.***	Yes No
Is any alternative, supplemental or non-routine QC required for this data set? *(Please specify)*	Yes[5] (No)

1. MCP Release Tracking Number, as applicable.
2. Laboratory must use approved MCP Analytical Methods.
3. Attach modified analyte list (may include non-routine analytes).
4. Samples that require MS and/or MSD analysis should be designated on the COC. **Data user responsible for providing the laboratory with adequate sample volume to prepare MS/MSD samples.**
5. Attached description of alternative, supplemental or non-routine QC that is required.

Signature [signature] Date 11/8/10

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	M95681
Project Location:	Hess:#21224 468 West St Amherst MA	MADEP RTN	None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
M95681-1,M95681-10,M95681-11,M95681-1F,M95681-2,M95681-2F,M95681-3,M95681-3F
M95681-4,M95681-4F,M95681-5,M95681-5F,M95681-6,M95681-6F,M95681-7,M95681-7F, M95681-9
M95681-8,M95681-8F
Test method: Refer to case narrative.

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

CAM Protocol (check all that apply below):

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

Affirmative Responses to Questions A Through F are required for "Presumptive Certainty status

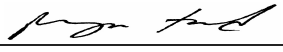
A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No
B	Were the analytical method(s) and all associated QC requirements specified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

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

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	☑ Yes	☐ No [1]
	Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.		
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes	☑ No [1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes	☑ No [1]

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

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

Signature:  **Position:** **Laboratory Director**

Printed Name: **Reza Tand** **Date:** **12/16/2010**

MADEP EPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservative	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 1.0 deg C.			
Extraction Method	**SW846 3510C**						

Method for Ranges: MADEP EPH REV 1.1
Method for Targets: MADEP EPH REV 1.1
EPH Surrogate Stds. Aliphatic: 1-Chlorooctadecane
Aromatic: o-Terphenyl
EPH Fractionation Surrogate Standards. 2-Fluorobiphenyl
2-Bromonaphthalene

Client ID: MW-1 **Lab ID:** M95681-1
Date Collected: 11/8/2010 **Date Received:** 11/8/2010

Date Extracted: 11/18/2010
First Date Run: 12/5/2010
Last Date Run: N/A
% Solids: N/A
Low Dilution: 1
High Dilution: N/A

Unadjusted Ranges	CAS #	Units	Result	RDL	Q
C11-C22 Aromatics (Unadj.)		ug/l	ND [A]	120	

Adjusted Ranges			
C9-C18 Aliphatics	ug/l	ND [A]	120
C19-C36 Aliphatics	ug/l	ND [A]	120
C11-C22 Aromatics	ug/l	ND [C]	120

Surrogate Recoveries			Acceptance Range
1-Chlorooctadecane	%	46	40-140 %
o-Terphenyl	%	82	40-140 %
2-Fluorobiphenyl	%	100	40-140 %
2-Bromonaphthalene	%	86	40-140 %

Footnotes

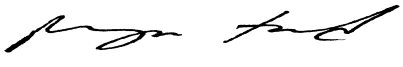
A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the EPH Method followed? ☑ Yes ☐ No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved? ☑ Yes ☐ No- Details Attatched
Were any significant modifications made to the EPH method, as specified in Sect. 11.3? ☑ No ☐ Yes- Details Attatched

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

Signature 
Postition Laboratory Director

Printed Name Reza Tand
Date 12/15/2010

MADEP EPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservative	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 1.0 deg C.			
Extraction Method	**SW846 3510C**						

Method for Ranges: MADEP EPH REV 1.1
Method for Targets: MADEP EPH REV 1.1
EPH Surrogate Stds. Aliphatic: 1-Chlorooctadecane
Aromatic: o-Terphenyl
EPH Fractionation Surrogate Standards. 2-Fluorobiphenyl
2-Bromonaphthalene

Client ID: MW-7R **Lab ID:** M95681-4
Date Collected: 11/8/2010 **Date Received:** 11/8/2010

Date Extracted:	First Date Run:	Last Date Run:
11/18/2010	12/5/2010	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Units	Result	RDL	Q
C11-C22 Aromatics (Unadj.)		ug/l	ND [A]	110	

Adjusted Ranges			
C9-C18 Aliphatics	ug/l	ND [A]	110
C19-C36 Aliphatics	ug/l	ND [A]	110
C11-C22 Aromatics	ug/l	ND [C]	110

Surrogate Recoveries			Acceptance Range
1-Chlorooctadecane	%	16 [E]	40-140 %
o-Terphenyl	%	91	40-140 %
2-Fluorobiphenyl	%	111	40-140 %
2-Bromonaphthalene	%	105	40-140 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

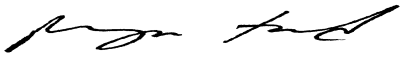
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes

E Outside control limits due to possible matrix interference. Confirmed by refractionation.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the EPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☐ Yes ☑	No- Details Attatched
Were any significant modifications made to the EPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** Laboratory Director

Printed Name Reza Tand **Date** 12/15/2010

MADEP EPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservative	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 1.0 deg C.			
Extraction Method	**SW846 3510C**						

Method for Ranges: MADEP EPH REV 1.1
Method for Targets: MADEP EPH REV 1.1
EPH Surrogate Stds. Aliphatic: 1-Chlorooctadecane
Aromatic: o-Terphenyl
EPH Fractionation Surrogate Standards. 2-Fluorobiphenyl
2-Bromonaphthalene

Client ID: MW-8R **Lab ID:** M95681-5
Date Collected: 11/8/2010 **Date Received:** 11/8/2010

Date Extracted:	First Date Run:	Last Date Run:
11/18/2010	12/5/2010	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Units	Result	RDL	Q
C11-C22 Aromatics (Unadj.)		ug/l	ND [A]	110	

Adjusted Ranges			
C9-C18 Aliphatics	ug/l	ND [A]	110
C19-C36 Aliphatics	ug/l	ND [A]	110
C11-C22 Aromatics	ug/l	ND [C]	110

Surrogate Recoveries			Acceptance Range
1-Chlorooctadecane	%	27 [E]	40-140 %
o-Terphenyl	%	66	40-140 %
2-Fluorobiphenyl	%	104	40-140 %
2-Bromonaphthalene	%	92	40-140 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

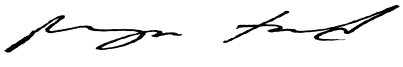
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes

E Outside control limits due to possible matrix interference. Confirmed by refractionation.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the EPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☐ Yes ☑	No- Details Attatched
Were any significant modifications made to the EPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** Laboratory Director

Printed Name Reza Tand **Date** 12/15/2010

MADEP EPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservative	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 1.0 deg C.			
Extraction Method	**SW846 3510C**						

Method for Ranges: MADEP EPH REV 1.1
Method for Targets: MADEP EPH REV 1.1
EPH Surrogate Stds. Aliphatic: 1-Chlorooctadecane
Aromatic: o-Terphenyl
EPH Fractionation Surrogate Standards. 2-Fluorobiphenyl
2-Bromonaphthalene

Client ID: MW-11 **Lab ID:** M95681-6
Date Collected: 11/8/2010 **Date Received:** 11/8/2010

Date Extracted:	First Date Run:	Last Date Run:
11/18/2010	12/5/2010	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Units	Result	RDL	Q
C11-C22 Aromatics (Unadj.)		ug/l	ND [A]	110	

Adjusted Ranges			
C9-C18 Aliphatics	ug/l	ND [A]	110
C19-C36 Aliphatics	ug/l	ND [A]	110
C11-C22 Aromatics	ug/l	ND [C]	110

Surrogate Recoveries			Acceptance Range
1-Chlorooctadecane	%	33 [E]	40-140 %
o-Terphenyl	%	73	40-140 %
2-Fluorobiphenyl	%	99	40-140 %
2-Bromonaphthalene	%	84	40-140 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

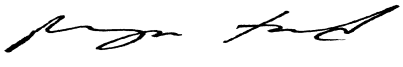
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes

E Outside control limits due to possible matrix interference. Confirmed by refractionation.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the EPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☐ Yes ☑	No- Details Attatched
Were any significant modifications made to the EPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** Laboratory Director

Printed Name Reza Tand **Date** 12/15/2010

MADEP EPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservative	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 1.0 deg C.			
Extraction Method	**SW846 3510C**						

Method for Ranges: MADEP EPH REV 1.1
Method for Targets: MADEP EPH REV 1.1
EPH Surrogate Stds. Aliphatic: 1-Chlorooctadecane
Aromatic: o-Terphenyl
EPH Fractionation Surrogate Standards. 2-Fluorobiphenyl
2-Bromonaphthalene

Client ID: MW-12 **Lab ID:** M95681-7
Date Collected: 11/8/2010 **Date Received:** 11/8/2010

Date Extracted:	First Date Run:	Last Date Run:
11/18/2010	12/5/2010	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Units	Result	RDL	Q
C11-C22 Aromatics (Unadj.)		ug/l	ND [A]	110	

Adjusted Ranges			
C9-C18 Aliphatics	ug/l	ND [A]	110
C19-C36 Aliphatics	ug/l	ND [A]	110
C11-C22 Aromatics	ug/l	ND [C]	110

Surrogate Recoveries			Acceptance Range
1-Chlorooctadecane	%	37 [E]	40-140 %
o-Terphenyl	%	82	40-140 %
2-Fluorobiphenyl	%	119	40-140 %
2-Bromonaphthalene	%	108	40-140 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

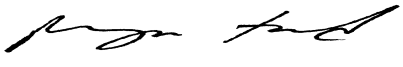
C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C11-C22 Aromatic Hydrocarbons exclude the concentration of Target PAH Analytes

E Outside control limits due to possible matrix interference. Confirmed by refractionation.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the EPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☐ Yes ☑	No- Details Attatched
Were any significant modifications made to the EPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** Laboratory Director

Printed Name Reza Tand **Date** 12/15/2010

MADEP VPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservatives	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 1.0 deg C.			
Methanol	**N/A**						

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: MW-1 **Lab ID:** M95681-1
Date Collected: 11/8/2010 **Date Received:** 11/8/2010

Date Extracted:	First Date Run:	Last Date Run:
N/A	11/16/2010	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND [B]	50	
C9- C12 Aliphatics		N/A	ug/l	ND [D]	50	

Surrogate Recoveries		Acceptance Range
FID:2,5-Dibromotoluene	88 %	70-130 %
PID:2,5-Dibromotoluene	82 %	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

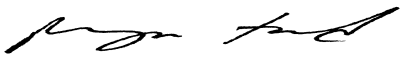
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☑ Yes ☐	No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** **Laboratory Director**

Printed Name **Reza Tand** **Date** **12/15/2010**

MADEP VPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservatives	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 1.0 deg C.			
Methanol	**N/A**						

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: MW-7R
Lab ID: M95681-4
Date Collected: 11/8/2010
Date Received: 11/8/2010

Date Extracted:	First Date Run:	Last Date Run:
N/A	11/17/2010	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	4.4	1	
Benzene	71-43-2	C5-C8	ug/l	ND	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND [B]	50	
C9- C12 Aliphatics		N/A	ug/l	ND [D]	50	

Surrogate Recoveries		Acceptance Range
FID:2,5-Dibromotoluene	94 %	70-130 %
PID:2,5-Dibromotoluene	87 %	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

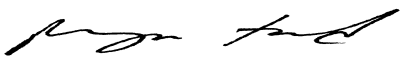
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☑ Yes ☐	No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** **Laboratory Director**

Printed Name **Reza Tand** **Date** **12/15/2010**

MADEP VPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservatives	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 1.0 deg C.			
Methanol	**N/A**						

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: MW-8R
Lab ID: M95681-5
Date Collected: 11/8/2010
Date Received: 11/8/2010

Date Extracted:	First Date Run:	Last Date Run:
N/A	11/17/2010	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	21.2	1	
Benzene	71-43-2	C5-C8	ug/l	ND	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND [B]	50	
C9- C12 Aliphatics		N/A	ug/l	ND [D]	50	

Surrogate Recoveries		Result	Acceptance Range
FID:2,5-Dibromotoluene	%	102	70-130 %
PID:2,5-Dibromotoluene	%	95	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☑ Yes ☐	No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature _____ **Postition** **Laboratory Director**

Printed Name **Reza Tand** **Date** **12/15/2010**

MADEP VPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservatives	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 1.0 deg C.			
Methanol	**N/A**						

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: MW-11 **Lab ID:** M95681-6
Date Collected: 11/8/2010 **Date Received:** 11/8/2010

Date Extracted:	First Date Run:	Last Date Run:
N/A	11/19/2010	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	6.3	1	
Benzene	71-43-2	C5-C8	ug/l	ND	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND [B]	50	
C9- C12 Aliphatics		N/A	ug/l	ND [D]	50	

Surrogate Recoveries		Acceptance Range
FID:2,5-Dibromotoluene	90 %	70-130 %
PID:2,5-Dibromotoluene	83 %	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

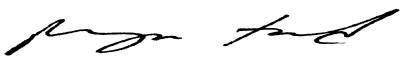
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☑ Yes ☐	No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** **Laboratory Director**

Printed Name **Reza Tand** **Date** **12/15/2010**

MADEP VPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservatives	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 1.0 deg C.			
Methanol	**N/A**						

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: MW-12 **Lab ID:** M95681-7
Date Collected: 11/8/2010 **Date Received:** 11/8/2010

Date Extracted:	First Date Run:	Last Date Run:
N/A	11/19/2010	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	55.2 [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	12.3	1	
Benzene	71-43-2	C5-C8	ug/l	2.2	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND [B]	50	
C9- C12 Aliphatics		N/A	ug/l	ND [D]	50	

Surrogate Recoveries		Acceptance Range
FID:2,5-Dibromotoluene	94 %	70-130 %
PID:2,5-Dibromotoluene	87 %	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☑ Yes ☐	No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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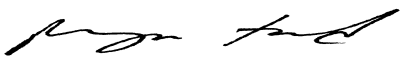
Signature  **Postition** **Laboratory Director**

Printed Name **Reza Tand** **Date** **12/15/2010**

MADEP VPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservatives	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 1.0 deg C.			
Methanol	**N/A**						

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: MW-13 **Lab ID:** M95681-8
Date Collected: 11/8/2010 **Date Received:** 11/8/2010

Date Extracted:	First Date Run:	Last Date Run:
N/A	11/19/2010	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	724 [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	161 [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	292 [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	24.6	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	437	1	
Benzene	71-43-2	C5-C8	ug/l	ND	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	13.3	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	286 [B]	50	
C9- C12 Aliphatics		N/A	ug/l	92.4 [D]	50	

Surrogate Recoveries			Acceptance Range
FID:2,5-Dibromotoluene	%	97	70-130 %
PID:2,5-Dibromotoluene	%	90	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☑ Yes ☐	No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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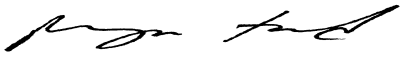
Signature  **Postition** Laboratory Director

Printed Name Reza Tand **Date** 12/15/2010

MADEP VPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservatives	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 1.0 deg C.			
Methanol	**N/A**						

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: MW-14 **Lab ID:** M95681-9
Date Collected: 11/8/2010 **Date Received:** 11/8/2010

Date Extracted:	First Date Run:	Last Date Run:
N/A	11/19/2010	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND [B]	50	
C9- C12 Aliphatics		N/A	ug/l	ND [D]	50	

Surrogate Recoveries		Result	Acceptance Range
FID:2,5-Dibromotoluene	%	86	70-130 %
PID:2,5-Dibromotoluene	%	80	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

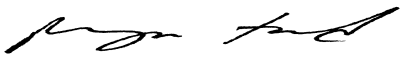
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☑ Yes ☐ No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved? ☑ Yes ☐ No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☑ No ☐ Yes- Details Attatched

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

Signature  **Postition** Laboratory Director

Printed Name Reza Tand **Date** 12/15/2010

MADEP VPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservatives	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 1.0 deg C.			
Methanol	**N/A**						

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: MW-19 **Lab ID:** M95681-10
Date Collected: 11/8/2010 **Date Received:** 11/8/2010

Date Extracted:	First Date Run:	Last Date Run:
N/A	11/19/2010	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	5.2	1	
Benzene	71-43-2	C5-C8	ug/l	ND	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND [B]	50	
C9- C12 Aliphatics		N/A	ug/l	ND [D]	50	

Surrogate Recoveries		Acceptance Range
FID:2,5-Dibromotoluene	87 %	70-130 %
PID:2,5-Dibromotoluene	82 %	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

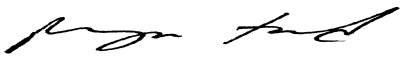
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☑ Yes ☐	No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** **Laboratory Director**

Printed Name **Reza Tand** **Date** **12/15/2010**

MADEP VPH FORM

Matrix	**Aqueous**	☑	**Soil**	☐	**Sediment**	☐	**Other**	☐
Containers	**Satisfactory**	☑	**Broken**	☐	**Leaking**	☐		
Aqueous Preservatives	**N/A**	☐	**pH <= 2**	☑	**pH > 2**	☐		
Temperature	**Received on Ice**	☐	**Received at 4 Deg. C**	☐	**Other**	☑	Rec'd at 1.0 deg C.	
Methanol	**N/A**							

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: FD-102 **Lab ID:** M95681-11
Date Collected: 11/8/2010 **Date Received:** 11/8/2010

Date Extracted:	First Date Run:	Last Date Run:
N/A	11/19/2010	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
Target Analytes						
Naphthalene	91-20-3	N/A	ug/l	ND	3	
m,p-Xylene		C9-C12	ug/l	ND	2	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	2	
Adjusted Ranges						
C9- C12 Aliphatics		N/A	ug/l	ND [D]	50	
C5- C8 Aliphatics		N/A	ug/l	ND [B]	50	

Surrogate Recoveries			Acceptance Range
FID:2,5-Dibromotoluene	%	84	70-130 %
PID:2,5-Dibromotoluene	%	80	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

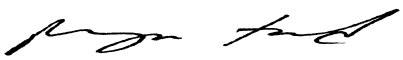
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

D Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☑ Yes ☐	No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** **Laboratory Director**

Printed Name **Reza Tand** **Date** **12/15/2010**

New England ACCUTEST LABORATORIES

02/22/11

Technical Report for

EnviroTrac

Hess:#21224 468 West St Amherst MA

Accutest Job Number: M97632

Sampling Date: 02/09/11

Report to:

EnviroTrac

patrickc@envirotrac.com

ATTN: Patrick Corcoran

Total number of pages in report: **27**

ACCREDITED IN ACCORDANCE WITH nelac

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

Reza Tand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

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Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

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Sample Summary

EnviroTrac

Job No: M97632

Hess:#21224 468 West St Amherst MA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
M97632-1	02/09/11	09:30	RPDT	02/09/11	AQ	Ground Water	MW-1
M97632-2	02/09/11	10:45	RPDT	02/09/11	AQ	Groundwater Filtered	MW-4
M97632-3	02/09/11	10:48	RPDT	02/09/11	AQ	Ground Water	MW-8R
M97632-4	02/09/11	11:53	RPDT	02/09/11	AQ	Ground Water	MW-13
M97632-4F	02/09/11	11:53	RPDT	02/09/11	AQ	Groundwater Filtered	MW-13
M97632-5	02/09/11	12:45	RPDT	02/09/11	AQ	Ground Water	MW-14
M97632-6	02/09/11	11:45	RPDT	02/09/11	AQ	Ground Water	MW-12
M97632-7	02/09/11	14:50	RPDT	02/09/11	AQ	Ground Water	FD-102

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	EnviroTrac	**Job No**	M97632
Site:	Hess:#21224 468 West St Amherst MA	**Report Date**	2/22/2011 10:20:25 AM

7 Sample(s) were collected on 02/09/2011 and were received at Accutest on 02/09/2011 properly preserved, at 0.5 Deg. C and intact. These Samples received an Accutest job number of M97632. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC By Method MADEP VPH REV 1.1

Matrix AQ **Batch ID:** GBD2000

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

Metals By Method SW846 6010C

Matrix AQ **Batch ID:** MP16613

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M97660-4FDUP, M97660-4FMS, M97660-4FSDL were used as the QC samples for metals.
- Only Manganese requested.

Wet Chemistry By Method ASTM516-90,02

Matrix AQ **Batch ID:** GN34128

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M97632-2DUP, M97632-2MS were used as the QC samples for Sulfate.

Wet Chemistry By Method EPA 353.2

Matrix AQ **Batch ID:** GP12619

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M97632-2DUP, M97632-2MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.

Matrix AQ **Batch ID:** R28116

- M97632-2 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix AQ **Batch ID:** R28117

- M97632-4F for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Wet Chemistry By Method SM 21 4500 NO2 B

Matrix	AQ	Batch ID:	GP12612

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M97630-3DUP, M97630-3MS were used as the QC samples for Nitrogen, Nitrite.

Wet Chemistry By Method SM21 2320B

Matrix	AQ	Batch ID:	GN34143

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M97632-4FDUP, M97632-4FMS were used as the QC samples for Alkalinity, Total as CaCO3.

Matrix	AQ	Batch ID:	GN34149

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M97706-1DUP, M97706-1MS were used as the QC samples for Alkalinity, Total as CaCO3.

Wet Chemistry By Method SM21 3500FE B

Matrix	AQ	Batch ID:	GN34098

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) M97632-2DUP were used as the QC samples for Iron, Ferrous.
- M97632-2 for Iron, Ferrous: Analysis is field recommended as per method.
- M97632-4F for Iron, Ferrous: Analysis is field recommended as per method.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M97632).

New England ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1		
Lab Sample ID:	M97632-1	**Date Sampled:**	02/09/11
Matrix:	AQ - Ground Water	**Date Received:**	02/09/11
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD42322.D	1	02/12/11	AF	n/a	n/a	GBD2000
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	66.5	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	58.0	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	65.7	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	74%		70-130%
615-59-8	2,5-Dibromotoluene	76%		70-130%

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

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	M97632-2	**Date Sampled:**	02/09/11
Matrix:	AQ - Groundwater Filtered	**Date Received:**	02/09/11
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	1500	15	ug/l	1	02/11/11	02/14/11	DA	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA12682
(2) Prep QC Batch: MP16613

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	M97632-2	**Date Sampled:**	02/09/11
Matrix:	AQ - Groundwater Filtered	**Date Received:**	02/09/11
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	165	5.0	mg/l	1	02/16/11	CF	SM21 2320B
Iron, Ferrous [a]	1.7	0.10	mg/l	1	02/09/11 17:35	CF	SM21 3500FE B
Nitrogen, Nitrate [b]	0.53	0.11	mg/l	1	02/14/11 12:17	CF	EPA 353.2
Nitrogen, Nitrate + Nitrite	0.54	0.10	mg/l	1	02/14/11 12:17	CF	EPA 353.2
Nitrogen, Nitrite	0.012	0.010	mg/l	1	02/10/11 17:45	CF	SM 21 4500 NO2 B
Sulfate	76.4	25	mg/l	5	02/14/11	SA	ASTM516-90,02

(a) Analysis is field recommended as per method.
(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-8R		
Lab Sample ID:	M97632-3	**Date Sampled:**	02/09/11
Matrix:	AQ - Ground Water	**Date Received:**	02/09/11
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD42324.D	1	02/12/11	AF	n/a	n/a	GBD2000
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	9.0	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	76%		70-130%
615-59-8	2,5-Dibromotoluene	80%		70-130%

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

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	M97632-4	**Date Sampled:**	02/09/11
Matrix:	AQ - Ground Water	**Date Received:**	02/09/11
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD42325.D	1	02/12/11	AF	n/a	n/a	GBD2000
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.9	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	78%		70-130%
615-59-8	2,5-Dibromotoluene	81%		70-130%

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

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	M97632-4F	**Date Sampled:**	02/09/11
Matrix:	AQ - Groundwater Filtered	**Date Received:**	02/09/11
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Manganese	< 15	15	ug/l	1	02/11/11	02/14/11	DA	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA12682
(2) Prep QC Batch: MP16613

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	M97632-4F	**Date Sampled:**	02/09/11
Matrix:	AQ - Groundwater Filtered	**Date Received:**	02/09/11
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	1410	5.0	mg/l	1	02/15/11	CF	SM21 2320B
Iron, Ferrous [a]	< 0.10	0.10	mg/l	1	02/09/11 17:35	CF	SM21 3500FE B
Nitrogen, Nitrate [b]	4.4	0.11	mg/l	1	02/14/11 12:18	CF	EPA 353.2
Nitrogen, Nitrate + Nitrite	4.4	0.10	mg/l	1	02/14/11 12:18	CF	EPA 353.2
Nitrogen, Nitrite	0.015	0.010	mg/l	1	02/10/11 17:45	CF	SM 21 4500 NO2 B
Sulfate	30.9	5.0	mg/l	1	02/14/11	SA	ASTM516-90,02

(a) Analysis is field recommended as per method.
(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-14		
Lab Sample ID:	M97632-5	**Date Sampled:**	02/09/11
Matrix:	AQ - Ground Water	**Date Received:**	02/09/11
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD42326.D	1	02/12/11	AF	n/a	n/a	GBD2000
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	76%		70-130%
615-59-8	2,5-Dibromotoluene	79%		70-130%

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

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	M97632-6	**Date Sampled:**	02/09/11
Matrix:	AQ - Ground Water	**Date Received:**	02/09/11
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD42327.D	1	02/12/11	AF	n/a	n/a	GBD2000
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	4.7	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	8.4	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	75%		70-130%
615-59-8	2,5-Dibromotoluene	77%		70-130%

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

Report of Analysis

Client Sample ID:	FD-102		
Lab Sample ID:	M97632-7	**Date Sampled:**	02/09/11
Matrix:	AQ - Ground Water	**Date Received:**	02/09/11
Method:	MADEP VPH REV 1.1	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BD42323.D	1	02/12/11	AF	n/a	n/a	GBD2000
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MA-VPH List

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	3.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
	m,p-Xylene	ND	2.0	ug/l	
95-47-6	o-Xylene	ND	2.0	ug/l	
	C5- C8 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C12 Aliphatics (Unadj.)	ND	50	ug/l	
	C9- C10 Aromatics (Unadj.)	ND	50	ug/l	
	C5- C8 Aliphatics	ND	50	ug/l	
	C9- C12 Aliphatics	ND	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	76%		70-130%
615-59-8	2,5-Dibromotoluene	81%		70-130%

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

New England ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody
- MCP Form
- VPH Form

Parameter Certifications

Job Number: M97632
Account: ENVTRAC EnviroTrac
Project: Hess:#21224 468 West St Amherst MA

The following parameters included in this report are certified by the state of MA.

Parameter	CAS#	Method	Mat	Certification Status
Alkalinity, Total as CaCO3		**SM21 2320B**	AQ	Accutest is certified for this parameter.
Nitrogen, Nitrate	14797-55-8	**EPA 353.2**	AQ	Accutest is certified for this parameter.
Nitrogen, Nitrate + Nitrite		**EPA 353.2**	AQ	Accutest is certified for this parameter.
Sulfate	14808-79-8	**ASTM516-90,02**	AQ	Accutest is certified for this parameter.

CHAIN OF CUSTODY

ACCUTEST Laboratories

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: M97632
ACCUTEST QUOTE #:

CLIENT INFORMATION
NAME: EnviroTrac Ltd.
ADDRESS: 2 Merchant St. Suite 2
CITY: Sharon STATE: MA ZIP: 02067
SEND REPORT TO: Patrick Corcoran
PHONE #: 781 793 0074

FACILITY INFORMATION
PROJECT NAME: Hess 21224
LOCATION: 468 West St. Amherst MA
PROJECT NO.:
FAX #: 781 793 7877

ANALYTICAL INFORMATION (* Ferrous iron, Alkalinity, Nitrate, Sulfate, * Dissolved manganese, * Nitrate, * field filtered)

MATRIX CODES
DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	VPH	Ferrous iron, Alkalinity	Nitrate, Sulfate *	Dissolved manganese *	Nitrate *	* field filtered	LAB USE ONLY
-1	MW-1	2/9/11	9:30am	RP/DT	GW	2	X					X						
-2,F	MW-4		10:45am			4			X	X	X		X	X	X	X		
-3	MW-8R		10:48am			2	X					X						
-4,F	MW-13		11:53am			6	X		X	X	X	X	X	X	X	X		
-5	MW-14		12:45pm			2	X					X						
-7	~~MW-102~~ FD-102		11:45am			2	X					X						
-6	MW-12	2/9/11	2:50pm	RP/DT	GW	2	X					X						14E,SE, 15S

DATA TURNAROUND INFORMATION
- [X] 14 DAYS STANDARD — APPROVED BY:
- [ ] 7 DAYS *RUSH*
- [ ] 48 HOUR EMERGENCY
- [ ] OTHER

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION
- [ ] STANDARD
- [ ] COMMERCIAL "B"
- [ ] DISK DELIVERABLE
- [ ] STATE FORMS
- [X] OTHER (SPECIFY) MCP Report

COMMENTS/REMARKS
must meet GW-1 standards
Bill ET direct station #21224

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. Rachel Conrad	DATE TIME: 2/9/11 1650	RECEIVED BY: 1. Will Arill	RELINQUISHED BY: 2.	DATE TIME:	RECEIVED BY: 2.
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE [ ]	ON ICE [X] TEMPERATURE 0.5° C

M97632: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: M97632 **Client:** ENVIROTRAC **Immediate Client Services Action Required:** No

Date / Time Received: 2/9/2011 **Delivery Method:** **Client Service Action Required at Login:** No

Project: HESS 21224 AMHERST **No. Coolers:** 1 **Airbill #'s:** N/A

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

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

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

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

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

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

Comments

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

M97632: Chain of Custody
Page 2 of 2

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	M97632
Project Location:	Hess:#21224 468 West St Amherst MA	MADEP RTN	None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
M97632-1,M97632-2,M97632-3,M97632-4,M97632-4F,M97632-5,M97632-6,M97632-7

Test method: Refer to case narrative.

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

CAM Protocol (check all that apply below):

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

Affirmative Responses to Questions A Through F are required for "Presumptive Certainty status

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

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

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	☑ Yes	☐ No [1]
	Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.		
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☑ Yes	☐ No [1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes	☑ No [1]

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

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

Signature: _____ **Position:** **Laboratory Director**

Printed Name: **Reza Tand** **Date:** **02/22/2011**

MADEP VPH FORM

Matrix	**Aqueous**	☑	**Soil**	☐	**Sediment**	☐	**Other**	☐
Containers	**Satisfactory**	☑	**Broken**	☐	**Leaking**	☐		
Aqueous Preservatives	**N/A**	☐	**pH <= 2**	☑	**pH > 2**	☐		
Temperature	**Received on Ice**	☐	**Received at 4 Deg. C**	☐	**Other**	☑	Rec'd at 0.5 Deg. C	
Methanol	**N/A**							

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: MW-1 **Lab ID:** M97632-1
Date Collected: 2/9/2011 **Date Received:** 2/9/2011

Date Extracted:	First Date Run:	Last Date Run:
N/A	2/12/2011	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	66.5 [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	58 [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	65.7 [B]	50	
C9- C12 Aliphatics		N/A	ug/l	ND [C]	50	

Surrogate Recoveries		Acceptance Range
FID:2,5-Dibromotoluene	% 74	70-130 %
PID:2,5-Dibromotoluene	% 76	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

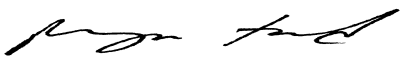
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed? ☑ Yes ☐ No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved? ☑ Yes ☐ No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3? ☑ No ☐ Yes- Details Attatched

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

Signature  **Postition** Laboratory Director

Printed Name Reza Tand **Date** 2/22/2011

MADEP VPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservatives	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 0.5 Deg. C			
Methanol	**N/A**						

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: MW-8R **Lab ID:** M97632-3
Date Collected: 2/9/2011 **Date Received:** 2/9/2011

Date Extracted:	First Date Run:	Last Date Run:
N/A	2/12/2011	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	9	1	
Benzene	71-43-2	C5-C8	ug/l	ND	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND [B]	50	
C9- C12 Aliphatics		N/A	ug/l	ND [C]	50	

Surrogate Recoveries		Acceptance Range
FID:2,5-Dibromotoluene	76 %	70-130 %
PID:2,5-Dibromotoluene	80 %	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

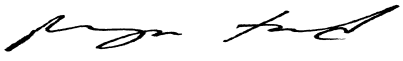
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☑ Yes ☐	No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** **Laboratory Director**

Printed Name **Reza Tand** **Date** **2/22/2011**

MADEP VPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservatives	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 0.5 Deg. C			
Methanol	**N/A**						

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: MW-13 **Lab ID:** M97632-4
Date Collected: 2/9/2011 **Date Received:** 2/9/2011

Date Extracted:	First Date Run:	Last Date Run:
N/A	2/12/2011	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	2.9	1	
Benzene	71-43-2	C5-C8	ug/l	ND	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND [B]	50	
C9- C12 Aliphatics		N/A	ug/l	ND [C]	50	

Surrogate Recoveries		Acceptance Range
FID:2,5-Dibromotoluene	78 %	70-130 %
PID:2,5-Dibromotoluene	81 %	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

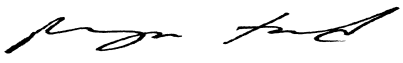
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☑ Yes ☐	No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** **Laboratory Director**

Printed Name **Reza Tand** **Date** **2/22/2011**

MADEP VPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservatives	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 0.5 Deg. C			
Methanol	**N/A**						

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: MW-14 **Lab ID:** M97632-5
Date Collected: 2/9/2011 **Date Received:** 2/9/2011

Date Extracted:	First Date Run:	Last Date Run:
N/A	2/12/2011	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND [B]	50	
C9- C12 Aliphatics		N/A	ug/l	ND [C]	50	

Surrogate Recoveries		Result	Acceptance Range
FID:2,5-Dibromotoluene	%	76	70-130 %
PID:2,5-Dibromotoluene	%	79	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

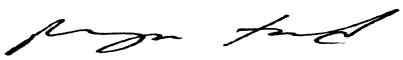
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☑ Yes ☐	No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** **Laboratory Director**

Printed Name **Reza Tand** **Date** **2/22/2011**

MADEP VPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservatives	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 0.5 Deg. C			
Methanol	**N/A**						

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: MW-12 **Lab ID:** M97632-6
Date Collected: 2/9/2011 **Date Received:** 2/9/2011

Date Extracted:	First Date Run:	Last Date Run:
N/A	2/12/2011	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	8.4	1	
Benzene	71-43-2	C5-C8	ug/l	4.7	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND [B]	50	
C9- C12 Aliphatics		N/A	ug/l	ND [C]	50	

Surrogate Recoveries		Acceptance Range
FID:2,5-Dibromotoluene	75 %	70-130 %
PID:2,5-Dibromotoluene	77 %	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

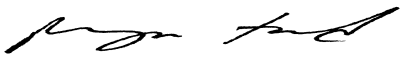
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☑ Yes ☐	No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** **Laboratory Director**

Printed Name **Reza Tand** **Date** **2/22/2011**

MADEP VPH FORM

Matrix	**Aqueous** ☑	**Soil** ☐	**Sediment** ☐	**Other** ☐			
Containers	**Satisfactory** ☑	**Broken** ☐	**Leaking** ☐				
Aqueous Preservatives	**N/A** ☐	**pH <= 2** ☑	**pH > 2** ☐				
Temperature	**Received on Ice** ☐	**Received at 4 Deg. C** ☐	**Other** ☑	Rec'd at 0.5 Deg. C			
Methanol	**N/A**						

Method for Ranges: MADEP VPH REV 1.1
Method for Target Analytes: MADEP VPH REV 1.1
VPH Surrogate Standards
PID: 2,5-Dibromotoluene
FID: 2,5-Dibromotoluene

Client ID: FD-102 **Lab ID:** M97632-7
Date Collected: 2/9/2011 **Date Received:** 2/9/2011

Date Extracted:	First Date Run:	Last Date Run:
N/A	2/12/2011	N/A
% Solids:	**Low Dilution:**	**High Dilution:**
N/A	1	N/A

Unadjusted Ranges	CAS #	Elution Range	Units	Result	RDL	Q
C5- C8 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C10 Aromatics (Unadj.)		N/A	ug/l	ND [A]	50	
C9- C12 Aliphatics (Unadj.)		N/A	ug/l	ND [A]	50	
Target Analytes						
Ethylbenzene	100-41-4	C9-C12	ug/l	ND	2	
Toluene	108-88-3	C5-C8	ug/l	ND	2	
Methyl Tert Butyl Ether	1634-04-4	C5-C8	ug/l	ND	1	
Benzene	71-43-2	C5-C8	ug/l	ND	2	
Naphthalene	91-20-3	N/A	ug/l	ND	3	
o-Xylene	95-47-6	C9-C12	ug/l	ND	2	
m,p-Xylene		C9-C12	ug/l	ND	2	
Adjusted Ranges						
C5- C8 Aliphatics		N/A	ug/l	ND [B]	50	
C9- C12 Aliphatics		N/A	ug/l	ND [C]	50	

Surrogate Recoveries		Result	Acceptance Range
FID:2,5-Dibromotoluene	%	76	70-130 %
PID:2,5-Dibromotoluene	%	81	70-130 %

Footnotes

A Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range

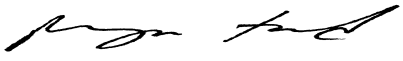
B Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range.

C Hydrocarbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range. C9-C12 aliphatic Hydrocarbons exclude conc of Target Analytes eluting in that range AND concentration of C9-C10 Aromatic Hydrocarbons.

Z A 'J' qualifier indicates an estimated value

Were all QA/QC procedures REQUIRED by the VPH Method followed?	☑ Yes ☐	No- Details Attatched
Were all performance/acceptance standards for required QA/QC procedures achieved?	☑ Yes ☐	No- Details Attatched
Were any significant modifications made to the VPH method, as specified in Sect. 11.3?	☑ No ☐	Yes- Details Attatched

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

Signature  **Postition** **Laboratory Director**

Printed Name **Reza Tand** **Date** **2/22/2011**

New England ACCUTEST LABORATORIES

06/14/11

Technical Report for

EnviroTrac

Hess:#21224 468 West St Amherst MA

Accutest Job Number: MC190

Sampling Date: 05/13/11

Report to:

EnviroTrac

RachelP@envirotrac.com

ATTN: Rachel Patenaude

Total number of pages in report: **16**

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

Reza Tand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

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Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

Sections: 1 2 3

Table of Contents

Sample Summary

EnviroTrac

Job No: MC190

Hess:#21224 468 West St Amherst MA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC190-1	05/13/11	11:29	AS	05/13/11	AQ	Ground Water	MW-12
MC190-2	05/13/11	12:00	AS	05/13/11	SO	Soil	TANK PAD EX SOIL

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	MC190-1	**Date Sampled:**	05/13/11
Matrix:	AQ - Ground Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R21890.D	1	05/18/11	TD	n/a	n/a	MSR806
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
71-43-2	Benzene	3.8	0.50	ug/l	
108-86-1	Bromobenzene	ND	5.0	ug/l	
74-97-5	Bromochloromethane	ND	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	

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

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	MC190-1	**Date Sampled:**	05/13/11
Matrix:	AQ - Ground Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

VOA 8260 List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
123-91-1	1,4-Dioxane	ND	25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
74-88-4	Iodomethane	ND	5.0	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.0	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
74-95-3	Methylene bromide	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
91-20-3	Naphthalene	ND	5.0	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	ug/l	
75-65-0	Tert Butyl Alcohol	733	20	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	ug/l	
108-05-4	Vinyl Acetate	ND	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
	m,p-Xylene	ND	1.0	ug/l	
95-47-6	o-Xylene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

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

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	MC190-1	**Date Sampled:**	05/13/11
Matrix:	AQ - Ground Water	**Date Received:**	05/13/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	88%		70-130%
460-00-4	4-Bromofluorobenzene	79%		70-130%

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

Accutest LabLink@113594 14:04 14-Jun-2011

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	MC190-1	**Date Sampled:**	05/13/11
Matrix:	AQ - Ground Water	**Date Received:**	05/13/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S24011.D	1	05/17/11	KR	05/13/11	OP24914	MSS1019
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.6	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	ug/l	
95-48-7	2-Methylphenol	ND	11	ug/l	
	3&4-Methylphenol	ND	11	ug/l	
88-75-5	2-Nitrophenol	ND	11	ug/l	
100-02-7	4-Nitrophenol	ND	22	ug/l	
87-86-5	Pentachlorophenol	ND	11	ug/l	
108-95-2	Phenol	ND	5.6	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	ug/l	
85-68-7	Butyl benzyl phthalate	7.1	5.6	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.6	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.6	ug/l	
84-66-2	Diethyl phthalate	ND	5.6	ug/l	
131-11-3	Dimethyl phthalate	ND	5.6	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	2.8	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		15-110%
4165-62-2	Phenol-d5	24%		15-110%
118-79-6	2,4,6-Tribromophenol	58%		15-110%
4165-60-0	Nitrobenzene-d5	72%		30-130%
321-60-8	2-Fluorobiphenyl	62%		30-130%
1718-51-0	Terphenyl-d14	71%		30-130%

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

Accutest LabLink@113594 14:04 14-Jun-2011

Report of Analysis

Client Sample ID: MW-12
Lab Sample ID: MC190-1
Matrix: AQ - Ground Water
Project: Hess:#21224 468 West St Amherst MA

Date Sampled: 05/13/11
Date Received: 05/13/11
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony	< 6.0	6.0	ug/l	1	05/13/11	05/17/11	DA	EPA 200.7 [2]	EPA 200.7 [3]
Arsenic	9.5	4.0	ug/l	1	05/13/11	05/17/11	DA	EPA 200.7 [2]	EPA 200.7 [3]
Cadmium	< 4.0	4.0	ug/l	1	05/13/11	05/17/11	DA	EPA 200.7 [2]	EPA 200.7 [3]
Chromium	< 10	10	ug/l	1	05/13/11	05/17/11	DA	EPA 200.7 [2]	EPA 200.7 [3]
Copper	< 25	25	ug/l	1	05/13/11	05/17/11	DA	EPA 200.7 [2]	EPA 200.7 [3]
Iron	12400	100	ug/l	1	05/13/11	05/17/11	DA	EPA 200.7 [2]	EPA 200.7 [3]
Lead	< 5.0	5.0	ug/l	1	05/13/11	05/17/11	DA	EPA 200.7 [2]	EPA 200.7 [3]
Mercury	< 0.20	0.20	ug/l	1	05/14/11	05/16/11	MA	EPA 245.1 [1]	EPA 245.1 [4]
Nickel	< 40	40	ug/l	1	05/13/11	05/17/11	DA	EPA 200.7 [2]	EPA 200.7 [3]
Selenium	< 10	10	ug/l	1	05/13/11	05/17/11	DA	EPA 200.7 [2]	EPA 200.7 [3]
Silver	< 5.0	5.0	ug/l	1	05/13/11	05/17/11	DA	EPA 200.7 [2]	EPA 200.7 [3]
Zinc	< 20	20	ug/l	1	05/13/11	05/17/11	DA	EPA 200.7 [2]	EPA 200.7 [3]

(1) Instrument QC Batch: MA12970
(2) Instrument QC Batch: MA12981
(3) Prep QC Batch: MP17051
(4) Prep QC Batch: MP17054

RL = Reporting Limit

Accutest LabLink@113594 14:04 14-Jun-2011

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	MC190-1	**Date Sampled:**	05/13/11
Matrix:	AQ - Ground Water	**Date Received:**	05/13/11
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	4100	200	mg/l	200	05/16/11	CF	SM21 4500CL C
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	05/13/11 15:45	MC	SW846 7196A
Chromium, Trivalent [a]	< 0.020	0.020	mg/l	1	05/17/11 15:46	DA	6010/7196A M/200.7
Cyanide	< 0.010	0.010	mg/l	1	05/18/11 11:59	MA	EPA 335.4
Solids, Total Suspended	35.0	4.0	mg/l	1	05/16/11	BF	SM21 2540D

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Accutest LabLink@113594 14:04 14-Jun-2011

Report of Analysis

Client Sample ID:	TANK PAD EX SOIL		
Lab Sample ID:	MC190-2	**Date Sampled:**	05/13/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
Method:	SW846 8015	**Percent Solids:**	96.6
Project:	Hess:#21224 468 West St Amherst MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH21044.D	1	05/16/11	WS	n/a	n/a	GBH1136
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	15.2 g	15.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	5.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	90%		36-148%

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

Accutest LabLink@113594 14:04 14-Jun-2011

Report of Analysis

Client Sample ID:	TANK PAD EX SOIL		
Lab Sample ID:	MC190-2	**Date Sampled:**	05/13/11
Matrix:	SO - Soil	**Date Received:**	05/13/11
		Percent Solids:	96.6
Project:	Hess:#21224 468 West St Amherst MA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	6.6	0.83	mg/kg	1	05/13/11	05/13/11	PY	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA12976
(2) Prep QC Batch: MP17050

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody

Parameter Certifications

Job Number: MC190
Account: ENVTRAC EnviroTrac
Project: Hess:#21224 468 West St Amherst MA

The following parameters included in this report are certified by the state of MA.

Parameter	CAS#	Method	Mat	Certification Status
Antimony	7440-36-0	**EPA 200.7**	AQ	Accutest is certified for this parameter.
Arsenic	7440-38-2	**EPA 200.7**	AQ	Accutest is certified for this parameter.
Cadmium	7440-43-9	**EPA 200.7**	AQ	Accutest is certified for this parameter.
Chromium	7440-47-3	**EPA 200.7**	AQ	Accutest is certified for this parameter.
Copper	7440-50-8	**EPA 200.7**	AQ	Accutest is certified for this parameter.
Iron	7439-89-6	**EPA 200.7**	AQ	Accutest is certified for this parameter.
Lead	7439-92-1	**EPA 200.7**	AQ	Accutest is certified for this parameter.
Mercury	7439-97-6	**EPA 245.1**	AQ	Accutest is certified for this parameter.
Nickel	7440-02-0	**EPA 200.7**	AQ	Accutest is certified for this parameter.
Selenium	7782-49-2	**EPA 200.7**	AQ	Accutest is certified for this parameter.
Silver	7440-22-4	**EPA 200.7**	AQ	Accutest is certified for this parameter.
Zinc	7440-66-6	**EPA 200.7**	AQ	Accutest is certified for this parameter.
Chloride	16887-00-6	**SM21 4500CL C**	AQ	Accutest is certified for this parameter.
Cyanide	57-12-5	**EPA 335.4**	AQ	Accutest is certified for this parameter.
Solids, Total Suspended		**SM21 2540D**	AQ	Accutest is certified for this parameter.

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

PAGE ___ OF ___

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # MC190

Client / Reporting Information

- Company Name: Enviro Track LTD
- Street Address: 2 Merchant St Suite 2
- City: Sharon State: MA Zip: 02067
- Project Contact: Patrick C. E mail:
- Phone #: 781 793-0074 Fax #:
- Sampler(s) Name(s): Amos Spencer Phone #:

Project Information

- Project Name: Hess 21224
- Street: 468 west St.
- City: Amherst MA
- Project#: 21224
- Client PO#:
- Project Manager: Sean Kennedy

Billing Information (If different from Report to)

- Company Name:
- Street Address:
- City: State: Zip:
- Attention: PO#

Requested Analysis (see TEST CODE sheet): TSS, Hex Cr, CHL; Total metals; Total Cr; V8260 OXYS Acetone; 1,4 Dioxane; SVOC (phen, PCP, Nth); TPH GRO; TPH DRO

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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	TSS, Hex Cr, CHL	Total metals	Total Cr	V8260 OXYS Acetone	1,4 Dioxane	SVOC	TPH GRO	TPH DRO	LAB USE ONLY
-1	MW-12		5/13/11	11:29	AS	GW	10	X	X	X		X					X	X	X	X	X	X			
	~~[crossed out]~~		~~[crossed out]~~	~~[crossed out]~~	~~[crossed out]~~																				
-2	Tank pad Ex. Soil		5/13/11	12:00	AS	SO	2					X		X									X	X	

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [x] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

RUSH!

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

RGP, must meet GW-1, Bill Milu Mntri
16F,5C,11E,3A3 1024

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Amos Spencer	5/13/11 2:00	1 [signature]	2		2 SAMPLES RECEIVED DIRECTLY FROM FIELD SAMPLING
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	☐ Intact ☐ Not intact	Preserved where applicable ☐ On Ice ☒ Cooler Temp. 17.6

MC190: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC190 **Client:** ENVIROTRAC **Immediate Client Services Action Required:** No

Date / Time Received: 5/13/2011 **Delivery Method:** **Client Service Action Required at Login:** No

Project: HESS 21224 **No. Coolers:** 1 **Airbill #'s:** N/A

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

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

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

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

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

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

Comments

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

MC190: Chain of Custody
Page 2 of 2

New England ACCUTEST LABORATORIES

06/08/11

Technical Report for

EnviroTrac

Hess:#21224 468 West St Amherst MA

Accutest Job Number: MC817

Sampling Date: 06/07/11

Report to:

EnviroTrac

patrickc@envirotrac.com

ATTN: Patrick Corcoran

Total number of pages in report: **9**

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

Reza Tand
Lab Director

Client Service contact: Kristen Blanchard 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) ISO 17025:2005 (L2235)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

Sections: 1 2 3

Table of Contents

-1-

Sample Summary

EnviroTrac

Job No: MC817

Hess:#21224 468 West St Amherst MA

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC817-1	06/07/11	11:55	RP	06/07/11	AQ	Ground Water	MW-12

Sample Results

Report of Analysis

Accutest LabLink@10:20 08-Jun-2011

Report of Analysis

Client Sample ID:	MW-12		
Lab Sample ID:	MC817-1	**Date Sampled:**	06/07/11
Matrix:	AQ - Ground Water	**Date Received:**	06/07/11
		Percent Solids:	n/a
Project:	Hess:#21224 468 West St Amherst MA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Total Residual Chlorine	< 0.050	0.050	mg/l	1	06/07/11 16:56	CF	SM21 4500CL F

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Parameter Certifications (MA)
- Chain of Custody

Parameter Certifications

Job Number: MC817
Account: ENVTRAC EnviroTrac
Project: Hess:#21224 468 West St Amherst MA

The following parameters included in this report are certified by the state of MA.

Parameter	CAS#	Method	Mat	Certification Status
Total Residual Chlorine		**SM21 4500CL F**	AQ	Accutest is certified for this parameter.

ACCUTEST Laboratories

CHAIN OF CUSTODY

495 TECHNOLOGY CENTER WEST • BUILDING ONE
MARLBOROUGH, MA 01752
TEL: 508-481-6200 • FAX: 508-481-7753

ACCUTEST JOB #: MC817
ACCUTEST QUOTE #:

CLIENT INFORMATION
NAME: EnviroTrac Ltd
ADDRESS: 2 merchant St. Suite 2
CITY: Sharon STATE: MA ZIP: 02067
SEND REPORT TO: Patrick Corcoran
PHONE #: 7817930074

FACILITY INFORMATION
PROJECT NAME: Hess #21224
LOCATION: 468 West St. Amherst MA
PROJECT NO.:
FAX #: 7817937877

ANALYTICAL INFORMATION
Total Residual Chlorine

MATRIX CODES
DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	PRESERVATION HCl	NaOH	HNO3	H2SO4	NONE	Total Residual Chlorine	LAB USE ONLY
-1	MW-12	6/7/11	11.55	RP	GW	2					X	X	
													ISC

DATA TURNAROUND INFORMATION
- ☐ 14 DAYS STANDARD — APPROVED BY: _____
- ☐ 7 DAYS *RUSH* — _____
- ☐ 48 HOUR EMERGENCY — _____
- ☒ OTHER 24 hr — _____

14 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION
- ☒ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY) _____

COMMENTS/REMARKS
Bill ET direct Station #21224

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
1. [signature]	6/7/11 13:45	1. [signature]	2.		2.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE TIME:	RECEIVED BY:
3.		3.	4.		4.
RELINQUISHED BY:	DATE TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE ☐	ON ICE ☒ TEMPERATURE 0.1 °C
5.		5.			

MC817: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC817 **Client:** ENVIROTRAC **Immediate Client Services Action Required:** No

Date / Time Received: 6/7/2011 **Delivery Method:** **Client Service Action Required at Login:** No

Project: HESS 21224 AMHERST **No. Coolers:** 1 **Airbill #'s:** N/A

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

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

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

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

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

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

Comments

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 508.481.7753

Marlborough, MA
www/accutest.com

MC817: Chain of Custody
Page 2 of 2

ATTACHMENT C

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National Register of Historic Places

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TITLE LIST DISPLAY

From: NPS Digital Library
Term(s) Searched: Massachusetts and Amherst
Records Displayed: 1 to 15 of 16

Go back to: Revise Search

Sort By: **Title** | Releva

- Amherst Central Business District *[Image]*
- Amherst West Cemetery *[Image]*
- Baird House *[Image]*
- Conkey-Stevens House *[Image]*
- Cushman Village Historic District *[Image]*
- Dickinson Historic District *[Image]*
- Dickinson, Emily, House *[Image]*
- Dickinson, Emily, House *[Image]*
- East Village Historic District *[Image]*
- Goodwin Memorial African Methodist Episcopal Zion Church *[Image]*
- Lincoln--Sunset Historic District *[Image]*
- North Amherst Center Historic District *[Image]*
- Prospect--Gaylord Historic District *[Image]*
- South Amherst Common Historic District *[Image]*
- Strong House *[Image]*

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nps.gov

National Park Service
U.S. Department of the Interior

National Register of Historic Places

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From: NPS Digital Library
Term(s) Searched: Massachusetts and Amherst
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Go back to: Revise Search

Sort By: **Title** | Relevancy | Modified

- Westside Historic District *[Image]* 7%

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Last updated: 06/10/11

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Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

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

Inv. No.	Property Name	Street	Town	Year
AMH.929	West Cemetery - Joy, Levi Marker	Triangle St	Amherst	1785
AMH.930	West Cemetery - Finnemore, Sarah Marker	Triangle St	Amherst	1842
AMH.931	West Cemetery - African American Civil War Soldier	Triangle St	Amherst	1961
AMH.932	West Cemetery - Kellogg, Martin K. Obelisk	Triangle St	Amherst	1854
AMH.933	West Cemetery - Boltwood, Lucius Marker	Triangle St	Amherst	1792
AMH.469	Williams, B. H. House	20 Triangle St	Amherst	1903
AMH.468	Dillon, Thomas House	28 Triangle St	Amherst	1930
AMH.467	Elder, David B. House	36 Triangle St	Amherst	1903
AMH.1003	Patterson, James - Lombard, Capt. Levi House	152 Triangle St	Amherst	1767
AMH.462	Field, Edwin G. House	10 Tyler Pl	Amherst	1875
AMH.464	Richardson, Mary Lincoln House	16 Tyler Pl	Amherst	1870
AMH.465	Tyler, William Seymour House	24 Tyler Pl	Amherst	1860
AMH.466	Delta Tau Delta - Kappa Theta Fraternity House	35 Tyler Pl	Amherst	1930
AMH.613		71 West Pomeroy Ln	Amherst	1870
AMH.569	Blodgett - Thurston, L. House	West St	Amherst	1800
AMH.570		West St	Amherst	1920
AMH.571	Sabin, J. House	West St	Amherst	1820
AMH.572		West St	Amherst	1900
AMH.938	Untitled Sculpture	West St	Amherst	1982
AMH.942	Uncubed Sculpture	West St	Amherst	1981
AMH.552		165 West St	Amherst	1850
AMH.558	Yale, L. House	332 West St	Amherst	1820
AMH.556		400 West St	Amherst	1920
AMH.557		410 West St	Amherst	1920
AMH.559	Merrick, Aaron House	441 West St	Amherst	1825
AMH.560		500 West St	Amherst	1900
AMH.561		560 West St	Amherst	1880
AMH.562	Williams, A. - Miller, C. House	577 West St	Amherst	1850
AMH.563	Miles - Dickinson House	611 West St	Amherst	1870
AMH.564		646 West St	Amherst	1920
AMH.565		657 West St	Amherst	1900
AMH.566		685 West St	Amherst	1920
AMH.568	Johnson, S. O. House	730 West St	Amherst	1840
AMH.573	Warner, Aaron Jr. House	916 West St	Amherst	1770
AMH.574	Darling House	1095 West St	Amherst	1830
AMH.8	Thayer, J. House	1120 West St	Amherst	1870
AMH.903	Woodside Avenue Bridge over B & M Railroad	Woodside Ave	Amherst	1919
AMH.290	Goodwin Memorial African Methodist Episcopal	14 Woodside Ave	Amherst	1910
AMH.288	Boyden, John House	58 Woodside Ave	Amherst	1837

EnviroTrac
Environmental Services

May 17, 2011

Mr. Thomas Chapman, Supervisor
U.S. Fish and Wildlife Service
New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087

Re: Hess Station # 21224
468 West Street, Amherst, MA 01002-2965
MassDEP RTN 1-18197

Dear Mr. Chapman:

EnviroTrac Ltd. (EnviroTrac) plans to prepare a Notice of Intent for coverage of a temporary discharge under the National Pollutant Discharge Elimination System (NPDES) Remediation & Miscellaneous Contaminated Sites General Permit (RGP) on behalf of Hess Corporation (Hess). The temporary discharge is expected to be less than one week and duration and will consist of treated groundwater generated during construction dewatering associated with the repair or replacement of an underground storage tank (UST). A site locus map is provided as **Figure 1**.

EnviroTrac plans to direct treated groundwater removed during dewatering activities to the catch basin located due north of the facility in West Street. This catch basin drains to a swale located approximately 250 feet north of the facility. The swale drains to Plum Brook, which ultimately drains to the Fort River. Plum Brook and the Fort River are both located in a National Heritage & Endangered Species Program Estimated Rare Wetland Habitat associated with the dwarf wedge mussel. Groundwater will be sampled prior to dewatering and during dewatering in accordance with RGP requirements.

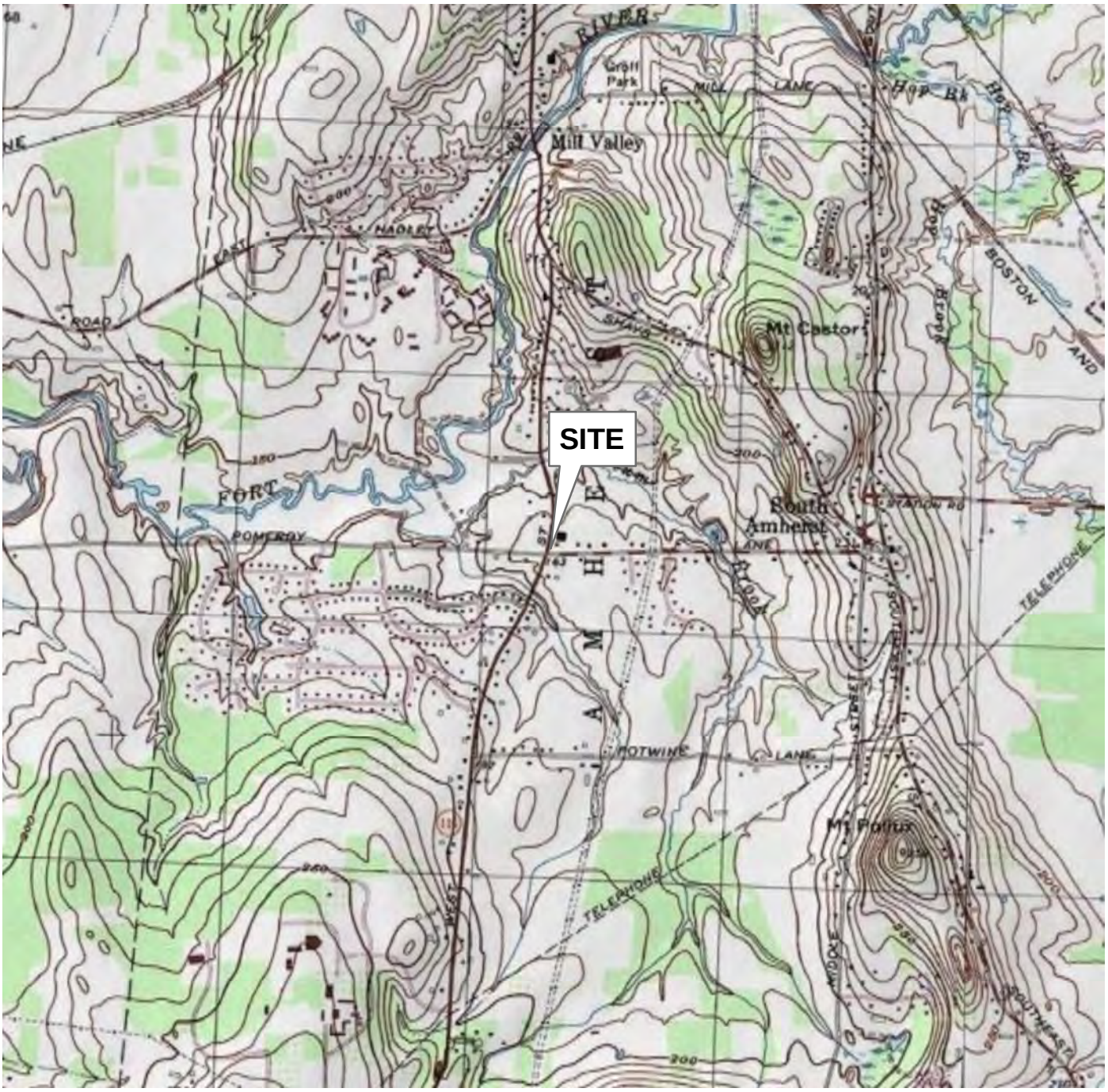
Please advise whether the location of the proposed discharge is located within an area where the dwarf wedge mussel has been identified, or whether the proposed discharge is unlikely to affect the listed species. Should you have any questions, please contact the undersigned at (781) 793-0074.

Sincerely,
EnviroTrac Ltd.

Patrick D. Corcoran, LSP
Senior Project Manager

cc: Mike Matri, Hess Corporation

Attachment: Site Locus Map



Scale: 1:24,000

Hess Station #21224
468 West Street
Amherst, MA 01002-2965

FIGURE 1

SITE LOCUS MAP
UNITED STATES GEOLOGICAL SURVEY
MT. HOLYOKE AND BELCHERTOWN, MA QUADRANGLES

Contour Interval: 10 ft.

UTM Coordinates:

4,690,550 m North
704,320 m East

N
W E
S

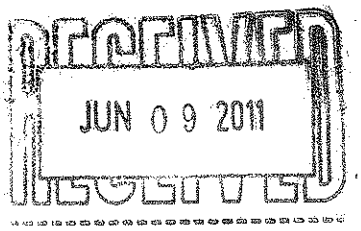
EnviroTrac
Environmental Services

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
http://www.fws.gov/newengland

June 6, 2011



Mr. Patrick D. Corcoran
EnviroTrac Environmental Services
2 Merchant Street
Sharon, MA 02067

Dear Mr. Corcoran:

This responds to your May 17, 2011 letter requesting that we review a temporary discharge proposed under the National Pollutant Discharge Elimination System Remediation & Miscellaneous Contaminated Sites General Permit for information on the presence of federally endangered or threatened species. Our comments are provided in accordance with the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531, *et seq.*)

The temporary discharge will drain into a catch basin, through a swale, into a small brook (Plum Brook) before reaching the Fort River in Amherst, Massachusetts. The discharge will consist of treated groundwater generated during repair or replacement of an underground storage tank. Federally endangered dwarf wedgemussels are known to occur in the Fort River in the vicinity of the mouth of Plum Brook. Given the distance of the treated discharge to the Fort River and the number of wetlands the discharge may pass through, we anticipate that adverse effects are not likely to occur to dwarf wedgemussels located downstream of the mouth of Plum Brook. Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required.

Thank you for your cooperation. Please contact Susi von Oettingen of this office at 603-223-2541, extension 22, if you have any questions or need additional assistance.

Sincerely yours,

Acting for Thomas R. Chapman
Supervisor
New England Field Office