

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1 5 Post Office Square, Suite 100 BOSTON, MA 02109-3912

CERTIFIED MAIL RETURN RECEIPT REQUESTED

APR 2 7 2011

Jonathan More, President Omni Environmental Group 14 Fletcher Street, Suite 7 Chelmsford, MA 01824

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Joals Garage site located at 500 Adamsville Road (P.B. Box 3074) Westport, MA Bristol County; Authorization # MAG91072 - Reissuance

Dear Mr. More:

Based on the review of a Notice of Intent (NOI) submitted on behalf of Joals Garage, Inc., by your firm Omni Environmental Group, 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 exceeded Appendix III limits. The checklist also includes other parameters for which your laboratory reports indicated there was insufficient sensitivity to detect these parameters at the minimum levels established in Appendix VI of the RGP.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on a dilution factor range (DFR). With the absence of dilution to wetland, EPA determined that the DFR for each parameter is in the one and five (1-5) range. (See Appendix IV of the RGP for Massachusetts facilities)

Therefore, the limits for lead of 1.3ug/L, and iron of 1,000ug/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 is ongoing with not termination date known. If for any reason the discharge terminates at some point in the future 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.

Westgort, MA British County, Authorization # MACRITOTS - Bollansons

incerely

David M. Webster, Chief Industrial Permits Branch

Enclosure

cc: Kathleen Keohane, MassDEP

2010 Remediation General Permit Summary of Monitoring Parameters [11]

NPDES Authorization Number:		MAG910172 - Reissuance					
Authorization Issued:	April,	2011					
Facility/Site Name:	ame: Joals Garage						
Encility/City Address	500 A	damsville,(P.O. Box3074)Wesport, MA 02790, Bristol County					
Facility/Site Address:	Email	Email address of owner: joalsgarage@yahoo.com : Phone: 5086366954					
Legal Name of Operat	or:	Omni Environmental Group					
Operator contact name, title, and Address:		Jonathan More, President of Omni Environmental, 14 Fletcher Street, Suite 7, Chelmsford, MA 01824					
		Email: <u>imore@omniapex.com</u> Phone: 9782566766					
Estimated Date of Com	pletion	: Ongoing					
Category and Sub-Category:		Category I- Petroleum Related Site Remediation. Sub—category A. Gasoline Only Sites.					
Receiving Water:	2 141 1	Wetland to unnamed brook					

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

	<u>Parameter</u>	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)
√	Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing **, Me#60.2/ML5ug/L
	Total Residual Chlorine (TRC) Total Residual Chlorine	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
378	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
Act).	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
JM	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
	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
V	12.tert-Butyl Alcohol (TBA)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L

	Cat. Propert Special	Effluent Limit/Method#/ML
	Davanatas	(All Effluent Limits are shown as Daily
	Parameter	Maximum Limit, unless denoted by a **,
	And the second	in that case it will be a Monthly Average Limit)
	(TertiaryButanol)	and a second sec
V	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
97	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
110	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
2	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
-10	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
Aug	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
1.1	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
9/	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
	33. Total Phthalates	3.0 ug/L ** /Me#8270D/ML 5ug/L,
	(Phthalate esters) ⁶	Me#606/ML 10ug/L& Me#625/ML 5ug/L
	34. Bis (2-Ethylhexyl)	6.0 ug/L /Me#8270D/ML
	Phthalate [Di- (ethylhexyl) Phthalate]	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
	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
South	d. Benzo(k)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L,

60344)	<u>Parameter</u>	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)					
AM		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					
79	I. 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					
- 1	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L					
High	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					

		Total Recove Metal Limit 50 mg/l Cal discharge Massachu (ug/l) 1	@ H ¹⁰ = CO3 for es in	Minimum level=ML
	Metal parameter	Freshwater		
W 368	39. Antimony	5.6/ML	10	
	40. Arsenic **	10/ML20		
	41. Cadmium **	0.2/ML10		
-	42. Chromium III (trivalent) **	48.8/ML15	Secretary of	
	43. Chromium VI (hexavalent) **	11.4/ML10		Atthe Light of the month of the month of the control of the contro
	44. Copper **	5.2/ML15		January 100

	Afficient Street American as Dely element Unit, unless denoised by a ** of case it will be a Monthly Average Limit?	Total Recoverable Metal Limit @ H ¹⁰ = 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) ^{11/12}	Minimum level=ML
	Metal parameter	Freshwater	
\checkmark	45. Lead **	1.3/ML20	
	46. Mercury **	0.9/ML0.2	
	47. Nickel **	29/ML20	
	48. Selenium **	5/ML20	leaders to a lead
	49. Silver	1.2/ML10	
	50. Zinc **	66.6/ML15	1 1 18381 . d£
√	51. Iron	1,000/ML 20	I CONTROLOGICA

	Other Parameters	<u>Limit</u>
√	52. Instantaneous Flow	Site specific in CFS
√	53. Total Flow	Site specific in CFS
\checkmark	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:

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.

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).

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).

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.

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.

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 \times 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 \times 2 =2,000 ug/L., etc. not to exceed the DF=5.

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).

pH sampling for compliance with permit limits may be performed using field

methods as provided for in EPA test Method 150.1.

Temperature sampling per Method 170.1

Omni Environmental Group

Omni Apex Management Corporation

March 14, 2011

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

Re: RGP Notice of Intent

Joals Garage

500 Adamsville Road Westport, Massachusetts

To Whom It May Concern:

Omni Environmental Group, on behalf of Joals Garage, Inc., is submitting the attached Notice of Intent for coverage under the National Pollutant Discharge Elimination System Remediation General Permit. The Notice of Intent is for the discharge of treated ground water from the remediation system located at 500 Adamsville Road in Westport, Massachusetts.

If you should need any additional information, please feel free to contact me at (978) 256-6766 or jmoore@omniapex.com.

Sincerely,

Jonathan Moore

Jonathan S. Moore, L.S.P. Omni Environmental Group

attachment

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: Joals Garage Facility/site mailing address: Location of facility/site: Facility SIC Street: longitude: 71 07' 16" P.O. Box 3074 code(s): latitude: 41 33' 39" 5541 Town: Westport b) Name of facility/site owner: Joals Garage, Inc. Email address of facility/site owner: State: Zip: County: joalsgarage@yahoo.com MA 02790 Bristol Telephone no. of facility/site owner: 508-636-6954 Fax no. of facility/site owner: Owner is (check one): 1. Federal O 2. State/Tribal O 3. Private **②** 4. Other **O** if so, describe: Address of owner (if different from site): Street: Same as above Town: Zip: State: County: Operator telephone no: 978-256-6766 c) Legal name of operator: Omni Environmental Group Operator fax no .: Operator email: jmoore@omniapex.com Operator contact name and title: Jonathan Moore, President Street: Address of operator (if different from 14 Fletcher Street, Suite 7 owner): Town: Chelmsford Zip: 01824 State: MA County: Middlesex

d) Check Y for "yes" or N for "no" for the following: 1. Has a prior NPDES permit exclusion been granted for the discharge? Y O NO, if Y, number: 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Y O NO, if Y, date and tracking #: 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y O NO 4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y O NO							
e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y O N O If Y, please list: 1. site identification # assigned by the state of NH or MA: RTN 4-14409 2. permit or license # assigned: W008657 3. state agency contact information: name, location, and telephone number: Mass. Department of Environmental Protection 20 Riverside Drive Lakeville MA 02347 508-946-2700 g) Is the site/facility located within or does it discharge to	f) Is the site/facility covered by any other EPA permit, including: 1. Multi-Sector General Permit? Y O N O, if Y, number: 2. Final Dewatering General Permit? Y O N O, if Y, number: 3. EPA Construction General Permit? Y O N O, if Y, number: 4. Individual NPDES permit? Y O N O, if Y, number: 5. any other water quality related individual or general permit? Y O N O, if Y, number:						
	al sampling data, identify the sub-category into which the potential						
discharge falls.	- camping dual, racing, and the dual campaign and racing and personal						
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/a	pplicant is seeking coverage:
Ground water remediation of a gasoline release.	
b) Provide the following information about each discharge	s:
	nd average flow rate of discharge (in cubic feet per second, ft ³ /s)? s maximum flow a design value? Y O N O Is average flow a design value or estimate? measured
3) Latitude and longitude of each discharge within 100 fee pt.1: lat 41 33' 31" long 71 07' 22" pt.2: lat. pt.3: lat long pt.4: lat. pt.5: lat long pt.6: lat. pt.7: lat long pt.8: lat.	long; long; long; long; etc.
4) If hydrostatic testing, total volume of the discharge (gals): 5) Is the discharge intermitted in the discharge ongoing? Y	
c) Expected dates of discharge (mm/dd/yy): start Dec 17, 2003 d) Please attach a line drawing or flow schematic showing 1. sources of intake water. 2. contributing flow from the owners(s). See attached.	

3. Contaminant information.

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

						Minimum	Maximum da	ly value	Average daily value		
Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Type (c.g., grab)	Method Used (method #)	Level (ML) of Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
Total Suspended Solids (TSS)			×	1	grab	2540D	5 mg/l	5,000	0.14	5,000	0.14
2. Total Residual Chlorine (TRC)		×									
Total Petroleum Hydrocarbons (TPH)		×									
4. Cyanide (CN)	57125	×									
5. Benzene (B)	71432		×	1	grab	624	1.0 ug/l	3.8	4.5x10-5	3.8	4.5x10-5
6. Toluene (T)	108883		×	1	grab	624	1,0 ug/l	92	0.001	92	0.001
7. Ethylbenzene (E)	100414	×									
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207		×	1	grab	624	2.0 ug/l	300	0.004	300	0.004
9. Total BTEX 2	n/a		×	1	grab	624	2.0 ug/l	395.8	0.005	395.8	0.005
10. Ethylene Dibromide (EDB) (1,2- Dibromoethane) ³	106934	X									
11. Methyl-tert-Butyl Ether (MtBE)	1634044	×									
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	×									

^{*} 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.

		l l			Sample	Analytical	Minimum	Maximum da	ily value	Average daily	value
<u>Parameter *</u>	CAS Number	Believed Absent	Believed Present	# of Samples	Type (e.g., grab)	Method Used (method #)	Level (ML) of Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508		×	1	grab	624	20 ug/l	1,200	0.03	1.200	0.03
14. Naphthalene	91203		×	1	grab	8270C	0.20 ug/l	0.77	2.1x10-5	0.77	2,1x10-5
15. Carbon Tetrachloride	56235	×									
16. 1,2 Dichlorobenzene (o-DCB)	95501	×									
17. 1,3 Dichlorobenzene (m-DCB)	541731	×									
18. 1,4 Dichlorobenzene (p-DCB)	106467	×									
18a. Total dichlorobenzene		×									
19. 1,1 Dichloroethane (DCA)	75343	×									
20. 1,2 Dichloroethane (DCA)	107062	×									
21. 1,1 Dichloroethene (DCE)	75354	×									
22. cis-1,2 Dichloroethene (DCE)	156592	×									
23. Methylene Chloride	75092	×									
24. Tetrachloroethene (PCE)	127184	×									
25. 1,1,1 Trichloro-ethane (TCA)	71556	×									
26. 1,1,2 Trichloro-ethane (TCA)	79005	×									
27. Trichloroethene (TCE)	79016	×									

					Sample	Analytical	Minimum	Maximum da	ly value	Average daily	value
Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Type (c.g., grab)	Method Used (method #)	Level (ML) of Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	×									
29. Acetone	67641	×									
30. 1,4 Dioxane	123911	×									
31. Total Phenols	108952	×									
32. Pentachlorophenol (PCP)	87865	×									
33. Total Phthalates (Phthalate esters) 4		×									
34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	117817	X									
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		×									
a. Benzo(a) Anthracene	56553	×									
b. Benzo(a) Pyrene	50328	×									
c. Benzo(b)Fluoranthene	205992	×									
d. Benzo(k)Fluoranthene	207089	×									
e. Chrysene	21801	×									
f. Dibenzo(a,h)anthracene	53703	×									
g. Indeno(1,2,3-cd) Pyrene	193395	×									
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)			×	1	grab	8270C	0.20 ug/l	0.77	2.1x10-5	0.77	2.1x10-5

⁴ The sum of individual phthalate compounds.

					6 1		Minimum	Maximum dai	ly value	Average daily	value
Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (c.g., grab)	Analytical Method Used (method #)	Level (ML) of Test Method	concentration (ug/l)	mass (kg)	concentration (ug/I)	mass (kg)
h. Acenaphthene	83329	×		The second secon							
i. Acenaphthylene	208968	×									
j. Anthracene	120127	×									
k. Benzo(ghi) Perylene	191242	×		NAME OF TAXABLE PARTY.		1					
I. Fluoranthene	206440	×									
m. Fluorene	86737	×									
n. Naphthalene	91203			1	grab	8270C	0.20 ug/l	0.77	2.1x10-5	0.77	2.1x10-5
o. Phenanthrene	85018	×	×								
p. Pyrene	129000	×			1						
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	×									
38. Chloride	16887006	×									
39. Antimony	7440360	×									
40. Arsenic	7440382	×									
41. Cadmium	7440439	×									
42. Chromium III (trivalent)	16065831	×									
43. Chromium VI (hexavalent)	18540299	×									
44. Copper	7440508	×									
45. Lead	7439921	×									
46. Mercury	7439976	×									
47. Nickel	7440020										
48. Selenium	7782492	×									
49. Silver	7440224	×									
50. Zinc	7440666	×									
51. Iron	7439896		×	1	grab	6020	0.50 mg/l	12,000	0.32	12,000	0.32
Other (describe):		×									

					Sample	Analytical	Minimum	Maximum daily value A		Maximum daily value		Average daily valu	
Parameter *	CAS Number	Believed Absent	Believed Present	#of Samples	Type (e.g., grab)	Method Used (method #)	Level (ML) of Test Method	concentration (ug/l)	n mass (kg)	concentration (ug/l)	mass (kg)		
					<u> </u>								
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 O N O Iron based on historic sampling													
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: DF DF Metal: DF DF Metal: DF Metal: DF DF Metal: Metal:													
Metal:		DF:	1			iron							
4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including: a) A description of the treatment system, including a schematic of the proposed or existing treatment system: Refer to the attached treatment system summary sheet.													
b) Identify each	Frac. ta	ank 🔲 A	ir stripper	☐ Oil/v	vater separa	tor 🗵	Equalization	on tanks 🗖 E	Bag filter ⊠	GAC filter	×		
applicable treatment unit (check all that apply):	Chlorin		e- nlorination		ther (please describe):								

c) Proposed average and maximum flow rates (gallons per minute) for the discharge and the design flow rate(s) (gallons per minute) of the treatment system: Average flow rate of discharge or 5 gpm Maximum flow rate of treatment system gpm Design flow rate of treatment system gpm								
d) A description of chemical additives being used or planned to be used (attach MSDS sheets):								
5. Receiving surface water(s). Please	se provide inform	nation about the re	eceiving water(s),	using separate she	eets 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 pa	athway, including	the name(s) of the	receiving waters:				
The storm drain discharges within a culvert	to an unnamed st	ream within a foreste	d wetlands area app	roximately 800 feet w	est of the site.			
 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 B							
e) Provide the state water quanty classification of the receiving water e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 0.003 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_O_N_O_If yes, for which pollutant(s)?								
Is there a final TMDL? Y_O_N_O_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.

- 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 O N O
- 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 2 ③ 3 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.

Refer to the following supporting documents:

- 1. Remediation System Summary
- Site Plan
- 3. Remedial System Layout Plan
- 4. Area Map
- 5. USGS topographic map
- 6. Northeast Geoscience correspondence regarding dilution factor
- Laboratory Analytical Report

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

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name: Joals Garage, Inc.
Operator signature: Jointhan Moore
Printed Name & Title: Jonathan Moore, President
Date: 3/14/11

Remediation System Summary Joals Garage, Inc. 500 Adamsville Road Westport, Massachusetts

Joals Garage, Inc. is seeking coverage under the National Pollutant Discharge Elimination System Remediation General Permit for the discharge of treated ground water from 500 Adamsville Road in Westport, Massachusetts (the Property).

The ground water is being treated and discharged as part of response actions conducted under the Massachusetts Contingency Plan. The response actions are designed to remove petroleum hydrocarbons from the ground water. The petroleum originated from a release of gasoline from an underground storage tank at the Property. Ground water is extracted through the use of a high vacuum extraction remediation system. The ground water is treated by granular activated carbon and discharged to the municipal storm drain system located within Adamsville Road. The storm drain system discharges to an unnamed, intermittent stream and forested wetlands area located approximately 800 feet west of the Property.

High Vacuum Extraction Remediation System

Ground water and soil vapor are extracted from a series of recovery wells (RW-1 through RW-10 on the attached Site Plan). The remediation system extracts from one or two of the recovery wells at a time. Vacuum is applied to the recovery wells using a high vacuum liquid ring pump capable of an operating vacuum of 29 inches of mercury and an air flow of approximately 70 standard cubic feet per minute.

Waste Water Treatment

The combined ground water and soil vapor extracted from the recovery wells enter a moisture separation tank (60 gallon total capacity; 30 gallon storage capacity) where the air is separated from the fluids. The recovered ground water is pumped from the moisture separation tank through an oil water separator. The oil water separator is designed for a flow rate of up to 10 gallons per minute. The moisture separation tank, oil water separator and product collection tank have high level alarm switches interlocked with the high vacuum pump to deactivate the remedial system in the event of a high liquid level.

The recovered ground water is pumped from the oil water separator through a set of water treatment vessels at a maximum flow rate of 5 gallons per minute and a maximum pressure of 100 pounds per square inch. The water treatment vessels consists of two particulate bag filters, two particulate cartridge filters, one liquid phase granular activated

February 28, 2011 Page 1

carbon (LGAC) vessel with a capacity of 500 pounds of LGAC, followed by two LGAC vessels with a combined capacity of 360 pounds of LGAC, followed by one additional particulate cartridge filter. Treated ground water is discharged to the Town of Westport storm drain system.

The treatment system is designed to treat and discharge water in a batch mode only. Once the moisture separation tank is filled, two transfer pumps activate and pump 30 gallons of water through the treatment system at a flow rate of 5 gallons per minute. The treated water is discharged to the storm drain system. Once completed, the pumps deactivate and there is no discharge to the storm drain system until the moisture separator is refilled.

The rate at which ground water is extracted depends on the elevation of the ground water in the recovery wells and the depth at which the drop tubes are set within each recovery well. Operating data indicate that ground water extraction rates range between 0.5 gallons per minute and 2.5 gallons per minute. Based on these rates, the remediation system generally discharges between 30 gallons per hour and 150 gallons per hour. Because the system operates in batch mode, the number of batches per hour varies but the discharge flow rate of 5 gallons per minute is constant.

Discharge Location

The ground water is discharged to the municipal storm drain system located within Adamsville Road which discharges to an unnamed stream and forested wetlands area located approximately 800 feet west of the Property. The location of the storm drain outfall is shown on the attached Area Map. The stream appears to be formed where a culvert runs beneath Adamsville Road within a forested wetlands area at the bottom of the hill on which Joals Garage is located. The stream ultimately discharges into the West Branch of the Westport River. The attached section of the United States Geological Survey topographic map shows the discharge location relative to surface water features in the larger area.

February 28, 2011 Page 2

Design Control Features

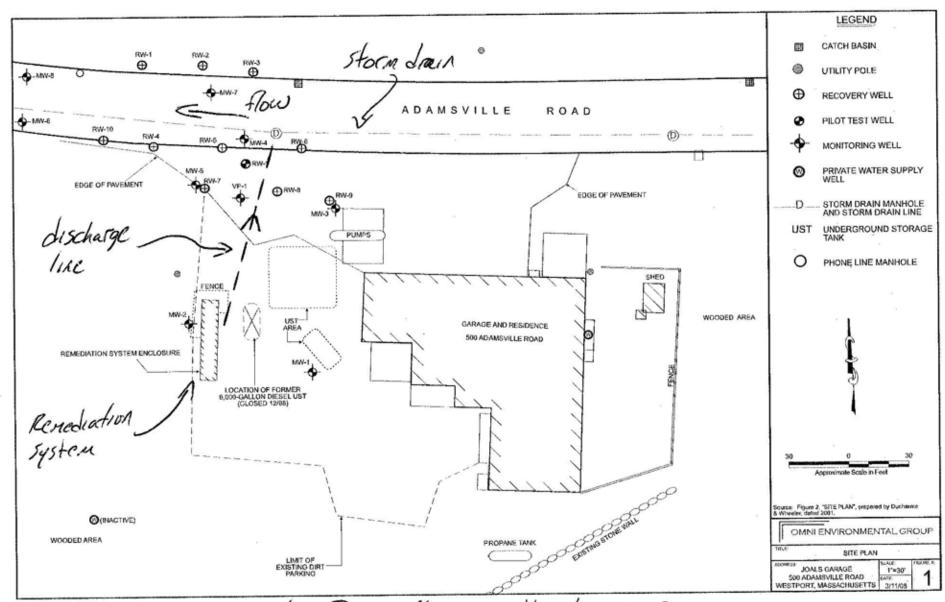
The design of the high vacuum extraction system includes alarm switches interlocked with the high vacuum pump that deactivate the high vacuum pump under specified conditions. These design features are intended to minimize the potential for a release of recovered ground water from the high vacuum extraction system.

The following alarm switches are included in the high vacuum extraction remediation system:

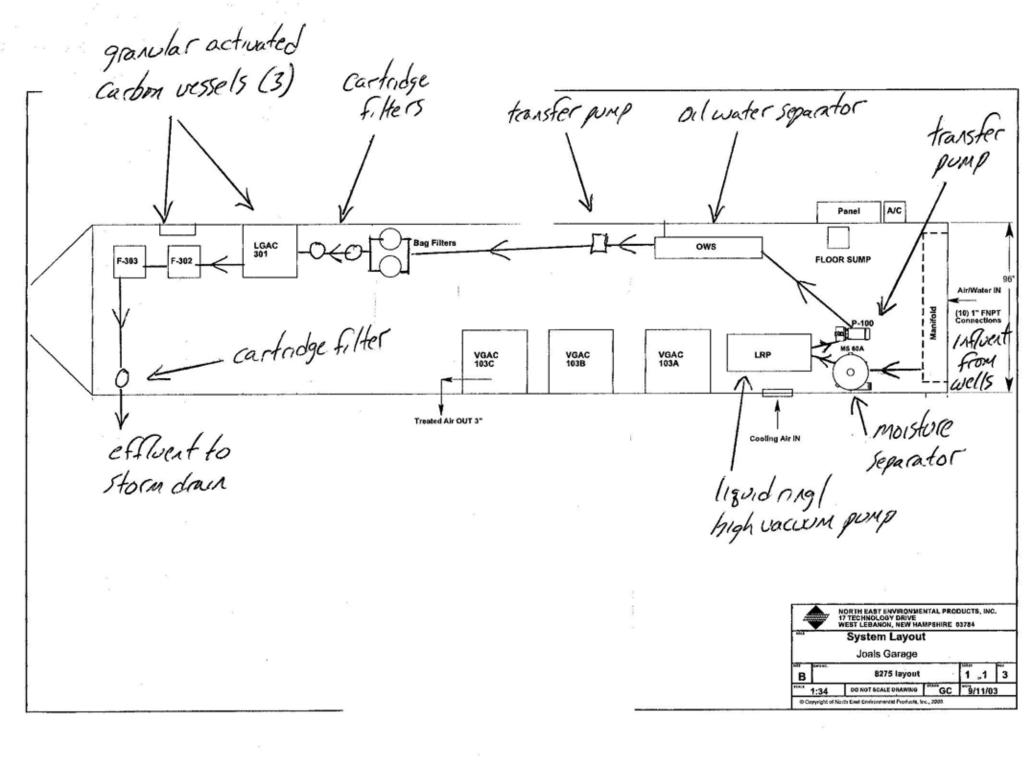
- Moisture separator high level switch A high level of liquid in the moisture separator shuts off the high vacuum extraction pump.
- Oil water separator high level switch A high level of liquid in the oil water separator shuts off the high vacuum extraction pump.
- Water treatment high pressure switch A high pressure in the water line to the particulate filters and the LGAC vessels shuts off the high vacuum extraction pump.
- Floor sump high level switch A high level of liquid within the sump in the floor of the system enclosure shuts off the high vacuum extraction pump.

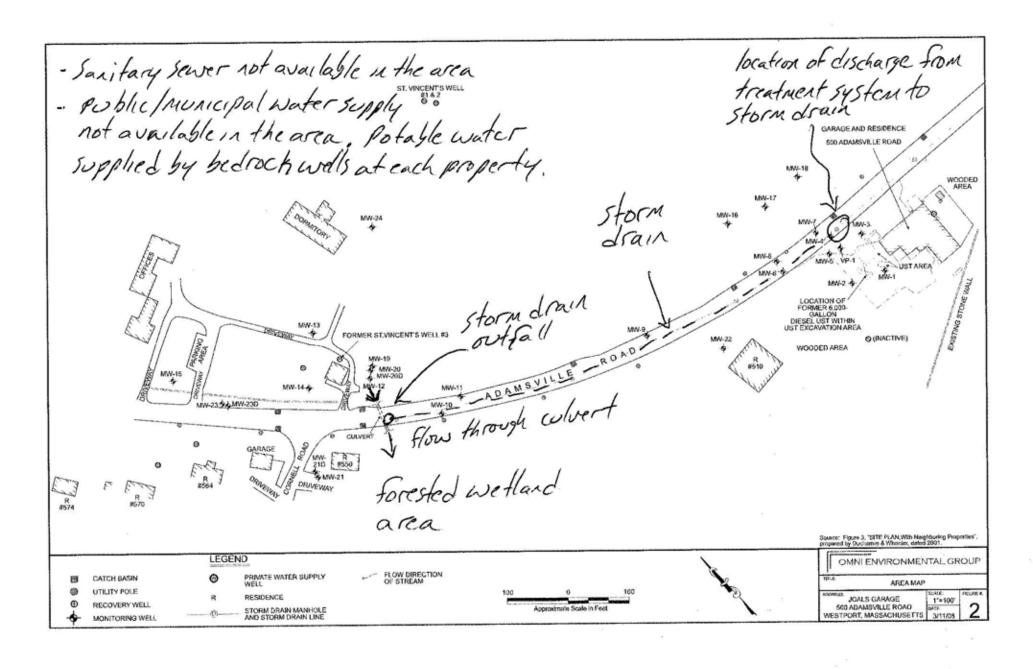
If an alarm is activated, the high vacuum extraction pump is automatically deactivated. The control panel for the high vacuum extraction remediation system includes hand-off-auto switches for the motors, run status lights, alarm condition lights, and fail-safe resets. Each alarm condition has a dedicated status light. The high vacuum extraction remediation system includes a telemetry system which notifies appropriate parties via telephone if there is an alarm condition.

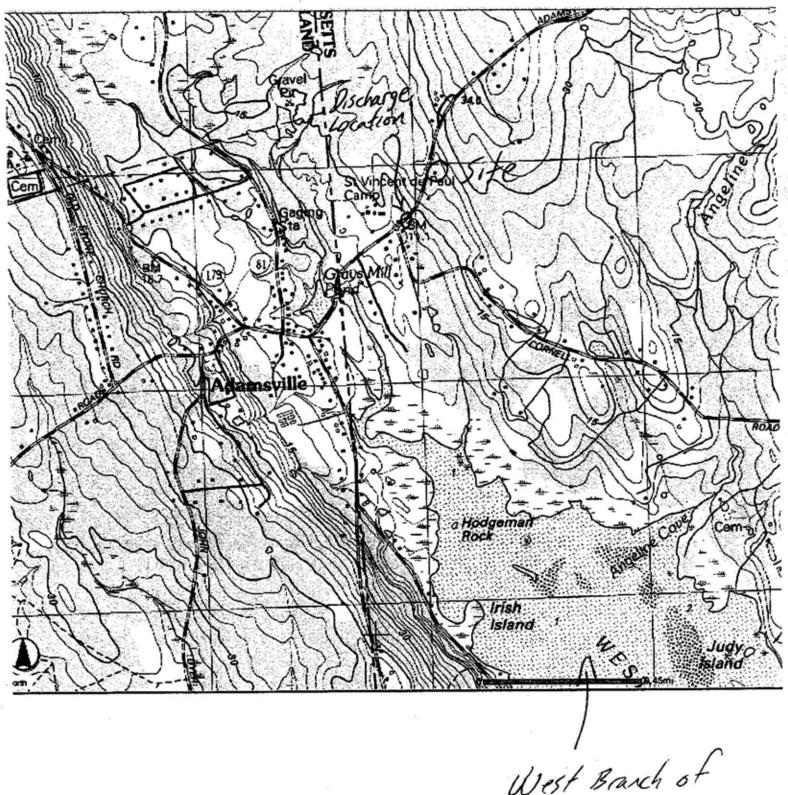
February 28, 2011 Page 3



Ground water extended from wells RW-1 through RW-10







West Branch of the Westgood River



Water Supply and Environmental Consulting

0 12 mi2

December 15, 2006

Mr. Jonathan Moore, L.S.P. Omni Environmental Group 227 Chelmsford Street Chelmsford, MA 01824

Re:

NPDES Remediation General Permit Joal's Garage - Adamsville Road

Westport, MA

Dear Mr. Moore;

Northeast Geoscience, Inc. (NGI) has completed calculations of the applicable dilution factor for the remediation system discharge at the above referenced site. These calculations were performed in accordance with the guidance document for Massachusetts General Permit MAG910000, the general permit for discharges associated with remediation systems and contaminated construction site dewatering operations.

For this site the receiving water is a tributary of the Westport River. NGI used the U.S.G.S. program STREAMSTATS to develop estimates of the 7Q10 flow for the receiving water. STREAMSTATS does not have a stream centerline package for selected costal drainage areas, including the site location. Therefore, NGI analyzed similar drainage basins in the area of Mount Hope Bay and normalized the data for the size of the contributing watershed of the receiving water tributary. These data are summarized as follows:

Receiving Water Contribu	iting Watershed at Dischar	rge Point	0.12 mi
Basin	Drainage Area	7Q10	cfs/mi ²
Analogous Basin 1	4.87 mi ²	0.14 cfs	0.028
Analogous Basin 2	1.17 mi^2	0.02 cfs	0.017
Analogous Basin 3	0.67 mi ²	0.02 cfs	0.030
Mean			0.025

Estimated 7Q10 at Discharge Point = $0.12 \text{ mi}^2 \times 0.025 \text{ cfs/mi}^2 = 0.003 \text{ cfs} (1.34 \text{ gpm})$

Assuming a remediation system average daily flow of 0.5 gpm, the dilution factor is calculated as follows:

$$DF = (0.5 \text{ gpm} + 1.34 \text{ gpm})/0.5 \text{ gpm} = 3.68$$

Under the General Remediation Discharge Permit the 0-5 Dilution Range Concentrations apply for discharges to the receiving water.

Adjusted Discharge Limits for Iron and Lead (Individual Permit)

Iron 1,000 ug/L X 3.68 = 3,680 ug/L Lead 1.3 ug/L X 3.68 = 4.78 ug/L These are the discharge limits you could expect to receive in the event that EPA issues an individual permit for the site. Please do not hesitate to contact me if you have any questions regarding this matter.

Sincerely;

Northeast Geoscience, Inc.

lay/Billings



ANALYTICAL REPORT

Lab Number: L1102882

Client: Omni Environmental Corp

One Village Square

14 Fletcher Street, Suite 7

Chelmsford, MA 01824

ATTN: Jonathan Moore Phone: (978) 256-6766

Project Name: JOALS
Project Number: 3602

Report Date: 03/11/11

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

Certifications & Approvals: MA (M-MA086), NY NELAC (11148), CT (PH-0574), NH (2003), NJ (MA935), RI (LAO00065), ME (MA0086), PA (Registration #68-03671), USDA (Permit #S-72578), US Army Corps of Engineers, Naval FESC.

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



Project Name:JOALSLab Number:L1102882Project Number:3602Report Date:03/11/11

Alpha Sample ID Client ID Client ID Client ID Client ID Coation Collection Date/Time Collection Date/Time



Serial_No:03111117:49

Project Name:JOALSLab Number:L1102882Project Number:3602Report Date:03/11/11

Case Narrative

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

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

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

E ₀ r	additional	information	nlagea	contact	Cliont	Sorvicos	at 800-624-9220.
ΓUI	addillonal	miormation.	Diease	contact	Cilent	Services	al 000-024-9220.

Semivolatile Organics

The WG458211-2/-3 LCS/LCSD recoveries, associated with L1102882-01, were above the acceptance criteria for 2,4-Dinitrotoluene (103%/107%); however, the associated sample was non-detect for this target compound. The results of the original analysis are reported.

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

Michelle M. Morris

Authorized Signature:

Title: Technical Director/Representative

Date: 03/11/11



ORGANICS



VOLATILES



Serial_No:03111117:49

Project Name:JOALSLab Number:L1102882Project Number:3602Report Date:03/11/11

SAMPLE RESULTS

Lab ID: Date Collected: 03/04/11 13:25

Client ID: INFLUENT Date Received: 03/04/11
Sample Location: WESTPORT Field Prep: Not Specified

Matrix: Water

Analytical Method: 5,624
Analytical Date: 03/07/11 10:57

Analyst: TT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westbord	ough Lab					
Methylene chloride	ND		ug/l	5.0		1
1,1-Dichloroethane	ND		ug/l	1.5		1
Chloroform	ND		ug/l	1.5		1
Carbon tetrachloride	ND		ug/l	1.0		1
1,2-Dichloropropane	ND		ug/l	3.5		1
Dibromochloromethane	ND		ug/l	1.0		1
1,1,2-Trichloroethane	ND		ug/l	1.5		1
2-Chloroethylvinyl ether	ND		ug/l	10		1
Tetrachloroethene	ND		ug/l	1.5		1
Chlorobenzene	ND		ug/l	3.5		1
Trichlorofluoromethane	ND		ug/l	5.0		1
1,2-Dichloroethane	ND		ug/l	1.5		1
1,1,1-Trichloroethane	ND		ug/l	2.0		1
Bromodichloromethane	ND		ug/l	1.0		1
trans-1,3-Dichloropropene	ND		ug/l	1.5		1
cis-1,3-Dichloropropene	ND		ug/l	1.5		1
Bromoform	ND		ug/l	1.0		1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0		1
Benzene	3.8		ug/l	1.0		1
Toluene	92		ug/l	1.0		1
Ethylbenzene	ND		ug/l	1.0		1
Chloromethane	ND		ug/l	10		1
Bromomethane	ND		ug/l	5.0		1
Vinyl chloride	ND		ug/l	2.0		1
Chloroethane	ND		ug/l	2.0		1
1,1-Dichloroethene	ND		ug/l	1.0		1
trans-1,2-Dichloroethene	ND		ug/l	1.5		1
cis-1,2-Dichloroethene	ND		ug/l	1.0		1
Trichloroethene	ND		ug/l	1.0		1
1,2-Dichlorobenzene	ND		ug/l	5.0		1



Serial_No:03111117:49

Project Name: JOALS Lab Number: L1102882

Project Number: 3602 Report Date: 03/11/11

SAMPLE RESULTS

Lab ID:L1102882-01Date Collected:03/04/11 13:25Client ID:INFLUENTDate Received:03/04/11Sample Location:WESTPORTField Prep:Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - West	borough Lab					
1,3-Dichlorobenzene	ND		ug/l	5.0		1
1,4-Dichlorobenzene	ND		ug/l	5.0		1
p/m-Xylene	170		ug/l	2.0		1
o-xylene	130		ug/l	1.0		1
Xylene (Total)	300		ug/l	2.0		1
Styrene	ND		ug/l	1.0		1
Acetone	ND		ug/l	10		1
Carbon disulfide	ND		ug/l	5.0		1
2-Butanone	ND		ug/l	10		1
Vinyl acetate	ND		ug/l	20		1
4-Methyl-2-pentanone	ND		ug/l	10		1
2-Hexanone	ND		ug/l	10		1
Acrolein	ND		ug/l	8.0		1
Acrylonitrile	ND		ug/l	10		1
Methyl tert butyl ether	ND		ug/l	20		1
Dibromomethane	ND		ug/l	1.0		1
1,4-Dioxane	ND		ug/l	2000		1
Tert-Butyl Alcohol	ND		ug/l	100		1
Tertiary-Amyl Methyl Ether	ND		ug/l	20		1

			Acceptance	
Surrogate	% Recovery	Qualifier	Criteria	
Pentafluorobenzene	90		80-120	
Fluorobenzene	99		80-120	
4-Bromofluorobenzene	105		80-120	

Project Name: Lab Number: JOALS L1102882 **Project Number:** 3602 Report Date: 03/11/11

Method Blank Analysis Batch Quality Control

Analytical Method: Analytical Date: 5,624

03/07/11 07:26

Analyst: TT

Parameter	Result	Qualifier	Units		RL	MDL
Volatile Organics by GC/MS	- Westborough Lab	o for sample(s):	: 01	Batch:	WG45	7154-8
Methylene chloride	ND		ug/l		5.0	
1,1-Dichloroethane	ND		ug/l		1.5	
Chloroform	ND		ug/l		1.5	
Carbon tetrachloride	ND		ug/l		1.0	
1,2-Dichloropropane	ND		ug/l		3.5	
Dibromochloromethane	ND		ug/l		1.0	
1,1,2-Trichloroethane	ND		ug/l		1.5	
2-Chloroethylvinyl ether	ND		ug/l		10	
Tetrachloroethene	ND		ug/l		1.5	
Chlorobenzene	ND		ug/l		3.5	
Trichlorofluoromethane	ND		ug/l		5.0	
1,2-Dichloroethane	ND		ug/l		1.5	
1,1,1-Trichloroethane	ND		ug/l		2.0	
Bromodichloromethane	ND		ug/l		1.0	
trans-1,3-Dichloropropene	ND		ug/l		1.5	
cis-1,3-Dichloropropene	ND		ug/l		1.5	
Bromoform	ND		ug/l		1.0	
1,1,2,2-Tetrachloroethane	ND		ug/l		1.0	
Benzene	ND		ug/l		1.0	
Toluene	ND		ug/l		1.0	
Ethylbenzene	ND		ug/l		1.0	
Chloromethane	ND		ug/l		10	
Bromomethane	ND		ug/l		5.0	
Vinyl chloride	ND		ug/l		2.0	
Chloroethane	ND		ug/l		2.0	
1,1-Dichloroethene	ND		ug/l		1.0	
trans-1,2-Dichloroethene	ND		ug/l		1.5	
cis-1,2-Dichloroethene	ND		ug/l		1.0	
Trichloroethene	ND		ug/l		1.0	
1,2-Dichlorobenzene	ND		ug/l		5.0	
1,3-Dichlorobenzene	ND		ug/l		5.0	
						700



Method Blank Analysis Batch Quality Control

Analytical Method: Analytical Date: 5,624

03/07/11 07:26

Analyst: TT

arameter	Result	Qualifier	Units		RL	MDL
olatile Organics by GC/MS -	· Westborough Lab	for sample(s):	01	Batch:	WG457154-8	3
1,4-Dichlorobenzene	ND		ug/l		5.0	
p/m-Xylene	ND		ug/l		2.0	
o-xylene	ND		ug/l		1.0	
Xylene (Total)	ND		ug/l		2.0	
Styrene	ND		ug/l		1.0	
Acetone	ND		ug/l		10	
Carbon disulfide	ND		ug/l		5.0	
2-Butanone	ND		ug/l		10	
Vinyl acetate	ND		ug/l		20	
4-Methyl-2-pentanone	ND		ug/l		10	
2-Hexanone	ND		ug/l		10	
Acrolein	ND		ug/l		8.0	
Acrylonitrile	ND		ug/l		10	
Methyl tert butyl ether	ND		ug/l		20	
Dibromomethane	ND		ug/l		1.0	
1,4-Dioxane	ND		ug/l		2000	
Tert-Butyl Alcohol	ND		ug/l		100	
Tertiary-Amyl Methyl Ether	ND		ug/l		20	
Tertiary-Amyl Methyl Ether	ND		ug/l		20	

			Acceptance	
Surrogate	%Recovery	Qualifier	Criteria	
Pentafluorobenzene	90		80-120	
Fluorobenzene	96		80-120	
4-Bromofluorobenzene	109		80-120	



Project Name: JOALS

Project Number: 3602

Lab Number: L1102882

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	01 Batch: W	G457154-7				
Methylene chloride	78		-		1-221	-		30
1,1-Dichloroethane	103		-		59-155	-		30
Chloroform	105		-		51-138	-		30
Carbon tetrachloride	122		-		70-140	-		30
1,2-Dichloropropane	103		-		1-210	-		30
Dibromochloromethane	110		-		53-149	-		30
1,1,2-Trichloroethane	113		-		52-150	-		30
2-Chloroethylvinyl ether	110		-		1-305	-		30
Tetrachloroethene	126		-		64-148	-		30
Chlorobenzene	106		-		37-160	-		30
Trichlorofluoromethane	91		-		17-181	-		30
1,2-Dichloroethane	96		-		49-155	-		30
1,1,1-Trichloroethane	108		-		52-162	-		30
Bromodichloromethane	113		-		35-155	-		30
trans-1,3-Dichloropropene	104		-		17-183	-		30
cis-1,3-Dichloropropene	105		-		1-227	-		30
Bromoform	104		-		45-169	-		30
1,1,2,2-Tetrachloroethane	104		-		46-157	-		30
Benzene	106		-		37-151	-		30
Toluene	108		-		47-150	-		30
Ethylbenzene	114		-		37-162	-		30



Project Name: JOALS
Project Number: 3602

Lab Number: L1102882

arameter	LCS %Recovery	Qual	LCSD %Recovery	y Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	01 Batch:	WG457154-7				
Chloromethane	173		-		1-273	-		30
Bromomethane	76		-		1-242	-		30
Vinyl chloride	66		-		1-251	-		30
Chloroethane	78		-		14-230	-		30
1,1-Dichloroethene	96		-		1-234	-		30
trans-1,2-Dichloroethene	115		-		54-156	-		30
cis-1,2-Dichloroethene	103		-		60-140	-		30
Trichloroethene	103		-		71-157	-		30
1,2-Dichlorobenzene	105		-		18-190	-		30
1,3-Dichlorobenzene	104		-		59-156	-		30
1,4-Dichlorobenzene	108		-		18-190	-		30
p/m-Xylene	110		-		40-160	-		30
o-Xylene	103		-		40-160	-		30
XYLENE (TOTAL)	107		-		40-160	-		30
Styrene	98		-		40-160	-		30
Acetone	76		-		40-160	-		30
Carbon disulfide	89		-		40-160	-		30
2-Butanone	102		-		40-160	-		30
Vinyl acetate	140		-		40-160	-		30
4-Methyl-2-pentanone	114		-		40-160	-		30
2-Hexanone	109		-		40-160	-		30



Project Name: JOALS

Project Number:

3602

Lab Number:

Report Date:

L1102882 03/11/11

Parameter	LCS %Recovery	LCSD Qual %Recovery	%Recovery Qual Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - W	Vestborough Lab Associated s	sample(s): 01 Batch: W0	G457154-7			
Acrolein	65	-	40-160	-		30
Acrylonitrile	94	-	40-160	-		30
Dibromomethane	109	-	70-130	-		30

	LCS		LCSD		Acceptance	
Surrogate	%Recovery	Qual	%Recovery	Qual	Criteria	
Pentafluorobenzene	95				80-120	
Fluorobenzene	98				80-120	
4-Bromofluorobenzene	103				80-120	



Project Name: JOALS
Project Number: 3602

Lab Number: L1102882

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual Found	MSD %Recovery Q	Recovery tual Limits	RPD	RPD Qual Limits
Volatile Organics by GC/MS -	Westborough	Lab Associ	ated sample	(s): 01 QC E	Batch ID: WG4571	54-3 QC Samp	le: L1102736-01	Clier	nt ID: MS Sample
Methylene chloride	ND	20	17	84	-	-	1-221	-	30
1,1-Dichloroethane	ND	20	21	106	·	-	59-155	-	30
Chloroform	ND	20	22	108		-	51-138	-	30
Carbon tetrachloride	ND	20	25	127		-	70-140	-	30
1,2-Dichloropropane	ND	20	22	108		-	1-210	-	30
Dibromochloromethane	ND	20	24	119		-	53-149	-	30
1,1,2-Trichloroethane	ND	20	24	121		-	52-150	-	30
2-Chloroethylvinyl ether	ND	20	19	94	-	-	1-305	-	30
Tetrachloroethene	ND	20	26	128	-	-	64-148	-	30
Chlorobenzene	ND	20	22	108	-	-	37-160	-	30
Trichlorofluoromethane	ND	20	19	96	-	-	17-181	-	30
1,2-Dichloroethane	ND	20	20	102	-	-	49-155	-	30
1,1,1-Trichloroethane	ND	20	22	108	-	-	52-162	-	30
Bromodichloromethane	ND	20	23	117	-	-	35-155	-	30
trans-1,3-Dichloropropene	ND	20	22	108	-	-	17-183	-	30
cis-1,3-Dichloropropene	ND	20	20	99		-	1-227	-	30
Bromoform	ND	20	22	112	-	-	45-169	-	30
1,1,2,2-Tetrachloroethane	ND	20	23	115	-	-	46-157	-	30
Benzene	ND	20	22	110		-	35-151	-	30
Toluene	ND	20	22	112		-	47-150	-	30
Ethylbenzene	ND	20	23	116	-	-	37-162	-	30

Project Name: JOALS
Project Number: 3602

Lab Number: L1102882

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery (Recovery Qual Limits	RPD	RPD Qual Limits
Volatile Organics by GC/MS	- Westborough	Lab Associ	ated sample	(s): 01 QC I	Batch ID: W	/G45715	4-3 QC Samp	ole: L1102736-01	Clier	nt ID: MS Sample
Chloromethane	ND	20	26	130		-	-	1-273	-	30
Bromomethane	ND	20	20	102		-	-	1-242	-	30
Vinyl chloride	ND	20	14	72		-	-	1-251	-	30
Chloroethane	ND	20	16	82		-	-	14-230	-	30
1,1-Dichloroethene	ND	20	20	100		-	-	1-234	-	30
trans-1,2-Dichloroethene	ND	20	24	120		-	-	54-156	-	30
cis-1,2-Dichloroethene	ND	20	22	108		-	-	60-140	-	30
Trichloroethene	ND	20	22	108		-	-	71-157	-	30
1,2-Dichlorobenzene	ND	20	22	113		-	-	18-190	-	30
1,3-Dichlorobenzene	ND	20	22	109		-	-	59-156	-	30
1,4-Dichlorobenzene	ND	20	23	116		-	-	18-190	-	30
p/m-Xylene	ND	40	44	111		-	-	40-160	-	30
o-Xylene	ND	20	21	105		-	-	40-160	-	30
XYLENE (TOTAL)	ND	60	65	109		-	-	40-160	-	30
Styrene	ND	20	20	100		-	-	40-160	-	30
Acetone	17	50	54	74		-	-	40-160	-	30
Carbon disulfide	ND	20	18	93		-	-	40-160	-	30
2-Butanone	ND	50	44	89		-	-	40-160	-	30
Vinyl acetate	ND	40	24	60		-	-	40-160	-	30
4-Methyl-2-pentanone	ND	50	52	104		-	-	40-160	-	30
2-Hexanone	ND	50	51	103		-	-	40-160	-	30

Project Name: JOALS
Project Number: 3602

Lab Number: L1102882

<u>Parameter</u>	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found %	MSD Recovery (Recovery Qual Limits	RPD Q	RPD ual <u>Limit</u> s
Volatile Organics by GC/MS -	- Westborough	Lab Associ	ated sample	(s): 01 QC B	atch ID: \	WG457154-3	3 QC Samp	ole: L1102736-01	Client II	D: MS Sample
Acrolein	ND	40	20	49		-	-	40-160	-	30
Acrylonitrile	ND	40	35	88		-	-	40-160	-	30
Dibromomethane	ND	20	18	92		-	-		-	30

	MS	3	M:	SD	Acceptance	
Surrogate	% Recovery	Qualifier	% Recovery	Qualifier	Criteria	
4-Bromofluorobenzene	104				80-120	
Fluorobenzene	99				80-120	
Pentafluorobenzene	96				80-120	

Project Name: JOALS Project Number: 3602

Lab Number: L1102882

03/11/11 Report Date:

arameter	Native Sample	Duplicate Sample	Units	RPD	Qual RPD Limits
platile Organics by GC/MS - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG457154-4	QC Sample:	L1102736-0	1 Client ID: DUP Sample
Methylene chloride	ND	ND	ug/l	NC	30
1,1-Dichloroethane	ND	ND	ug/l	NC	30
Chloroform	ND	ND	ug/l	NC	30
Carbon tetrachloride	ND	ND	ug/l	NC	30
1,2-Dichloropropane	ND	ND	ug/l	NC	30
Dibromochloromethane	ND	ND	ug/l	NC	30
1,1,2-Trichloroethane	ND	ND	ug/l	NC	30
2-Chloroethylvinyl ether	ND	ND	ug/l	NC	30
Tetrachloroethene	ND	ND	ug/l	NC	30
Chlorobenzene	ND	ND	ug/l	NC	30
Trichlorofluoromethane	ND	ND	ug/l	NC	30
1,2-Dichloroethane	ND	ND	ug/l	NC	30
1,1,1-Trichloroethane	ND	ND	ug/l	NC	30
Bromodichloromethane	ND	ND	ug/l	NC	30
trans-1,3-Dichloropropene	ND	ND	ug/l	NC	30
cis-1,3-Dichloropropene	ND	ND	ug/l	NC	30
Bromoform	ND	ND	ug/l	NC	30
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC	30
Benzene	ND	ND	ug/l	NC	30



Project Name: JOALS Project Number: 3602

Lab Number: L1102882

03/11/11 Report Date:

arameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
platile Organics by GC/MS - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG457154-4	QC Sample:	L1102736-01	Client ID: DUP Sample
Toluene	ND	ND	ug/l	NC	30
Ethylbenzene	ND	ND	ug/l	NC	30
Chloromethane	ND	ND	ug/l	NC	30
Bromomethane	ND	ND	ug/l	NC	30
Vinyl chloride	ND	ND	ug/l	NC	30
Chloroethane	ND	ND	ug/l	NC	30
1,1-Dichloroethene	ND	ND	ug/l	NC	30
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	30
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	30
Trichloroethene	ND	ND	ug/l	NC	30
1,2-Dichlorobenzene	ND	ND	ug/l	NC	30
1,3-Dichlorobenzene	ND	ND	ug/l	NC	30
1,4-Dichlorobenzene	ND	ND	ug/l	NC	30
p/m-Xylene	ND	ND	ug/l	NC	30
o-xylene	ND	ND	ug/l	NC	30
Xylene (Total)	ND	ND	ug/l	NC	30
Styrene	ND	ND	ug/l	NC	30
Acetone	17	18	ug/l	6	30
Carbon disulfide	ND	ND	ug/l	NC	30



Project Name: JOALS
Project Number: 3602

Lab Number: L1102882

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
olatile Organics by GC/MS - West	borough Lab Associated sample(s): 01	QC Batch ID: WG457154-4	QC Sample:	L1102736-01	Client ID: DUP Sample
2-Butanone	ND	ND	ug/l	NC	30
Vinyl acetate	ND	ND	ug/l	NC	30
4-Methyl-2-pentanone	ND	ND	ug/l	NC	30
2-Hexanone	ND	ND	ug/l	NC	30
Acrolein	ND	ND	ug/l	NC	30
Acrylonitrile	ND	ND	ug/l	NC	30
Dibromomethane	ND	ND	ug/l	NC	30

_		_	Acceptance	
Surrogate	%Recovery	Qualifier %Recovery	Qualifier Criteria	
Pentafluorobenzene	91	90	80-120	
Fluorobenzene	97	98	80-120	
4-Bromofluorobenzene	115	109	80-120	



SEMIVOLATILES



Project Name: JOALS Lab Number: L1102882

Project Number: 3602 Report Date: 03/11/11

SAMPLE RESULTS

Lab ID: Date Collected: 03/04/11 13:25

Client ID: INFLUENT Date Received: 03/04/11
Sample Location: WESTPORT Field Prep: Not Specified
Matrix: Water Extraction Method: EPA 3510C

Matrix: Water Extraction Method: EPA 3510C

Analytical Method: 1,8270C Extraction Date: 03/10/11 18:04

Analytical Date: 03/11/11 11:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	stborough Lab					
Benzidine	ND		ug/l	50		1
1,2,4-Trichlorobenzene	ND		ug/l	5.0		1
Hexachlorobenzene	ND		ug/l	5.0		1
Bis(2-chloroethyl)ether	ND		ug/l	5.0		1
1,2-Dichlorobenzene	ND		ug/l	5.0		1
1,3-Dichlorobenzene	ND		ug/l	5.0		1
1,4-Dichlorobenzene	ND		ug/l	5.0		1
3,3'-Dichlorobenzidine	ND		ug/l	50		1
2,4-Dinitrotoluene	ND		ug/l	6.0		1
2,6-Dinitrotoluene	ND		ug/l	5.0		1
Azobenzene	ND		ug/l	5.0		1
4-Chlorophenyl phenyl ether	ND		ug/l	5.0		1
4-Bromophenyl phenyl ether	ND		ug/l	5.0		1
Bis(2-chloroisopropyl)ether	ND		ug/l	5.0		1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0		1
Hexachlorobutadiene	ND		ug/l	10		1
Hexachlorocyclopentadiene	ND		ug/l	30		1
Hexachloroethane	ND		ug/l	5.0		1
Isophorone	ND		ug/l	5.0		1
Nitrobenzene	ND		ug/l	5.0		1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	15		1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	5.0		1
Butyl benzyl phthalate	ND		ug/l	5.0		1
Di-n-butylphthalate	ND		ug/l	5.0		1
Di-n-octylphthalate	ND		ug/l	5.0		1
Diethyl phthalate	ND		ug/l	5.0		1
Dimethyl phthalate	ND		ug/l	5.0		1
Aniline	ND		ug/l	20		1
4-Chloroaniline	ND		ug/l	5.0		1
2-Nitroaniline	ND		ug/l	5.0		1



Analyst:

JΒ

Project Name: JOALS Lab Number: L1102882

Project Number: 3602 Report Date: 03/11/11

SAMPLE RESULTS

Lab ID:L1102882-01Date Collected:03/04/11 13:25Client ID:INFLUENTDate Received:03/04/11Sample Location:WESTPORTField Prep:Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westl	oorough Lab					
3-Nitroaniline	ND		ug/l	5.0		1
4-Nitroaniline	ND		ug/l	7.0		1
Dibenzofuran	ND		ug/l	5.0		1
n-Nitrosodimethylamine	ND		ug/l	50		1
2,4,6-Trichlorophenol	ND		ug/l	5.0		1
P-Chloro-M-Cresol	ND		ug/l	5.0		1
2-Chlorophenol	ND		ug/l	6.0		1
2,4-Dichlorophenol	ND		ug/l	10		1
2,4-Dimethylphenol	ND		ug/l	10		1
2-Nitrophenol	ND		ug/l	20		1
4-Nitrophenol	ND		ug/l	10		1
2,4-Dinitrophenol	ND		ug/l	30		1
4,6-Dinitro-o-cresol	ND		ug/l	20		1
Pentachlorophenol	ND		ug/l	10		1
Phenol	ND		ug/l	7.0		1
2-Methylphenol	ND		ug/l	6.0		1
3-Methylphenol/4-Methylphenol	ND		ug/l	6.0		1
2,4,5-Trichlorophenol	ND		ug/l	5.0		1
Benzoic Acid	ND		ug/l	50		1
Benzyl Alcohol	ND		ug/l	10		1
Carbazole	ND		ug/l	5.0		1
Pyridine	ND		ug/l	50		1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
2-Fluorophenol	40		21-120	
Phenol-d6	27		10-120	
Nitrobenzene-d5	62		23-120	
2-Fluorobiphenyl	68		15-120	
2,4,6-Tribromophenol	96		10-120	
4-Terphenyl-d14	102		33-120	



Project Name:JOALSLab Number:L1102882

Project Number: 3602 Report Date: 03/11/11

SAMPLE RESULTS

Lab ID: Date Collected: 03/04/11 13:25

Client ID:INFLUENTDate Received:03/04/11Sample Location:WESTPORTField Prep:Not SpecifiedMatrix:WaterExtraction Method:EPA 3510C

Analytical Method: 1,8270C Extraction Date: 03/10/11 17:59
Analytical Date: 03/11/11 15:46

Analyst: AS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PAHs by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.20		1
2-Chloronaphthalene	ND		ug/l	0.20		1
Fluoranthene	ND		ug/l	0.20		1
Naphthalene	0.77		ug/l	0.20		1
Benzo(a)anthracene	ND		ug/l	0.20		1
Benzo(a)pyrene	ND		ug/l	0.20		1
Benzo(b)fluoranthene	ND		ug/l	0.20		1
Benzo(k)fluoranthene	ND		ug/l	0.20		1
Chrysene	ND		ug/l	0.20		1
Acenaphthylene	ND		ug/l	0.20		1
Anthracene	ND		ug/l	0.20		1
Benzo(ghi)perylene	ND		ug/l	0.20		1
Fluorene	ND		ug/l	0.20		1
Phenanthrene	ND		ug/l	0.20		1
Dibenzo(a,h)anthracene	ND		ug/l	0.20		1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20		1
Pyrene	ND		ug/l	0.20		1
1-Methylnaphthalene	ND		ug/l	0.20		1
2-Methylnaphthalene	ND		ug/l	0.20		1

		Acceptance					
Surrogate	% Recovery	Qualifier	Criteria				
Nitrobenzene-d5	108		23-120				
2-Fluorobiphenyl	78		15-120				
4-Terphenyl-d14	109		33-120				



Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C Analytical Date: 03/11/11 14:23

Analyst: AS

arameter	Result	Qualifier		Units	RL	MDL
PAHs by GC/MS-SIM - West	borough Lab for s	ample(s):	01	Batch:	WG458210-1	
Acenaphthene	ND			ug/l	0.20	
2-Chloronaphthalene	ND			ug/l	0.20	
Fluoranthene	ND			ug/l	0.20	
Naphthalene	ND			ug/l	0.20	
Benzo(a)anthracene	ND			ug/l	0.20	
Benzo(a)pyrene	ND			ug/l	0.20	
Benzo(b)fluoranthene	ND			ug/l	0.20	
Benzo(k)fluoranthene	ND			ug/l	0.20	
Chrysene	ND			ug/l	0.20	
Acenaphthylene	ND			ug/l	0.20	
Anthracene	ND			ug/l	0.20	
Benzo(ghi)perylene	ND			ug/l	0.20	
Fluorene	ND			ug/l	0.20	
Phenanthrene	ND			ug/l	0.20	
Dibenzo(a,h)anthracene	ND			ug/l	0.20	
Indeno(1,2,3-cd)Pyrene	ND			ug/l	0.20	
Pyrene	ND			ug/l	0.20	
1-Methylnaphthalene	ND			ug/l	0.20	
2-Methylnaphthalene	ND			ug/l	0.20	

	Acceptance				
Surrogate	%Recovery	Qualifier	Criteria		
Nitrobenzene-d5	90		23-120		
2-Fluorobiphenyl	79		15-120		
4-Terphenyl-d14	98		33-120		



Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C Analytical Date: 03/11/11 10:03

Analyst: JB

Parameter	Result	Qualifier Units	s RL	MDL
Semivolatile Organics by GC/MS	- Westborough	Lab for sample(s):	01 Batch:	WG458211-1
Acenaphthene	ND	ug/l	5.0	
Benzidine	ND	ug/l	50	
1,2,4-Trichlorobenzene	ND	ug/l	5.0	
Hexachlorobenzene	ND	ug/l	5.0	
Bis(2-chloroethyl)ether	ND	ug/l	5.0	
2-Chloronaphthalene	ND	ug/l	6.0	
1,2-Dichlorobenzene	ND	ug/l	5.0	
1,3-Dichlorobenzene	ND	ug/l	5.0	
1,4-Dichlorobenzene	ND	ug/l	5.0	
3,3'-Dichlorobenzidine	ND	ug/l	50	
2,4-Dinitrotoluene	ND	ug/l	6.0	
2,6-Dinitrotoluene	ND	ug/l	5.0	
Azobenzene	ND	ug/l	5.0	
Fluoranthene	ND	ug/l	5.0	
4-Chlorophenyl phenyl ether	ND	ug/l	5.0	
4-Bromophenyl phenyl ether	ND	ug/l	5.0	
Bis(2-chloroisopropyl)ether	ND	ug/l	5.0	
Bis(2-chloroethoxy)methane	ND	ug/l	5.0	
Hexachlorobutadiene	ND	ug/l	10	
Hexachlorocyclopentadiene	ND	ug/l	30	
Hexachloroethane	ND	ug/l	5.0	
Isophorone	ND	ug/l	5.0	
Naphthalene	ND	ug/l	5.0	
Nitrobenzene	ND	ug/l	5.0	
NitrosoDiPhenylAmine(NDPA)/DPA	ND	ug/l	15	
Bis(2-Ethylhexyl)phthalate	ND	ug/l	5.0	
Butyl benzyl phthalate	ND	ug/l	5.0	
Di-n-butylphthalate	ND	ug/l	5.0	
Di-n-octylphthalate	ND	ug/l	5.0	
Diethyl phthalate	ND	ug/l	5.0	
Dimethyl phthalate	ND	ug/l	5.0	
				W.



Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C Analytical Date: 03/11/11 10:03

Analyst: JB

Parameter	Result	Qualifier Units	RL	MDL	
Semivolatile Organics by GC/MS	- Westborough	Lab for sample(s):	01 Batch:	WG458211-1	
Benzo(a)anthracene	ND	ug/l	5.0		
Benzo(a)pyrene	ND	ug/l	5.0		
Benzo(b)fluoranthene	ND	ug/l	5.0		
Benzo(k)fluoranthene	ND	ug/l	5.0		
Chrysene	ND	ug/l	5.0		
Acenaphthylene	ND	ug/l	5.0		
Anthracene	ND	ug/l	5.0		
Benzo(ghi)perylene	ND	ug/l	5.0		
Fluorene	ND	ug/l	5.0		
Phenanthrene	ND	ug/l	5.0		
Dibenzo(a,h)anthracene	ND	ug/l	5.0		
Indeno(1,2,3-cd)Pyrene	ND	ug/l	7.0		
Pyrene	ND	ug/l	5.0		
Aniline	ND	ug/l	20		
4-Chloroaniline	ND	ug/l	5.0		
1-Methylnaphthalene	ND	ug/l	5.0		
2-Nitroaniline	ND	ug/l	5.0		
3-Nitroaniline	ND	ug/l	5.0		
4-Nitroaniline	ND	ug/l	7.0		
Dibenzofuran	ND	ug/l	5.0		
2-Methylnaphthalene	ND	ug/l	5.0		
n-Nitrosodimethylamine	ND	ug/l	50		
2,4,6-Trichlorophenol	ND	ug/l	5.0		
P-Chloro-M-Cresol	ND	ug/l	5.0		
2-Chlorophenol	ND	ug/l	6.0		
2,4-Dichlorophenol	ND	ug/l	10		
2,4-Dimethylphenol	ND	ug/l	10		
2-Nitrophenol	ND	ug/l	20		
4-Nitrophenol	ND	ug/l	10		
2,4-Dinitrophenol	ND	ug/l	30		
4,6-Dinitro-o-cresol	ND	ug/l	20		
				75	



Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270C Analytical Date: 03/11/11 10:03

Analyst: JB

Parameter	Result	Qualifier Units	s RL	MDL
Semivolatile Organics by GC/MS - V	Vestboroug	h Lab for sample(s):	01 Batch:	WG458211-1
Pentachlorophenol	ND	ug/l	10	
Phenol	ND	ug/l	7.0	
2-Methylphenol	ND	ug/l	6.0	
3-Methylphenol/4-Methylphenol	ND	ug/l	6.0	
2,4,5-Trichlorophenol	ND	ug/l	5.0	
Benzoic Acid	ND	ug/l	50	
Benzyl Alcohol	ND	ug/l	10	
Carbazole	ND	ug/l	5.0	
Pyridine	ND	ug/l	50	

		Acceptance	
Surrogate	%Recovery	Qualifier Criteria	
2-Fluorophenol	54	21-120	
Phenol-d6	38	10-120	
Nitrobenzene-d5	77	23-120	
2-Fluorobiphenyl	84	15-120	
2,4,6-Tribromophenol	105	10-120	
4-Terphenyl-d14	119	33-120	



Project Name: JOALS

3602

Project Number:

Lab Number: L1102882

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PAHs by GC/MS-SIM - Westborough Lab As	ssociated sample	e(s): 01	Batch: WG4582	10-2 WG	458210-3			
Acenaphthene	83		85		37-111	2		40
2-Chloronaphthalene	96		97		40-140	1		40
Fluoranthene	104		103		40-140	1		40
Anthracene	98		98		40-140	0		40
Pyrene	98		96		40-140	2		40

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qu	ual %Recovery Qual	Criteria
Nitrobenzene-d5	103	118	23-120
2-Fluorobiphenyl	87	89	15-120
4-Terphenyl-d14	97	98	33-120



Project Name: JOALS
Project Number: 3602

Lab Number: L1102882

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	Qual RPD Limits					
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG458211-2 WG458211-3											
Acenaphthene	78		84	37-111	7	30					
1,2,4-Trichlorobenzene	60		66	39-98	10	30					
2-Chloronaphthalene	82		91	40-140	10	30					
1,2-Dichlorobenzene	56		64	40-140	13	30					
1,4-Dichlorobenzene	59		65	36-97	10	30					
2,4-Dinitrotoluene	103	Q	107	Q 24-96	4	30					
2,6-Dinitrotoluene	92		96	40-140	4	30					
Fluoranthene	103		104	40-140	1	30					
4-Chlorophenyl phenyl ether	90		94	40-140	4	30					
n-Nitrosodi-n-propylamine	69		77	41-116	11	30					
Butyl benzyl phthalate	101		102	40-140	1	30					
Anthracene	95		97	40-140	2	30					
Pyrene	99		102	26-127	3	30					
P-Chloro-M-Cresol	90		95	23-97	5	30					
2-Chlorophenol	73		80	27-123	9	30					
2-Nitrophenol	78		88	30-130	12	30					
4-Nitrophenol	48		43	10-80	11	30					
2,4-Dinitrophenol	66		68	20-130	3	30					
Pentachlorophenol	66		67	9-103	2	30					
Phenol	39		41	12-110	5	30					



Project Name: JOALS Lab Number:

L1102882

Project Number: 3602

Report Date: 03/11/11

	LCS		LCSD		%Recovery			
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG458211-2 WG458211-3

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qua	l %Recovery Qual	Criteria
2-Fluorophenol	50	51	21-120
Phenol-d6	35	37	10-120
Nitrobenzene-d5	72	80	23-120
2-Fluorobiphenyl	83	89	15-120
2,4,6-Tribromophenol	107	108	10-120
4-Terphenyl-d14	112	115	33-120



METALS



Project Name:JOALSLab Number:L1102882Project Number:3602Report Date:03/11/11

SAMPLE RESULTS

Lab ID:L1102882-01Date Collected:03/04/11 13:25Client ID:INFLUENTDate Received:03/04/11Sample Location:WESTPORTField Prep:Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - We	estborough L	_ab									
Iron, Total	ND		mg/l	0.05		1	03/05/11 17:3	0 03/07/11 08:59	EPA 3005A	19,200.7	Al
Lead, Total	ND		mg/l	0.0005		1	03/05/11 17:3	0 03/08/11 17:46	EPA 3005A	1,6020	ВМ



Project Name: JOALS
Project Number: 3602

Lab Number:

L1102882

Report Date:

03/11/11

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared		Analytical Method	
Total Metals - Westboroug	h Lab for sample(s)	: 01 Bat	tch: Wo	G45752	25-1				
Iron, Total	ND	mg/l	0.05		1	03/05/11 17:30	03/07/11 08:53	19,200.7	AI

Prep Information

Digestion Method: EPA 3005A

Dilution Date Analytical Date Method Analyst **Factor Prepared Parameter Result Qualifier** MDL Analyzed Units RLTotal Metals - Westborough Lab for sample(s): 01 Batch: WG457526-1 Lead, Total ND 0.0005 mg/l 1 1,6020 BM

Prep Information

Digestion Method: EPA 3005A



Project Name: JOALS Project Number: 3602

Lab Number:

L1102882

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sal	mple(s): 01 B	atch: WG45	57525-2					
Iron, Total	100		-		85-115	-		
Total Metals - Westborough Lab Associated sal	mple(s): 01 B	atch: WG45	57526-2					
Lead, Total	108		-		80-120	-		



Project Name: JOALS
Project Number: 3602

Lab Number:

L1102882

Report Date:

<u>Parameter</u>	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recover Qual Limits	y RPD Qı	RPD _{Ial} Limits
Total Metals - Westborough Lab	Associated	sample(s): 01	QC Ba	tch ID: WG457	525-4	QC Samp	ole: L1102882-0	1 Client ID: II	NFLUENT	
Iron, Total	ND	1	1.0	100		-	-	75-125	-	20
Total Metals - Westborough Lab	Associated	sample(s): 01	QC Ba	tch ID: WG457	526-4	QC Samp	ole: L1102881-0	2 Client ID: N	IS Sample	
Lead, Total	ND	0.51	0.5248	103		-	-	80-120	-	20



Project Name: JOALS Project Number: 3602

Lab Number:

L1102882

Report Date:

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual F	RPD Limits
Total Metals - Westborough Lab Associated sample(s):	01 QC Batch ID:	WG457525-3 QC Sample:	L1102882-01	Client ID:	INFLUENT	
Iron, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s):	01 QC Batch ID:	WG457526-3 QC Sample:	L1102881-02	Client ID:	DUP Sample	
Lead, Total	ND	ND	mg/l	NC		20

INORGANICS & MISCELLANEOUS



Project Name: JOALS Lab Number: L1102882

Project Number: 3602 Report Date: 03/11/11

SAMPLE RESULTS

Lab ID: L1102882-01 Date Collected: 03/04/11 13:25

Client ID: Date Received: 03/04/11
Sample Location: WESTPORT Date Received: 03/04/11
Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	stborough Lab)								
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	03/09/11 11:45	30,2540D	DW
TPH	ND		mg/l	4.00		1	03/07/11 11:30	03/08/11 13:15	74,1664A	JO
Phenolics, Total	ND		mg/l	0.03		1	03/09/11 17:30	03/09/11 22:50	4,420.1	TP



Project Name: JOALS

Project Number: 3602

Lab Number:

L1102882

Report Date:

03/11/11

Method Blank Analysis Batch Quality Control

Parameter	Result Qu	ualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry	- Westborough Lab	for sam	ple(s): 01	Batch:	WG45	7612-2				
TPH	ND		mg/l	4.00		1	03/07/11 11:30	03/08/11 13:15	74,1664A	JO
General Chemistry	- Westborough Lab	for sam	ple(s): 01	Batch:	WG45	7970-1				
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	03/09/11 11:45	30,2540D	DW
General Chemistry	- Westborough Lab	for sam	ple(s): 01	Batch:	WG45	8036-1				
Phenolics, Total	ND		mg/l	0.03		1	03/09/11 17:30	03/09/11 22:44	4,420.1	TP



Project Name: JOALS Project Number: 3602

Lab Number:

L1102882

Report Date:

Parameter	LCS %Recovery Qu	LCSD ual %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits			
General Chemistry - Westborough Lab A	ssociated sample(s): 01	Batch: WG457612-1								
TPH	90	-		64-132	-		34			
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG458036-2										
Phenolics, Total	99	-		82-111	-		12			



Project Name: JOALS
Project Number: 3602

Lab Number:

L1102882

Report Date:

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		SD und	MSD %Recovery Q		Recovery Limits	RPD Qual	RPD Limits
General Chemistry - Westbore	ough Lab Assoc	ciated samp	ole(s): 01	QC Batch ID: \	WG457612-3	3 Q(C Sample: L11028	382-01	I Client ID	: INFLUENT	
TPH	ND	20.4	15.6	76		-	-		64-132	-	34
General Chemistry - Westbore	ough Lab Assoc	ciated samp	ole(s): 01	QC Batch ID: \	WG458036-3	3 Q(C Sample: L11028	349-01	I Client ID	: MS Sample	Э
Phenolics, Total	ND	0.8	0.78	98		-	-		77-124	-	12

L1102882

Lab Duplicate Analysis Batch Quality Control

Project Name: JOALS
Project Number: 3602

ty Control Lab Number:

Parameter	Native Sa	ample	Duplicate Sar	mple Units	RPD	Qual RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID:	WG457612-4	QC Sample: L11027	31-01 Clien	t ID: DUP Sample
TPH	ND		ND	mg/l	NC	34
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID:	WG457970-2	QC Sample: L11029	55-01 Clien	t ID: DUP Sample
Solids, Total Suspended	350		350	mg/l	0	32
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID:	WG458036-4	QC Sample: L11028	82-01 Clien	t ID: INFLUENT
Phenolics, Total	ND		ND	mg/l	NC	12



Project Name:JOALSLab Number:L1102882Project Number:3602Report Date:03/11/11

Sample Receipt and Container Information

Were project specific reporting limits specified?

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Info	rmation	Temp					
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1102882-01A	Vial Na2S2O3 preserved	Α	N/A	3	Υ	Absent	624(7)
L1102882-01B	Vial Na2S2O3 preserved	Α	N/A	3	Υ	Absent	624(7)
L1102882-01C	Amber 1000ml unpreserved	Α	7	3	Υ	Absent	PAHTCL-SIM(7)
L1102882-01D	Amber 1000ml unpreserved	Α	7	3	Υ	Absent	PAHTCL-SIM(7)
L1102882-01E	Amber 1000ml unpreserved	Α	7	3	Υ	Absent	8270TCL(7)
L1102882-01F	Amber 1000ml unpreserved	Α	7	3	Υ	Absent	8270TCL(7)
L1102882-01G	Amber 1000ml HCl preserved	Α	<2	3	Υ	Absent	TPH-1664(28)
L1102882-01H	Amber 1000ml HCl preserved	Α	<2	3	Υ	Absent	TPH-1664(28)
L1102882-01I	Amber 1000ml H2SO4 preserved	Α	<2	3	Υ	Absent	TPHENOL-420(28)
L1102882-01J	Amber 1000ml H2SO4 preserved	Α	<2	3	Υ	Absent	TPHENOL-420(28)
L1102882-01K	Plastic 1000ml unpreserved	Α	7	3	Υ	Absent	TSS-2540(7)
L1102882-01L	Plastic 250ml HNO3 preserved	Α	<2	3	Υ	Absent	FE-UI(180),PB-6020T(180)

GLOSSARY

Acronyms

EPA - Environmental Protection Agency.

LCS · Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD · Laboratory Control Sample Duplicate: Refer to LCS.

MDL • Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS • Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD · Matrix Spike Sample Duplicate: Refer to MS.

NA · Not Applicable.

NC • Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI · Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

Terms

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

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- ${\bf E} \qquad \hbox{-Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.}$
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H -The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when

Report Format: Data Usability Report



Data Qualifiers

the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND • Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report



REFERENCES

- Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I IIIA, 1997.
- 4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.
- Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).
- 19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

LIMITATION OF LIABILITIES

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

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



Certificate/Approval Program Summary

Last revised February 23, 2011 - Westboro Facility

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

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

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

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

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Volatile Organics, Acid Extractables (Phenols), 3.3'-Dichlorobenzidine, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

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

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

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-H, 4500NO3-F, 4500P-B, 4500P-B, 5210B, 5220D, 5310C, EPA 200.7, 200.8, 245.1. Organic Parameters: 608, 624, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

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

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

Non-Potable Water (Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl, V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

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

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

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

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6020, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 1664A, SW-846 9010, 9030, 9040B, 9050A, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 5030B, 8260B, 8270C, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8151A.)

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

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

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

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

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

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

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

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

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

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

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

Non-Potable Water (Inorganic Parameters: EPA 1312. Organic Parameters: EPA 3510C, 5030B, 625, 624, 608, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 6010B, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3545, 3546, 3550B,

3580A, 3630C, 5035, 8015B, 8081A, 8082, 8151A, 8260B, 8270C, 8330)

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

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

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

Department of Defense Certificate/Lab ID: L2217.

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

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

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

Analytes Not Accredited by NELAP

Certification is not available by NELAP for the following analytes: **EPA 8260B:** Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline. **EPA 350.1** for Ammonia in a Soil matrix.

	ΔLPHA	СНА	IN OF CU	STO)Y	\GE	OF /	Dat	e Rec	'd in	_ab:	3)	4	71	J.		ALPH	A Job ;	#: /110788S)
	WESTBORO, MA	MANSFIELD, MA	Projec	i Informati	on			Re	port	Infor	mati	on - I	Data	Deliv	/erab	les	Billin	g Inform	ation	gat a lank a seggan ja
6	TEL: 508-898-9220 FAX: 508-898-9193	TEL: 508-822-9300 FAX: 508-822-3288	Project I	Name:	rals	* ,			FAX		- !	□ EM	ÁIĹ				Sam	e as Clien	t info PO#:	
17:4	Client Information	n	Project I	ocation: 4	KSFDOS	-+	100		ADEx				'l Del							
111	Client: ORAI	ENU. GOW.	Project :					Reg	ulato	ory R	equii	reme	nts/F	epo	rt Lim	its				
No:03111	Address: 14 Flet Chelms force	Wer St. Sun	6 7 Project I	Manager:	7	7)CP		State	/Fea	l Prog	ıram	N	PDE	5		Crite	ria Z	5P		
1 1	Chelysfore	MA 088	4 ALPHA			- 	. Trainin Nggaran sa					PTIV	E CE	RTA	INTY	C.	Γ REAS	ONABLE	CONFIDENCE PR	гото
Serial	Phone: 978-25	6-6766	The second secon	Around Tim	ne			☐ Yes ★ No Are MCP Analytical Methods Required? ☐ Yes ★ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)												nente)
Ŋ	Fax:		H 011		· milioni			☐ Yes ☐ Yes ☐ Are CT RCP (Reasonable Confidence Protocols) Required?												
	Email: IMOOCE a	OMICAREX.C	Stand	Kata Tanaharan	RUSH (only o		oproved!)		/	7	: :/	: :/	**./.	1	. /	/	//	1/2 1/2	/	T
	These samples have	e been previously analyz	ed by Alpha		3/11/11	Time:		ي ا	ğ/		/-					/·· ,	/ / /	/: /, ,	SAMPLE HANDLIN	NG T
		Agraga a	ts/Comments/Det					ANAIN	/	Q	/ 🔾	/2	16	/ /	/ /	. /	/ /	/ /	Filtration □ Done	- L
			Comments which samp es require MS every 20 s		ests MS to be	pertormed.	•	4	18		6	10	1.0%	16			/ /	/	Not needed ☐ Lab to do	В
				4-1	÷	٠				, (), ()	(A)		\mathcal{Y}_{i}	9/1	$\sqrt{}$	/ /	' / /	/ <u>/</u>	Preservation ☐ Lab to do	O
	ALPHA Lab ID (Lab Use Only)	Sam	ple ID	Colle	ction Time	Sample Matrix	Sampler's Initials	1/1	Y	2/0	No.	4	3	1)	/ :./			Sam	(Please specific Commen	ts s
	02682 1	influent	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3/4/11	125	\mathcal{I})m	X	V	X	χ	X	X							12
		-		C., 'L															Service of the servic	
							4,44													
					******************************						-							:		
														+						
		***																1	er i de la companya d	
	MARKET STATE OF THE STATE OF TH		**************************************								-				- -,				r en	
					er en											1.				
	Flucing Co.	<u></u>			<u> </u>				20				1 44		, 4, 2					
	E SER	····· ·										* *, • .	-:-			1			· · · · · ·	
8,500				*			1 1 2481 2 2 3 4 5 6 7	1.5		1				•		14			NAMES TO SECURE	
	PLEASE ANSWER	QUESTIONS ABOV	E!	A CALL	200		ainer Type	Ą	A	4	A	ρ	V I	0					e print clearly, legibly a	
	IS YOUR PE	ROJECT i	and you was a	labard Do	<u> </u>	. 1	eservative	<u> 1</u> 5	/	<i>∕</i> €.	<i>D</i> _		4 /	7		D=*	/Time =	in and	turnaround time clock ntil any ambiguitles ar mples submitted are si	will not
	MA MCP or		Lara Man	ished By:		3/4/11	e/Time 430 (10	u ().	Rec	eivec	ı By:		-	314		/Time /63,	Start-u Hall sar	nples submitted are su	ubject to O
	FORM NO: 01-01 (rev. 18-Jan	1-2010\		-,	<u> </u>	4.64			تىن	46 (4			•	J) 7	t . v		See re	s Terms and Condition verse side.	AND THE STREET, SEC.
[ORANIAO, OF-OF (189, 16-Jan	(-2010) 	-					<u> </u>			(y								Page