

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

### **CERTIFIED MAIL RETURN RECEIPT REQUESTED**

JAN 1 1 2013

Doug Murray, Construction Manager Gershman Brown Crowley, Inc. 14 Breakneck Hill Road, Suite 101 Lincoln, RI 02865

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Proposed CVS Pharmacy/Store construction site located at 2 West Center Street, West Bridgewater, MA, Plymouth County; Authorization # MAG910565

Dear Mr. Murray:

Based on the review of a Notice of Intent (NOI) submitted on behalf of Gershman Brown Crowley, Inc., by the firm Ransom Consulting, Inc., for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Owner Representative and Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

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

Please note the enclosed checklist includes parameters that exceeded Appendix III limits. The checklist also includes other parameters for which your laboratory reports indicated there was insufficient sensitivity to detect these parameters at the minimum levels established in Appendix VI of the RGP.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on selected dilution ranges and technology-based ceiling limitations. For each parameter the dilution factor 14.0 for this site is within a dilution range greater than ten to fifty (> 10 to 50), established in the RGP. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limits for arsenic of 100

ug/L, lead of 13ug/L, zinc of 666 ug/L and iron of 5,000 ug/L, are required to achieve permit compliance at your site.

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

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on February 1, 2014. If for any reason the discharge terminates sooner you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

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

Sincerely,

Milna Murphy

Thelma Murphy, Manager Storm Water and Construction Permits Section

### Enclosure

cc: Robert Kubit, MassDEP Nancy J. Moloney, BS Barrett L. Smith, Ransom Inc.

### 2010 Remediation General Permit Summary of Monitoring Parameters<sup>[1]</sup>

NPDES Authorization Number:	n <sup>al</sup> i Ari (Junt	MAG910565					
Authorization Issued:	Janua	ry, 2013					
Facility/Site Name:       Pro         Facility/Site Address:       2 W         Email Legal Name of Operator:       2 M         Operator contact name, title and Address:       1000000000000000000000000000000000000		sed CVS Pharmacy/Store#1803					
Facility/Site Address	the second second second second second	st Center Street, West Bridgewater, MA 02379					
Authorization Issued: Facility/Site Name: Facility/Site Address: Legal Name of Opera Operator contact nam and Address: Estimated date of Cor Category and Sub-Cat	Email	address of owner: dmurray@gershmanbrowncrow.com					
Legal Name of Operat	or:	Gershman Brown Crowley, Inc					
Operator contact name, title, and Address:		Doug Murray Construction Manager 14 D					
		Email: Same as the owner					
Estimated date of Com	pletion	February 1, 2014					
Category and Sub-Cate	egory:	Category I-Petroleum Related site Remediation. Subcategory C. Petroleum Sites with additional Contamination					
<b>RGP</b> Termination Date:	DM O	September 10, 2015					
Receiving Water:		Town River					

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

		Effluent Limit/Method#/ML
-	Parameter	(All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
$\checkmark$	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing ** Me#160.2/ML5ug/L
	2. Total Residual Chlorine (TRC) <sup>1</sup>	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
$\checkmark$	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
	4. Cyanide (CN) <sup>2,3</sup>	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L
$\checkmark$	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
$\checkmark$	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
$\checkmark$	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
$\checkmark$	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
$\checkmark$	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) <sup>4</sup>	100 ug/L/ Me#8260C/ ML 2ug/L
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
$\checkmark$	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l/Me#8260C/ML 10ug/L
	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	13. tert-Amyl Methyl Ether (TAME)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
$\checkmark$	14. Naphthalene <sup>5</sup>	20 ug/L /Me#8260C/ML 2ug/L
	15. Carbon Tetrachloride	4.4 ug/L /Me#8260C/ ML 5ug/L
$\checkmark$	16. 1,2 Dichlorobenzene (o- DCB)	600 ug/L /Me#8260C/ ML 5ug/L
çola	17. 1,3 Dichlorobenzene (m- DCB)	320 ug/L /Me#8260C/ ML 5ug/L
$\checkmark$	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
4	19. 1,1 Dichloroethane (DCA)	70 ug/L /Me#8260C/ ML 5ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/L/Me#8260C/ ML 5ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/L/Me#8260C/ ML 5ug/L
1	23. Methylene Chloride	4.6 ug/L/Me#8260C/ ML 5ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/L/Me#8260C/ ML 5ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/L/Me#8260C/ ML 5ug/L
e la constante de la constante	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
1.00	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
0.1	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
.0	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
101	33. Total Phthalates (Phthalate esters) <sup>6</sup>	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
	a. Benzo(a) Anthracene <sup>7</sup>	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	b. Benzo(a) Pyrene <sup>7</sup>	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)						
-123	c. Benzo(b)Fluoranthene 7	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L						
	d. Benzo(k)Fluoranthene <sup>7</sup>	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L						
-	e. Chrysene <sup>7</sup>	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 <sup>7</sup>	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						
100	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						
1	n. Naphthalene <sup>5</sup>	20 ug/l / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L						
	o. Phenanthrene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L						
	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L						
	37. Total Polychlorinated Biphenyls (PCBs) <sup>8,9</sup>	0.000064 ug/L/Me# 608/ ML 0.5 ug/L						
$\checkmark$	38. Chloride	Monitor only/Me# 300.0/ ML 100 ug/L						

	- Kny 1.5" P. 1/Month/Gran	<u>Total Rec</u> <u>Metal Limit</u> <u>mg/l Ca</u> <u>dischar</u> <u>Massachuse</u> <u>11/</u>	@ H <sup>10</sup> = 50 CO3 for ges in etts (ug/l)	<u>Minimum</u> level=ML		
	Metal parameter	Freshwater	Saltwater			
	39. Antimony	5.6/M	the statement of the st	18670-1200		
$\checkmark$	40. Arsenic **	100/ML20	36/ML 20			
	41. Cadmium **	0.2/ML10	8.9/ML 10	and the prove		
	42. Chromium III (trivalent)	48.8/ML15	100/ML 15	and the second second		

	B Trojecto J. Mills are shown as Doly I Efficient Limits are shown as Doly throm Limit, unless desorate by a big case it will be a Monthly Avaid Limit).	Total Rec Metal Limit <u>mg/l Cau</u> dischar Massachuse	<u>Minimum</u> level=ML		
	Metal parameter	Freshwater	Saltwater	and the second second	
	**	40.0 Sec. 500	anticand states		
<u>k</u>	43. Chromium VI (hexavalent)	11.4/ML10	50.3/ML 10	e Chryse	
	44. Copper **	5.2/ML15	3.7/ML 15		
$\checkmark$	45. Lead **	13/ML20	8.5/ML 20	f. Oltranz	
	46. Mercury **	0.9/ML0.2	1.1/ML 0.2	nebnt .p.	
	47. Nickel **	29/ML20	8.2/ML 20	1	
-	48. Selenium **	5/ML20	71/ML 20	0.00100	
1	49. Silver	1.2/ML10	2.2/ML 10	Carlo Do 14	
$\checkmark$	50. Zinc **	666/ML15	85.6/ML 15	hir Aquin	· Y
$\checkmark$	51. Iron	5,000/	ML 20	hooA .I	

	Other Parameters	Limit
$\checkmark$	52. Instantaneous Flow	Site specific in CFS
$\checkmark$	53. Total Flow	Site specific in CFS
V	54. pH Range for Class A & Class B Waters in MA	6.5-8.3; 1/Month/Grab13
	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab13
	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab <sup>13</sup>
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab <sup>14</sup>
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab <sup>14</sup>
-	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab <sup>14</sup>
1	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab <sup>14</sup>
	61. Maximum Change in Temperature in MA – Any Class B water body - Cold water and Lakes/Ponds	3°F; 1/Month/Grab <sup>14</sup>
	62. Maximum Change in Temperature in MA – Any Class SA water body - Coastal	1.5°F; 1/Month/Grab <sup>14</sup>
	63. Maximum Change in Temperature in MA – Any Class SB water body - July to September	1.5°F; 1/Month/Grab <sup>14</sup>
	64. Maximum Change in Temperature in MA –Any Class SB water body - October to June	4°F; 1/Month/Grab <sup>14</sup>

### Footnotes:

<sup>1</sup> 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).

<sup>2</sup> 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.

<sup>3</sup> 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).

<sup>4</sup> BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.

<sup>5</sup> 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.

<sup>6</sup> 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.

<sup>7</sup> 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.

<sup>8</sup> 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.

<sup>9</sup>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).
<sup>10</sup> Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.

<sup>11</sup> For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using DF x 1,000ug/L (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit =1,000 x 2 =2,000 ug/L., etc. not to exceed the DF=5.

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).

<sup>13</sup>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

D=14.09



December 21, 2012

Consulting Engineers and Scientists

Project 091.05123.009

MA6910565

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

RE: Notice of Intent Proposed CVS Pharmacy/Store #1803 2 West Center Street West Bridgewater, Massachusetts

To Whom It May Concern:

Ransom Consulting, Inc. (Ransom) has prepared the following documents on behalf of Gershman Brown Crowley, Inc. (GBC) for the purposes of filing a Notice of Intent (NOI) to discharge under the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) for Massachusetts and New Hampshire at the above-referenced property. This property constitutes a portion of a proposed redevelopment project to construct a CVS Pharmacy/Store. The proposed redevelopment includes work on three parcels including Lot 5 (12 West Center Street), Lot 22 (17 Central Square), and Lot 23 (2 West Center Street), as identified by the Town of West Bridgewater Assessor's Office (the "Site").

A "Disposal Site," as defined by the Massachusetts Contingency Plan (MCP), resulting from a release of gasoline is located on the 2 West Center Street portion of the Site, and extends onto the 17 Central Square parcel and into the public right-of-way under Central Square and River Street. The MCP defines a Disposal Site as any location where uncontrolled oil and/or hazardous material (OHM) has come to be located as a result of a release of OHM into the environment. The Massachusetts Department of Environmental Protection (MA DEP) identifies the Disposal Site associated with the release of gasoline at 2 West Center Street with Release Tracking Number (RTN) 4-0000407.

As shown on the attached Site Plan, the footprint of the proposed CVS facility is partially co-located with the historical limits of the Disposal Site associated with RTN 4-0000474. This NOI submittal has been prepared as a contingency so that excavation dewatering can be completed within the Disposal Site boundary if high-water-table conditions are encountered during foundation construction during the spring of 2013. The proposed discharge will be to the Town River via an approximately 1,000-foot long, 24-inch-diameter corrugated metal drain pipe. A separate NOI to discharge from portions of the Site outside of the limits of the RTN 4-0000474 Disposal Site under the NPDES Construction General Permit is being submitted by others under separate cover.

**60 Valley Street, Bldg. F, Suite 106, Providence, Rhode Island 02909, Tel (401) 433-2160** 12 Kent Way, Suite 100, Byfield, Massachusetts 01922, Tel (978) 465-1822, Fax (978) 465-2986 400 Commercial Street, Portland, Maine 04101, Tel (207) 772-2891 Pease International Tradeport, 112 Corporate Drive, Portsmouth, New Hampshire 03801, Tel (603) 436-1490 2127 Hamilton Avenue, Hamilton, New Jersey 08619, Tel (609) 584-0090

www.ransomenv.com

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December 21, 2012

Remediation General Permit NOI Processing U.S. EPA Region 1

Should you have any questions regarding this NOI Submittal, please do not hesitate to contact the undersigned at (401) 433-2160.

Sincerely,

RANSOM CONSULTING, INC. Barrett Smith

Bat L. M. 2012.12.21 14:22:53 -05'00'

Barrett L. Smith, CPG Project Manager/Hydrogeologist

JD/BLS/BRP:sh Attachments

cc: Doug Murray, GBC

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

ride the following information about the site. DIG ation l facility/site info U D

1. Ceneral lacinity/site information. Flease provide the following information about the site:	ase provide u	IC TOILOW HIS HILVITION ALL AL	Dut the site.	
a) Name of <b>facility/site</b> : Proposed CVS Pharmacy 1803	lacy 1803 –	Facility/site mailing address:	ress:	
Location of <b>facility/site</b> : longitude: 71° 00' 30" latitude: 42° 01' 07"	Facility SIC code(s): 7538	Street: 2 West Center Street	ţ	
b) Name of facility/site owner:		Town: West Bridgewater		
Email address of facility/site owner:		State:	Zip: Cou	County:
Telephone no. of facility/site owner: (401) 770-7282	70-7282	Massachusetts	02379 Plyn	Plymouth
Fax no. of facility/site owner: (401) 770-4372		Owner is (check one): 1. Federal O 2. State/Tribal O	. Federal O 2. State/T	Tribal O
Address of <b>owner</b> (if different from site):				
Street: One CVS Drive				
Town: Woonsocket	State: RI	Zip: 02895	County: Providence	
c) Legal name of <b>operator</b> :	<b>Operator</b> te	<b>Operator</b> telephone no: (401) 721-1612		
Gershman Brown Crowley, Inc.	<b>Operator</b> fax no.:	x no.:	Operator email: dmurray@gershmanbrowncrow	ay@gershmanbrowncrow
<b>Operator</b> contact name and title: Doug Mur	Doug Murray, Construction Manager	n Manager		
Address of <b>operator</b> (if different from owner):	Street: 14 Bre	14 Breakneck Hill Road, Suite 101		
Town: Lincoln	State: RI	Zip: 02865	County: Providence	

Remediation General Permit Appendix V - NOI

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<ul> <li>d) Check Y for "yes" or N for "no" for the following:</li> <li>1. Has a prior NPDES permit exclusion been granted for the discharge? Y O N O, if Y, number.</li> <li>2. Has a prior NPDES application (Form 1 &amp; 2C) ever been filed for the discharge?</li> <li>Y O N O, if Y, date and tracking #:</li></ul>	<ul> <li>d) Check Y for "yes" or N for "no" for the following:</li> <li>1. Has a prior NPDES permit exclusion been granted for the discharge? Y O N O, if Y, number:</li> <li>2. Has a prior NPDES application (Form 1 &amp; 2C) ever been filed for the discharge?</li> <li>3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y O N O</li> <li>4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y O N O</li> </ul>
<ul> <li>e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y O NO</li> <li>If Y, please list: <ol> <li>site identification # assigned by the state of NH or MA:</li> <li>set identification # assigned:</li> </ol> </li> <li>2. permit or license # assigned: <ol> <li>state agency contact information: name, location, and telephone number:</li> </ol> </li> </ul>	<ul> <li>f) Is the site/facility covered by any other EPA permit, including:</li> <li>1. Multi-Sector General Permit? Y O N O, if Y, number:</li> <li>2. Final Dewatering General Permit? Y O N O, if Y, number:</li> <li>3. EPA Construction General Permit? Y O N O, if Y, number:</li> <li>4. Individual NPDES permit? Y O N O, if Y, number:</li> </ul>
g) Is the site/facility located within or does it discharge to	5. any other water quality related individual or general permit? Y <u>O</u> N <u>O</u> , if Y, number: does it discharge to an Area of Critical Environmental Concern (ACEC)? Y O N O
h) Based on the facility/site information and any historica discharge falls.	pote
Activity Category	Activity Sub-Category
I - Petroleum Related Site Remediation	<ul> <li>A. Gasoline Only Sites</li> <li>B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges)</li> <li>C. Petroleum Sites with Additional Contamination X</li> </ul>
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites <b>D</b> B. VOC Sites with Additional Contamination <b>D</b> C. Primarily Heavy Metal Sites <b>D</b>
III - Contaminated Construction Dewatering	A. General Urban Fill Sites

Remediation General Permit Appendix V - NOI

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IV - Miscellaneous Related Discharges	charges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated SitesB. 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	2. Discharge information. Please provide information about the discharge, (attaching additional sheets as necessary) including:
a) Describe the discharge activities		for which the owner/applicant is seeking coverage:
The discharge is for recovery of gro site using granular activated charcc	undwater from construction-rel oal (GAC) prior to discharge to th	The discharge is for recovery of groundwater from construction-related excavations during property redevelopment. The discharge will be treated on- site using granular activated charcoal (GAC) prior to discharge to the Town River via +/- 1,000 feet of drain pipe along River Street.
b) Provide the following information about each discharge:	rmation about each discharg	je:
1) Number of discharge points:	2) What is the maximum and aver. Max. flow <sup>0.11</sup> Is maxim Average flow (include units) <sup>20 gpm</sup>	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft <sup>3</sup> /s)? Max. flow <sup>0.11</sup> Is maximum flow a design value? Y O N O Average flow (include units) <sup>20 gpm</sup> Is average flow a design value or estimate? Estimate
3) Latitude and longitude of each d pt.1: lat <sup>42° 00'58"</sup> long <sup>71° 00'</sup> pt.3: lat long pt.5: lat long pt.7: lat long	of each discharge within 100 feet: long 71° 00' 33" pt.2: lat. long pt.4: lat. long pt.6: lat. long pt.8: lat.	et: long long long etc.
drostatic testing, lume of the ge (gals);	5) Is the discharge Is discharge ongoi	O or sea
c) Expected dates of discharge (mm/dd/yy): start <sup>2/1/2012</sup>	ce (mm/dd/yy): start 2/1/2012 -	end 2/1/2013 -
d) Please attach a line drawin 1. sources of intake water. 2. waters(s). See Figures 1 through 3.	ng or flow schematic showin contributing flow from the	d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water. 2. contributing flow from the operation. 3. treatment units, and 4. discharge points and receiving waters(s) See Figures 1 through 3.
		P H H H H
Remediation General Permit Appendix V - NOI	Page 12 of 22	10. H. O

## 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.

rel										Г			
value mass (kg)					0.011	QN	0.0015		0.0039	0.0164	QN	0.0193	
Average daily value           concentration         mass           (ug/l)         (kg)					12.1	ND	1.6		4.2	17.90	DN	21	
<u>Iv value</u> mass (kg)					0.0021	QN	0.0003		0.0007	0.0032	DN	0.0037	
Maximum daily value           concentration         mass           (ug/l)         (kg)					12.1	ND	1.6		4.2	17.90	DN	21	
<u>Minimum</u> <u>Level</u> (ML) of <u>Test</u> <u>Method</u>			150		1	1	1		ε		1	-	
<u>Analytical</u> <u>Method</u> <u>Used</u> (method #)			MassDEP EPH 150		8260B	8260B	8260B		8260B	82608	8260B	8260B	
Sample Type (e.g., grab)			grab		grab				grab	grab	grab	grab	
<u># of</u> <u>Samples</u>			4		4	4	4		4	4	4	4	
<u>Believed</u> <u>Present</u>	×		X		×				X	×		X	
Believed Absent		X		×		×	×				X		X
<u>CAS</u> <u>Number</u>				57125	71432	108883	100414	108883;	106423; 95476; 1330207	n/a	106934	1634044	75650
<u>Parameter *</u>	1. Total Suspended Solids (TSS)	2. Total Residual Chlorine (TRC)	3. Total Petroleum Hydrocarbons (TPH)	4. Cyanide (CN)	5. Benzene (B)	6. Toluene (T)	7. Ethylbenzene (E)	8. (m,p,o) Xylenes (X)		9. Total BTEX <sup>2</sup>	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane) <sup>3</sup>	11. Methyl-tert-Butyl Ether (MtBE)	12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)

\* 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. <sup>2</sup> BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

<sup>3</sup> EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

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NPDES Permit No. MAG910000 NPDES Permit No. NHG910000

Average daily value	ion mass (kg)	DN	0.158	DN	0.0011	DN	0.0016	0.0027	0.0027 ND	0.0027 ND ND	0.0027 ND ND ND	0.0027 ND ND ND ND ND	0.0027 ND ND ND ND ND	0.0027 ND ND ND ND ND ND ND	0.0027 ND ND ND ND ND ND ND ND	0.0027 ND ND ND ND ND ND ND ND
Average	<u>concentration</u> (ug/l)	ND	172	QN	1.2	DN	1.7	2.9	2.9 ND	2.9 ND ND	2.9 ND ND	2.9 ND ND ND	2.9 ND ND ND	2.9 ND ND ND ND ND	2.9 ND ND ND ND ND	2.9 ND ND ND ND ND ND
ily value	mass (kg)	QN	0.0304	QN	0.0002	DN	0.0003	0.0005	0.0005 ND	0.0005 ND ND	0.0005 ND ND ND	0.0005 ND ND ND ND	0.0005 ND ND ND ND	0.0005 ND ND ND ND ND ND	0.0005 ND ND ND ND ND ND ND	0.0005 ND ND ND ND ND ND ND ND
Maximum daily value	<u>concentration</u> ( <u>ug/l</u> )	DN	172	ND	1.2	DN	1.7	2.9	2.9 ND	2.9 ND ND	2.9 ND ND	2.9 ND ND ND	2.9 ND ND ND	2.9 ND ND ND ND ND	2.9 ND ND ND ND ND ND	2.9 ND ND ND ND ND ND ND
Minimum	Level (ML) of Test Method	1	10	-	-	-	1	1								
Analytical	<u>Method</u> <u>Used</u> (method #)	8260B	8260B	8260B	8260B	8260B	8260B	8260B	8260B 8260B	8260B 8260B 8260B	8260B 8260B 8260B 8260B	8260B 8260B 8260B 8260B 8260B	8260B 8260B 8260B 8260B 8260B 8260B	8260B 8260B 8260B 8260B 8260B 8260B 8260B	8260B 8260B 8260B 8260B 8260B 8260B 8260B	8260B 8260B 8260B 8260B 8260B 8260B 8260B 8260B
Sample	<u>Tvpe</u> (e.g., grab)	grab	grab	grab	grab	grab	grab	grab	grab grab	grab grab grab	grab grab grab	grab grab grab grab	grab grab grab grab	grab grab grab grab grab grab	grab grab grab grab grab grab	grab grab grab grab grab grab grab
	<u># of</u> <u>Samples</u>	4	4	4	4	4	4	4	4 4	4 4 4	4 4 4 4	4 4 4 4	4 4 4 4 4 4	4 4 4 4 4 4	4 4 4 4 4 4 4	4 4 4 4 4 4 4 4
	<u>Believed</u> <u>Present</u>		×		×		×	×								
	<u>Believed</u> <u>Absent</u>	X		×		×										
	<u>CAS</u> <u>Number</u>	9940508	91203	56235	95501	541731	106467		75343	75343 107062	75343 107062 75354	75343 107062 75354 156592	75343 107062 75354 156592 75092	75343 107062 75354 156592 75092 127184	75343 107062 75354 156592 156592 127184 71556	75343 107062 75354 156592 156592 75092 127184 71556 71556 79005
	Parameter *	13. tert-Amyl Methyl Ether (TAME)	14. Naphthalene	15. Carbon Tetrachloride	16. 1,2 Dichlorobenzene (o-DCB)	17.1,3 Dichlorobenzene (m-DCB)	18. 1,4 Dichlorobenzene (p-DCB)	otal obenzene	otal obenzene Dichloroethane	otal obenzene Dichloroethane Dichloroethane	otal obenzene Dichloroethane Dichloroethane Dichloroethene	otal Dichloroethane Dichloroethane Dichloroethene 1,2 Dichloroethene	otal Dichloroethane Dichloroethane Dichloroethane 1,2 Dichloroethene itylene Chloride	otal Dichloroethane Dichloroethane Dichloroethene 1,2 Dichloroethene itylene Chloride achloroethene	otal Dichloroethane Dichloroethane Dichloroethene 1,2 Dichloroethene achloroethene achloroethene 1 Trichloro-ethane	18a. Totaldichlorobenzene19. 1,1 Dichloroethane(DCA)20. 1,2 Dichloroethane(DCA)21. 1,1 Dichloroethane(DCE)21. 1,1 Dichloroethane(DCE)22. cis-1,2 Dichloroethene(DCE)23. Methylene Chloride24. Tetrachloroethene(PCE)25. 1,1,1 Trichloro-ethane(TCA)25. 1,1,2 Trichloro-ethane(TCA)26. 1,1,2 Trichloro-ethane(TCA)

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Remediation General Permit Appendix V - NOI

uily value	n mass (kg)	NA	NA	NA						NA	NA	NA	NA	NA	NA	NA	0.049
Average daily value	<u>concentration</u> (ug/l)	ND	ND	DN						ND	ND	DN	DN	DN	DN	DN	53.45
ily value	mass (kg)	NA	NA	NA						NA	NA	NA	NA	NA	NA	NA	0.0094
Maximum daily value	<u>concentration</u> (ug/)	DN	DN	DN						DN	ND	DN	DN	DN	DN	ND	53.45
Minimum	Level (ML) of Test Method	1	10	500						0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Analytical	<u>Method</u> <u>Used</u> (method #)	8260B	82608	8260B						8270D	8270D	8270D	8270D	8270D	8270D	8270D	8270D
Sample	Type (e.g., grab)	grab	grab	grab						grab	grab	grab	grab	grab	0	grab	grab
	<u># of</u> <u>Samples</u>	4	4	4						4	4	4	4	4	4	4	4
	<u>Believed</u> <u>Present</u>																×
	<u>Believed</u> <u>Absent</u>	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	
	<u>CAS</u> <u>Number</u>	75014	67641	123911	108952	87865		117817		56553	50328	205992	207089	21801	53703	193395	
	<u>Parameter *</u>	28. Vinyl Chloride (Chloroethene)	29. Acetone	30. 1,4 Dioxane	31. Total Phenols	32. Pentachlorophenol (PCP)	33. Total Phthalates (Phthalate esters) <sup>4</sup>	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	a. Benzo(a) Anthracene	b. Benzo(a) Pyrene	c. Benzo(b)Fluoranthene	d. Benzo(k)Fluoranthene	e. Chrysene	f. Dibenzo(a,h)anthracene	g. Indeno(1,2,3-cd) Pyrene	36. Total Group II Polycyclic Aromatic

<sup>4</sup> The sum of individual phthalate compounds.

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Average daily value	ation mass (kg)	0.0002	QN	QN	ND	ND	0.0002	0.0294	NA	NA						0.055	NA	NA			ND		QN	DN	DN	0.0312	The second
Averag	<u>concentration</u> (ug/l)	0.21	QN	QN	QN	QN	0.24	32	QN	DN					CIV	60	QN	QN			DN		DN	ND	DN	34	
ily value	mass (kg)	0.00004	NA	NA	NA	NA	0.00004	0.0057	NA	NA						0.0106	NA	NA			DN		DN	ND	DN	0.006	
Maximum daily value	<u>concentration</u> (ug/l)	0.21	DN	DN	DN	DN	0.24	32	DN	ON						60	DN	DN			DN		DN	ND	ND	34	
Minimum	Level (ML) of Test Method	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.5	0.2					u c	25	2.5	10			10		25	25	5	25	
Analytical	<u>Method</u> Used (method #)	8270D	8270D	8270D	8270D	8270D	8270D	8270D	8270D	8270D					7010	6010B	6010B	6010B			6010B		60108	6010B	60108	60108	
Sample	Type (e.g., grab)	grab	grab	grab	grab	grab	grab	grab	grab	grab					dera	grab	grab	grab			grab		grab		grab	grab	
	<u># of</u> <u>Samples</u>	4	4	4	4	4	4	4	4	4						4	4	4			4		4	4	4	4	
	<u>Believed</u> <u>Present</u>	×					×	×						C		×										×	
	<u>Believed</u> <u>Absent</u>		×	×	×	×			×	×		X		×			×	×	×	×	×	×	×	×	×		
	CAS Number	83329	208968	120127	191242	206440	86737	91203	85018	129000	85687; 84742;	117840; 84662:	131113;	16887006	7440360	7440382	7440439	16065831	18540299	7440508	7439921	7439976	7440020	7782492	7440224	7440666	
	Parameter *	h. Acenaphthene	i. Acenaphthylene	j. Anthracene	k. Benzo(ghi) Perylene	1. Fluoranthene	m. Fluorene	n. Naphthalene	o. Phenanthrene	p. Pyrene			37. Total Polychlorinated	Biphenyls (PCBs) 38 Chloride	39 Antimony	40. Arsenic	41. Cadmium	42. Chromium III (trivalent)	43. Chromium VI (hexavalent)	44. Copper	45. Lead	46. Mercury	47. Nickel	48. Selenium	49. Silver	50. Zinc	1

mm

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value	mass (kg)	0.0267	
Average daily	<u>concentration</u> (ug/l)	245	
ly value	mass (kg)	0.0911	
Maximum dai	<u>concentration</u> (ug/l)	245	
Minimum	<u>Level</u> (ML) of <u>Test</u> <u>Method</u>	25	
Analytical	<u>Method</u> <u>Used</u> (method #)	6010B	
Samula	Type (e.g., grab)	grab	
	<u># of</u> <u>Samples</u>	4	
	Believed Present	×	
	<u>Believed</u> <u>Absent</u>		
	<u>CAS</u> <u>Number</u>	7440393	
	Parameter *	Barium	

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 $\odot$ N $\odot$	If yes, which metals? Arsenic
<i>Step 2:</i> For any metals which exceed the <b>Appendix III</b> limits, calculate the <b>dilution factor</b> ( <b>DF</b> ) 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: DF: DF: DF: DF: DF: DF: DF: DF	Look up the limit calculated at the corresponding dilution factor in <b>Appendix IV</b> . Do any of the metals in the <b>influent</b> have the potential to exceed the corresponding <b>effluent</b> limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? $Y \odot N \odot If Y$ , list which metals:

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

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

The objective of the treatment system is to recover and treat groundwater impacted with petroleum hydrocarbons associated with RTN 4-407 (Former Dan's Service Station) if warranted as part of the proposed property redevelopment. Dewatering may be required to remove groundwater from utility and foundation excavations. If required, groundwater will be pumped from open excavations into a fractionation tank to allow silt and fines to settle-out. Water from the ractionation tank will be pumped into the treatment system, which will consist of two granular-activated carbon (GAC) filtering vessels and a bag filter.

b) Identify each	Frac. tank 🖂 Air st	tripper [	□ Oil/water separator □	Equalization tanks 🔲 Bag filter 🗷	Bag filter X	GAC filter 🕱
applicable treatment unit (check all that	Chlorination	De-	Other (please describe):			
apply):		chlorination				

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NPDES Permit No. MAG910000 NPDES Permit No. NHG910000	c) Proposed <b>average</b> and <b>maximum flow rates</b> (gallons per minute) for the discharge and the <b>design flow rate</b> (s) (gallons per minute) of the treatment system: Average flow rate of discharge <sup>20</sup> gpm Maximum flow rate of treatment system <sup>50</sup> gpm Design flow rate of treatment system <sup>20</sup> gpm	d) A description of chemical additives being used or planned to be used (attach MSDS sheets):		ce water(s). Please provide information about the receiving water(s), using separate sheets as necessary:	harge pathway: Direct to Within facility Storm Wetlands Orther (describe): receiving (sewer) drain 🕱 Wetlands	b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:	After treatment, water will be discharged to a sedimentation basin which overflows into a +/- 1,000 ft long drain pipe along River Street to the Town River.	<ul> <li>c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:</li> <li>1. For multiple discharges, number the discharges sequentially.</li> <li>2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water</li> <li>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.</li> </ul>	d) Provide the state water quality classification of the receiving water <sup>B</sup>	e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 1.44 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)?	DL? Y O N O If yes, for which pollutant(s)?
	c) Proposed <b>average</b> and <b>maximum flo</b> the treatment system: Average flow rate of discharge <sup>20</sup> Design flow rate of treatment system <sup>20</sup>	d) A description of chemical additiv	None.	5. Receiving surface water(s). Please provide	a) Identify the discharge pathway:	b) Provide a narrative description of	After treatment, water will be discharged t	<ul> <li>c) Attach a detailed map(s) indicating the site</li> <li>1. For multiple discharges, number the dischar</li> <li>2. For indirect dischargers, indicate the locatio</li> <li>The map should also include the location and on USGS topographical mapping), such as sur</li> </ul>	d) Provide the state water quality cla	e) Provide the reported or calculated Please attach any calculation sheets	f) Is the receiving water a listed 303	v O

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Remediation General Permit Appendix V - NOI

NPDES Permit No. MAG910000 NPDES Permit No. NHG910000	and VII.	C are you eligible for herway_0	tten concurrence finding	art I.C, Step 4.	nder this general permit? cers, including any terms ties regulated by the RGP.		any certification(s)	
	uirements of Permit Parts I.A.4 and I.A.5 Appendices I	n on Appendix II, under which criterion listed in Part I he federal services been completed? $\underline{Y O N O Un}$	Vor NOAA Fisheries Service was completed, was a wr species or critical habitat received? Y O N O	1 the NOI instructions and required by Appendix VII, 1	iterion listed in Part II.C are you eligible for coverage dence with the State or Tribal historic preservation offi llow to mitigate or prevent adverse effects due to activ		Attach any analytical data used to support the application. Attach any certification(s)	
	<b>0. ESA and NHFA Enginenty.</b> Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.	a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit? A $\bigcirc$ B $\bigcirc$ C $\bigcirc$ D $\bigcirc$ E $\bigcirc$ F $\bigcirc$ F $\bigcirc$ b) If you selected Criterion D or F, has consultation with the federal services been completed? Y $\bigcirc$ N $\bigcirc$ Underway $\bigcirc$	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 $\bigcirc$ N $\bigcirc$	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  0  2  0  3  0 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 required by the general permit.	ESS Laboratory Certificate of Analysis No. 1109075

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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 quilified personnel property 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 Based on my inquiry of the significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.         Facility/Site Name:       Penemex 1803         Operator signature:       Depresson of the possibility of fine and imprisonment for knowing violations.         Interd Name & Titlet:       Doug Asset         Printed Name & Titlet:       Doug Asset	210
<ul> <li>8. Signature Requirements: The Notice of Intent must be signed by the operator in accollection 122.22, including the following certification:</li> <li>I certify under penalty of law that this document and all attachments were prepared to a system designed to assure that qualified personnel properly gather and evaluate the person or persons who manage the system, or those persons directly responsible for information submitted is, to the best of my knowledge and belief, true, accurate, and significant penalties for submitting false information, including the possibility of fine Facility/Site Name: Proposed CVS Pharmacy 1803</li> <li>Operator signature: Doug A State Rest Printed Name &amp; Title: Doug A State Rest Printed Name &amp; Title: Doug A State Rest Printed Name</li> </ul>	December 17, 2012

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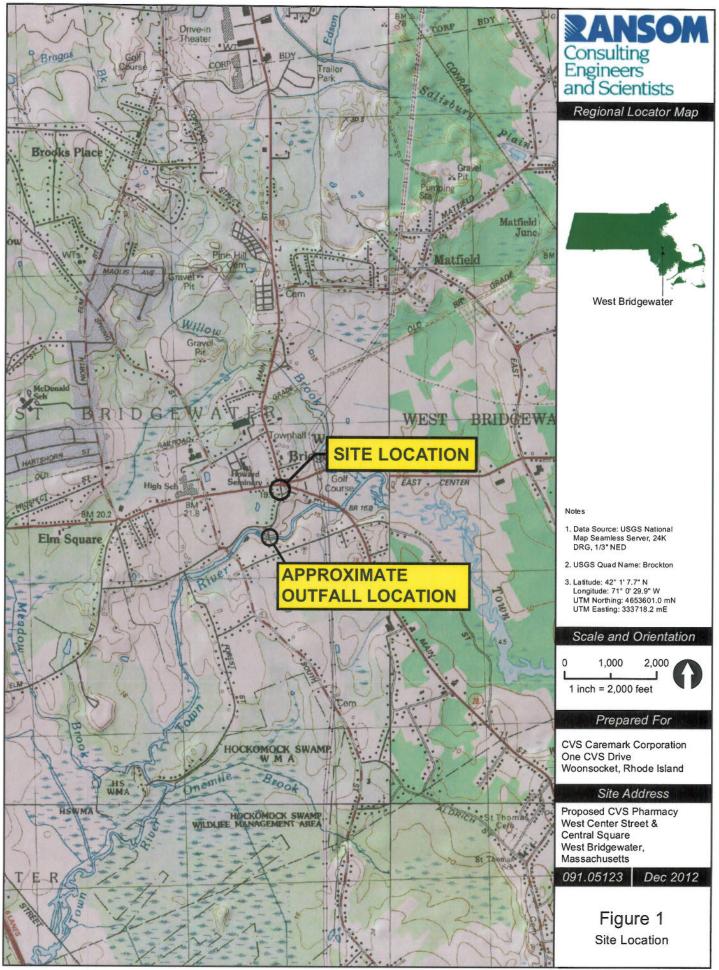
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### ATTACHMENT B

Site Location Map, Site Plan, and Treatment System Schematic

Notice of Intent 2 West Center Street West Bridgewater, Massachusetts

Ransom Consulting, Inc. Project 091.05123.009



### ATTACHMENT C

USGS Massachusetts Streamstats Drainage Basin Output and Ungaged Site Report

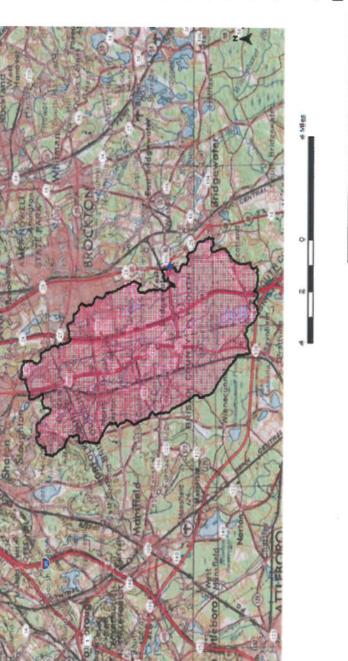
> Notice of Intent 2 West Center Street West Bridgewater, Massachusetts

Ransom Consulting, Inc. Project 091.05123.009

## **USGS** StreamStats



# **StreamStats Print Page**



- Explanation
  - NHDHGage
    - NHDHDam
- Gaging Station, Continuous Record
- Low Flow, Partial Record
- Peak Flow, Partial Record
- Peak and Low Flow, Partial Record
  - Stage Only
- Low Flow, Partial Record, Stage
- Miscellaneous Record
- 🔺 Unknown
- ★ GlobalWatershedPoint
- Dendritic Stream Network
- GlobalWatershed 🏵 Excludepoly

12/10/2012 3:32:01 PM

### **≊USGS** Massachusetts StreamStats

### **Streamstats Ungaged Site Report**

Date: Mon Dec 10 2012 15:37:23 Mountain Standard Time Site Location: Massachusetts NAD27 Latitude: 42.0171 (42 01 01) NAD27 Longitude: -71.0070 (-71 00 25) NAD83 Latitude: 42.0172 (42 01 02) NAD83 Longitude: -71.0065 (-71 00 23) ReachCode: 01090004000184 Measure: 17.08 Drainage Area: 50.9 mi2

Low Flows Basin Characteristics 100% Statewide Low Flow (50.9 mi2)	_		
Parameter	Value	Regression Equation	on Valid Range
Falanietei		Min	Max
Drainage Area (square miles)	50.9	1.61	149
Mean Basin Slope from 250K DEM (percent)	0.73	0.32	24.6
Stratified Drift per Stream Length (square mile per mile)	0.17	0	1.29
Massachusetts Region (dimensionless)	0	0	1

100% Perennial Flow Probability (50.9 mi2)			
Parameter	Value	Regression Equati	on Valid Range
		Min	Max
Drainage Area (square miles)	50.9 (above max value 1.99)	0.01	1.99
Percent Underlain By Sand And Gravei (percent)	38.54	0	100
Percent Forest (percent)	49.81	0	100
Massachusetts Region (dimensionless)	0	0	1

Warning: Some parameters are outside the suggested range. Estimates will be extrapolations with unknown errors.

Chabletia			Equivalent	90-Percent Pred	liction Interval
Statistic	Flow (ft <sup>3</sup> /s)	Prediction Error (percent)	years of record	Minimum	Maximum
D50	52.6	18		29.2	94.1
D60	40.2	20		19.4	82.8
D70	25.5	23		10.4	61.7
D75	20.2	26		8.21	48.9
D80	12.4	28		3.16	48.1
D85	8.84	32		2.28	33.7
D90	5.57	37		1.4	21.8
D95	3.27	46		0.7	14.8
D98	2.24	60		0.43	11.2
D99	1.73	65		0.3	9.53
M7D2Y	4.38	49		0.86	21.4
AUGD50	10.4	33		2.66	40
M7D10Y	1.44	71		0.24	8.22

The equation for estimating the probability of perennial flow is applicable for most areas of Massachusetts except eastern Buzzards Bay, Cape Cod, and the Island regions. The estimate obtained from the equation assumes natural flow conditions at the site. The equation also is best used for sites with drainage areas between 0.01 to 1.99 mi2, as errors beyond for basins beyond these bounds are unknown.

Probability	of Pe	rennial Flow Statistics
Statistic	Value	Standard Error (percent)
PROBPEREN	1	

**Dilution Calculation:** 

DF = (Qd + Qs)/Qd

DF = Dilution Factor

Qd = Maximum flow rate of discharge in cubic feet per second (cfs)

Qs = Receiving Water (Town River) 7Q10 flow (cfs)

Qd= 50 gallons per minute (gpm) x 0.00223 = 0.111 cfs Qs = 1.44 cfs

DF = 14.0



BAL Laboratory

The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW101 Date Sampled: 09/06/11 16:00 Percent Solids: N/A

ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-01 Sample Matrix: Ground Water Units: ug/L

### 3005A/3020A/6000/7000 Dissolved Metals

Analyte Antimony	Results (MRL) ND (2.5)	Method 7010	Limit DF	Analyst	Analyzed	<u>I/V</u>	<u>F/V</u>	Batch
Arsenic	10.9 (2.5)	7010	1	SVD	09/13/11 16:59	50	25	CI10901
Barium				SVD	09/13/11 23:43	50	25	C110901
	245 (25)	6010B	• 1	SVD	09/09/11 18:12	50	25	CI10901
Beryllium	ND (0.5)	6010B	1	SVD	09/09/11 18:12	50	25	CI10901
Cadmium	ND (2.5)	6010B	1	SVD	09/09/11 18:12	50	25	C110901
Chromium	ND (10)	6010B	1	SVD	09/09/11 18:12	50	25	CI10901
Lead	ND (10)	6010B	1	SVD	09/09/11 18:12	50	25	CI10901
Nickel	ND (25)	6010B	1	SVD	09/09/11 18:12	50	25	CI10901
Selenium	ND (25)	6010B	1.	SVD	09/09/11 18:12	50	25	C110901
Silver	ND (5)	6010B	1	SVD	09/09/11 18:12	50	25	CI10901
Thallium	ND (1.5)	7010	1	SVD	09/13/11 19:49	50	- 25	C110901
Vanadium	ND (10)	6010B	1	SVD	09/09/11 18:12	50	25	C110901
Zinc	34 (25)	6010B	1	SVD	09/09/11 18:12	50	25	CI10901



Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW101 Date Sampled: 09/06/11 16:00 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

**BAL Laboratory** 

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-01 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### 8260B Volatile Organic Compounds

Analyte 1,1,1,2-Tetrachloroethane	Results (MRL) ND (1.0)	Limit	DF	Analyzed 09/08/11 19:22	Sequence CUI0037	<u>Batch</u> C110809
1,1,1-Trichloroethane	ND (1.0)		1	09/08/11 19:22	CUI0037	CI10809
1,1,2,2-Tetrachloroethane	ND (0.5)		1	09/08/11 19:22	CU10037	C110809
1,1,2-Trichloroethane	ND (1.0)		1	09/08/11 19:22	CUI0037	C110809
1,1-Dichloroethane	ND (1.0)		1	09/08/11 19:22	CU10037	C110809
1,1-Dichloroethene	ND (1.0)		1	09/08/11 19:22	CUI0037	CI10809
1,1-Dichloropropene	ND (2.0)		1	09/08/11 19:22	CUI0037	C110809
1,2,3-Trichlorobenzene	ND (1.0)		1	. 09/08/11 19:22	CU10037	CI10809
1,2,3-Trichloropropane	ND (1.0)		1	09/08/11 19:22	CU10037	CI10809
1,2,4-Trichlorobenzene	ND (1.0)		1	09/08/11 19:22	CU10037	CI10809
1,2,4-Trimethylbenzene	ND (1.0)		1	09/08/11 19:22	CU10037	CI10809
1,2-Dibromo-3-Chloropropane	ND (5.0)		1	09/08/11 19:22	CUI0037	C110809
1,2-Dibromoethane	ND (1.0)		1	09/08/11 19:22	CU10037	CI10809
1,2-Dichlorobenzene	1.2 (1.0)		1	09/08/11 19:22	CUI0037	CI10809
1,2-Dichloroethane	ND (1.0)		1	09/08/11 19:22	CUI0037	CI10809
1,2-Dichloropropane	ND (1.0)		1	09/08/11 19:22	CUI0037	CI10809
1,3,5-Trimethylbenzene	ND (1.0)		1	09/08/11 19:22	CUI0037	CI10809
1,3-Dichlorobenzene	ND (1.0)		1	09/08/11 19:22	CUI0037	CI10809
1,3-Dichloropropane	ND (1.0)		1	09/08/11 19:22	CUI0037	CI10809
1,4-Dichlorobenzene	1.7 (1.0)		1	09/08/11 19:22	CUI0037	CI10809
1,4-Dioxane - Screen	ND (500)		1	09/08/11 19:22	CUI0037	CI10809
2,2-Dichloropropane	ND (1.0)		1	09/08/11 19:22	CUI0037	C110809
2-Butanone	ND (10.0)		1	09/08/11 19:22	CUI0037	CI10809
2-Chlorotoluene	1.0 (1.0)		1	09/08/11 19:22	CUI0037	CI10809
2-Hexanone	ND (10.0)		T	09/08/11 19:22	CUI0037	CI10809
4-Chlorotoluene	ND (1.0)		1	09/08/11 19:22	CUI0037	CI10809
4-Isopropyltoluene	ND (1.0)		1	09/08/11 19:22	CUI0037	CI10809
4-Methyl-2-Pentanone	ND (10.0)		1	09/08/11 19:22	CUI0037	CI10809
Acetone	ND (10.0)		1	09/08/11 19:22	CUI0037	CI10809
Benzene	12.1 (1.0)		1	09/08/11 19:22	CUI0037	CI10809
Bromobenzene	ND (2.0)		1	09/08/11 19:22	CUI0037	CI10809

Dependability Quality ٠

Fax: 401-461-4486 Service

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Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW101 Date Sampled: 09/06/11 16:00 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

### **BAL** Laboratory

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-01 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### 8260B Volatile Organic Compounds

Analyte Bromochloromethane	Results (MRL) ND (1.0)		Limit	<u>DF</u> 1	Law Cala	Analyzed 09/08/11 19:22	Sequence CUI0037	Batch C110809	
Bromodichloromethane	ND (0.6)			1		09/08/11 19:22	CUI0037	CI10809	
Bromoform	ND (1.0)			1		09/08/11 19:22	CU10037	CI10809	
Bromomethane	ND (2.0)			1		09/08/11 19:22	CU10037	CI10809	
Carbon Disulfide	ND (1.0)			1		09/08/11 19:22	CU10037	CI10809	
Carbon Tetrachloride	ND (1.0)			1		09/08/11 19:22	CU10037	C110809	
Chlorobenzene	10.9 (1.0)			1		09/08/11 19:22	CUI0037	CI10809	
Chloroethane	ND (2.0)			1		09/08/11 19:22	CU10037	CI10809	
Chloroform	ND (1.0)	201 190		1		09/08/11 19:22	CU10037	CI10809	
Chloromethane	ND (2.0)			1		09/08/11 19:22	CUI0037	CI10809	
cis-1,2-Dichloroethene	ND (1.0)			1		09/08/11 19:22	CUI0037	CI10809	
cis-1,3-Dichloropropene	ND (0.4)			1		09/08/11 19:22	CUI0037	CI10809	
Dibromochloromethane	ND (1.0)			1		09/08/11 19:22	CUI0037	CI10809	
Dibromomethane	ND (1.0)			1		09/08/11 19:22	CU10037	CI10809	
Dichlorodifluoromethane	ND (2.0)			1		09/08/11 19:22	CUI0037	C110809	
Diethyl Ether	ND (1.0)			1		09/08/11 19:22	CU10037	CI10809	
Di-isopropyl ether	1.2 (1.0)			1	8	09/08/11 19:22	CU10037	CI10809	
Ethyl tertiary-butyl ether	ND (1.0)			1		09/08/11 19:22	CU10037	CI10809	
Ethylbenzene	1.6 (1.0)			1		09/08/11 19:22	CU10037	CI10809	
Hexachlorobutadiene	ND (0.6)			1		09/08/11 19:22	CUI0037	C110809	
Hexachloroethane	ND (1.0)			1		09/08/11 19:22	CUI0037	CI10809	
Isopropylbenzene	7.4 (1.0)			1		09/08/11 19:22	CUI0037	CI10809	
Methyl tert-Butyl Ether	21.0 (1.0)			1		09/08/11 19:22	CUI0037	CI10809	
Methylene Chloride	ND (2.0)			1		09/08/11 19:22	CUI0037	CI10809	
Naphthalene	172 (10.0)			10		09/09/11 13:11	CUI0037	CI10809	
n-Butylbenzene	3.7 (1.0)			1		09/08/11 19:22	CUI0037	CI10809	
n-Propylbenzene	11.6 (1.0)			1		09/08/11 19:22	CUI0037	CI10809	
sec-Butylbenzene	3.4 (1.0)			1		09/08/11 19:22	CU10037	CI10809	
Styrene	ND (1.0)			1		09/08/11 19:22	CU10037	CI10809	
tert-Butylbenzene	1.9 (1.0)			1		09/08/11 19:22	CUI0037	CI10809	
Tertiary-amyl methyl ether	ND (1.0)			1		09/08/11 19:22	CUI0037	CI10809	

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Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW101 Date Sampled: 09/06/11 16:00 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

Surrogate: Dibromofluoromethane

Surrogate: Toluene-d8

### **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-01 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### 8260B Volatile Organic Compounds

Xylene P,M Xylenes (Total)	ND (2.0) ND (3.0)	8		1	09/0	8/11 19:22 8/11 19:22 8/11 19:22	CUI0037	CI10809 [CALC]
Vinyl Chloride Xylene O	ND (1.0) ND (1.0)			1		8/11 19:22 8/11 19:22		CI10809 C110809
Trichlorofluoromethane	ND (1.0)			1	09/0	8/11 19:22	CU10037	C110809
trans-1,3-Dichloropropene Trichloroethene	ND (0.4) ND (1.0)			1		8/11 19:22 8/11 19:22		C110809 C110809
trans-1,2-Dichloroethene	ND (1.0)	10 10		1		8/11 19:22		CI10809
Tetrahydrofuran Toluene	ND (5.0) ND (1.0)			1		8/11 19:22 8/11 19:22		C110809 C110809
Analyte Tetrachloroethene	Results (MRL) ND (1.0)		Limit	<u>DF</u> 1	09/0	<u>alyzed</u> 8/11 19:22		Batch CI10809

70-130

70-130

92 %

104 %

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Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW101 Date Sampled: 09/06/11 16:00 Percent Solids: N/A Initial Volume: 1000 Final Volume: 1 Extraction Method: 3510C

### **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-01 Sample Matrix: Ground Water Units: ug/L Analyst: IBM Prepared: 9/8/11 13:00

### MADEP-EPH-04-1.1/8270D Extractable Petroleum Hydrocarbons

Anthracene Benzo(a)anthracene	ND (0.20)		1	09/09/11 12:42 09/09/11 12:42	CU10051	CI10817
Acenaphthylene Anthracene	ND (0.20) ND (0.20)		1	09/09/11 12:42 09/09/11 12:42	CUI0051 CUI0051	CI10817 CI10817
Benzo(a)anthracene	ND (0.20)		1	09/09/11 12:42	CUI0051	CI10817
Benzo(a)pyrene	ND (0.10)	e	1	09/09/11 12:42	CUI0051	CI10817
Benzo(b)fluoranthene	ND (0.20)		1	09/09/11 12:42	CUI0051	CI10817
Benzo(g,h,i)perylene	ND (0.20)		1	09/09/11 12:42	CU10051	CI10817
Benzo(k)fluoranthene	ND (0.20)		1	09/09/11 12:42	CUI0051	CI10817
Chrysene	ND (0.20)		1	09/09/11 12:42	CUI0051	CI10817
Dibenzo(a,h)Anthracene	ND (0.20)		1	09/09/11 12:42	CUI0051	CI10817
Fluoranthene			1	09/09/11 12:42	CUI0051	CI10817
	ND (0.20)		1			
Fluorene	0.24 (0.20)		1	09/09/11 12:42	CUI0051	C110817
ndeno(1,2,3-cd)Pyrene	ND (0.20)		1	09/09/11 12:42	CUI0051	CI10817
yrene	ND (0.20)		1	09/09/11 12:42	CUI0051	CI10817
Preservative:	pH <= 2					CI10817

Surrogate: 2-Fluorobiphenyl Surrogate: O-Terphenyl

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91 %

72 %

40-140

40-140



### **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



### CERTIFICATE OF ANALYSIS

Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW101 Date Sampled: 09/06/11 16:00 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-01 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### MADEP-VPH-04-1.1 Volatile Petroleum Hydrocarbon

	%Recovery	Qualifier	Limits	ware distributed from the second		1-10-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
Preservative:	pH <= 2					CI11409
C9-C12 Aliphatics2,3	201 (150)		1	09/14/11 15:26		[CALC]
C5-C8 Aliphatics1,2	ND (150)		1	09/14/11 15:26		[CALC]
<u>Analyte</u> C9-C10 Aromatics	Results (MRL) 254 (100)		Limit DF	Analyzed 09/14/11 15:26	Sequence CUI0091	Batch CI11409

70-130

70-130

100 %

96 %

Surrogate: 2,5-Dibromotoluene - FID Surrogate: 2,5-Dibromotoluene - PID

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 Dependability
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 Quality
 \*
 Service



Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW102 Date Sampled: 09/06/11 15:05 Percent Solids: N/A

### **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-02 Sample Matrix: Ground Water Units: ug/L

### 3005A/3020A/6000/7000 Dissolved Metals

Analyte Antimony		Results (MRL) ND (2.5)		Method 7010	<u>Limit</u>	<u>DF</u>	Analyst SVD	Analyzed 09/13/11 17:04	<u>I/V</u> 50	<u>F/V</u> 25	Batch CI10901	
Arsenic		60 (25)		6010B		1	SVD	09/09/11 18:17	50	25	CI10901	
Barium		67 (25)		6010B		1	SVD	09/09/11 18:17	50	25	CI10901	
Beryllium		ND (0.5)		6010B		1	SVD	09/09/11 18:17	50	25	CI10901	
Cadmium		ND (2.5)		6010B		1	SVD	09/09/11 18:17	50	25	CI10901	
Chromium		ND (10)		6010B		1	SVD	09/09/11 18:17	50	25	CI10901	
Lead		ND (10)		6010B		1	SVD	09/09/11 18:17	50	25	C110901	
Nickel		ND (25)		6010B		1	SVD	09/09/11 18:17	50	25	CI10901	
Selenium		ND (25)	-3	6010B		1	SVD	09/09/11 18:17	50	25	CI10901	
Silver		ND. (5)		6010B		1	SVD	09/09/11 18:17	50	25	CI10901	
Thallium		ND (1.5)		7010		1	SVD	09/13/11 19:56	50	25	CI10901	
Vanadium		ND (10)		6010B		1	SVD	09/09/11 18:17	50	25	CI10901	
Zinc		ND (25)		6010B		1	SVD	09/09/11 18:17	50	25	CI10901	



Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW102 Date Sampled: 09/06/11 15:05 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

### **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-02 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### 8260B Volatile Organic Compounds

Analyte 1,1,1,2-Tetrachloroethane	Results (MRL) ND (1.0)	Limit	<b><u>DF</u></b> 1	Analyzed 09/08/11 17:46	Sequence CUI0037	Batch C110809	
1,1,1-Trichloroethane	ND (1.0)		1	09/08/11 17:46	CUI0037	C110809	
1,1,2,2-Tetrachloroethane	ND (0.5)		1	09/08/11 17:46	CUI0037	CI10809	
1,1,2-Trichloroethane	ND (1.0)		1	09/08/11 17:46	CUI0037	C110809	
1,1-Dichloroethane	ND (1.0)		1	09/08/11 17:46	CU10037	C110809	
1,1-Dichloroethene	ND (1.0)		1	09/08/11 17:46	CU10037	CI10809	
1,1-Dichloropropene	ND (2.0)		1	09/08/11 17:46	CUI0037	CI10809	
1,2,3-Trichlorobenzene	ND (1.0)		1	09/08/11 17:46	CUI0037	C110809	
1,2,3-Trichloropropane	ND (1.0)		1	09/08/11 17:46	CU10037	CI10809	
1,2,4-Trichlorobenzene	ND (1.0)		1	09/08/11 17:46	CUI0037	C110809	
1,2,4-Trimethylbenzene	ND (1.0)		1	09/08/11 17:46	CU10037	CI10809	
1,2-Dibromo-3-Chloropropane	ND (5.0)		1	09/08/11 17:46	CUI0037	C110809	
1,2-Dibromoethane	ND (1.0)	ata "o co	1	09/08/11 17:46	CUI0037	C110809	
1,2-Dichlorobenzene	ND (1.0)		1	09/08/11 17:46	CUI0037	C110809	
1,2-Dichloroethane	ND (1.0)		1	09/08/11 17:46	CUI0037	CI10809	
1,2-Dichloropropane	ND (1.0)		1	09/08/11 17:46	CUI0037	CI10809	
1,3,5-Trimethylbenzene	ND (1.0)		1	09/08/11 17:46	CU10037	CI10809	
1,3-Dichlorobenzene	ND (1.0)		1	09/08/11 17:46	CUI0037	CI10809	
1,3-Dichloropropane	ND (1.0)		1	09/08/11 17:46	CUI0037	C110809	
1,4-Dichlorobenzene	ND (1.0)		1	09/08/11 17:46	CU10037	CI10809	
1,4-Dioxane - Screen	ND (500)		1	09/08/11 17:46	CU10037	CI10809	
2,2-Dichloropropane	ND (1.0)		1	09/08/11 17:46	CU10037	CI10809	
2-Butanone	ND (10.0)		1	09/08/11 17:46	CUI0037	CI10809	
2-Chlorotoluene	ND (1.0)		1	09/08/11 17:46	CUI0037	CI10809	
2-Hexanone	ND (10.0)		1	09/08/11 17:46	CU10037	CI10809	
4-Chlorotoluene	ND (1.0)		1	09/08/11 17:46	CUI0037	C110809	
4-Isopropyltoluene	ND (1.0)		1	09/08/11 17:46	CUI0037	C110809	
4-Methyl-2-Pentanone	ND (10.0)		1	09/08/11 17:46	CUI0037	CI10809	
Acetone	ND (10.0)		1	09/08/11 17:46	CUI0037	CI10809	
Benzene	<b>5.2</b> (1.0)		1	09/08/11 17:46	CUI0037	CI10809	
Bromobenzene	ND (2.0)		1	09/08/11 17:46	CUI0037	CI10809	

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Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW102 Date Sampled: 09/06/11 15:05 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B **BAL Laboratory** 

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-02 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### 8260B Volatile Organic Compounds

Analyte Bromochloromethane	Results (MRL) ND (1.0)	Limit DF		Analyzed 09/08/11 17:46	Sequence CUI0037	Batch CI10809	
Bromodichloromethane	ND (0.6)	1		09/08/11 17:46	CUI0037	CI10809	
Bromoform	ND (1.0)	1		09/08/11 17:46	CU10037	CI10809	
Bromomethane	ND (2.0)	1	~	09/08/11 17:46	CU10037	CI10809	
Carbon Disulfide	ND (1.0)	1		09/08/11 17:46	CUI0037	CI10809	
Carbon Tetrachloride	ND (1.0)	1		09/08/11 17:46	CU10037	CI10809	
Chlorobenzene	ND (1.0)	1		09/08/11 17:46	CU10037	CI10809	
Chloroethane	ND (2.0)	1		09/08/11 17:46	CU10037	CI10809	
Chloroform	ND (1.0)	1		09/08/11 17:46	CU10037	C110809	
Chloromethane	ND (2.0)	1		09/08/11 17:46	CUI0037	CI10809	
cis-1,2-Dichloroethene	ND (1.0)	1		09/08/11 17:46	CUI0037	CI10809	
cis-1,3-Dichloropropene	ND (0.4)	1		09/08/11 17:46	CUI0037	CI10809	
Dibromochloromethane	ND (1.0)	1		09/08/11 17:46	CUI0037	CI10809	
Dibromomêthane	ND (1.0)	1		09/08/11 17:46	CUI0037	CI10809	
Dichlorodifluoromethane	ND (2.0)	1		09/08/11 17:46	CUI0037	CI10809	
Diethyl Ether	ND (1.0)	1		09/08/11 17:46	CUI0037	CI10809	
Di-isopropyl ether	5.8 (1.0)	1		09/08/11 17:46	CUI0037	CI10809	
Ethyl tertiary-butyl ether	ND (1.0)	1		09/08/11 17:46	CUI0037	CI10809	
Ethylbenzene	2.0 (1.0)	1		09/08/11 17:46	CUI0037	CI10809	
Hexachlorobutadiene	ND (0.6)	1		09/08/11 17:46	CUI0037	CI10809	
Hexachloroethane	ND (1.0)	1		09/08/11 17:46	CU10037	CI10809	
Isopropylbenzene	2.8 (1.0)	1		09/08/11 17:46	CU10037	CI10809	
Methyl tert-Butyl Ether	18.8 (1.0)	1		09/08/11 17:46	CUI0037	CI10809	
Methylene Chloride	ND (2.0)	· 1		09/08/11 17:46	CUI0037	CI10809	
Naphthalene	ND (1.0)	1		09/08/11 17:46	CUI0037	CI10809	
n-Butylbenzene	ND (1.0)	1		09/08/11 17:46	CU10037	CI10809	
n-Propylbenzene	4.8 (1.0)	1		09/08/11 17:46	CU10037	CI10809	
sec-Butylbenzene	ND (1.0)	1		09/08/11 17:46	CU10037	CI10809	
Styrene	ND (1.0)	_ 1		09/08/11 17:46	CU10037	C110809	
tert-Butylbenzene	ND (1.0)	- 1		09/08/11 17:46	CUI0037	CI10809	
Tertiary-amyl methyl ether	ND (1.0)	1		09/08/11 17:46	CUI0037	CI10809	

Dependability • Quality



Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW102 Date Sampled: 09/06/11 15:05 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

### **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-02 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### 8260B Volatile Organic Compounds

Analyte Tetrachloroethene		Results (MRL) ND (1.0)		<u>Limit</u>	$\frac{\mathbf{DF}}{1}$	Analyzed 09/08/11 17:46	Sequence CUI0037	Batch C110809
Tetrahydrofuran		ND (5.0)			1	09/08/11 17:46	CU10037	C110809
Toluene		ND (1.0)			1	09/08/11 17:46	CU10037	CI10809
trans-1,2-Dichloroethene		ND (1.0)			1	09/08/11 17:46	CU10037	CI10809
trans-1,3-Dichloropropene		ND (0.4)			1	09/08/11 17:46	CUI0037	CI10809
Trichloroethene		ND (1.0)			1	09/08/11 17:46	CU10037	CI10809
Trichlorofluoromethane		ND (1.0)			1	09/08/11 17:46	CUI0037	CI10809
Vinyl Chloride		ND (1.0)			1	09/08/11 17:46	CUI0037	CI10809
Xylene O		ND (1.0)			1	09/08/11 17:46	CUI0037	CI10809
Xylene P,M		4.2 (2.0)			1	09/08/11 17:46	CUI0037	CI10809
Xylenes (Total)		4.2 (3.0)			1	09/08/11 17:46		[CALC]
	M. FR. L.	%Recc	overy Qualifier	Limits				

	%Recovery	Qualifier	Limits	
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1				
Surrogate: 1,2-Dichloroethane-d4	90 %		70-130	
Surrogate: 4-Bromofluorobenzene	107 %		70-130	
Surrogate: Dibromofluoromethane	<i>92 %</i>		70-130	
Surrogate: Toluene-d8	103 %		70-130	



Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW102 Date Sampled: 09/06/11 15:05 Percent Solids: N/A Initial Volume: 1000 Final Volume: 1 Extraction Method: 3510C

## **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-02 Sample Matrix: Ground Water Units: ug/L Analyst: IBM Prepared: 9/8/11 13:00

## MADEP-EPH-04-1.1/8270D Extractable Petroleum Hydrocarbons

reservative:	pH <= 2						CI1081
yrene	ND (0.20)			1	09/09/11 13:27	CUI0051	CI1081
ideno(1,2,3-cd)Pyrene	ND (0.20)			1	09/09/11 13:27	CUI0051	CI1081
luorene	ND (0.20)			1	09/09/11 13:27	CUI0051	C11081
uoranthene	ND (0.20)			1	09/09/11 13:27	CUI0051	CI1081
ibenzo(a,h)Anthracene	ND (0.20)			1	09/09/11 13:27	CUI0051	CI1081
hrysene	ND (0.20)			1	09/09/11 13:27	CUI0051	CI108
enzo(k)fluoranthene	ND (0.20)			1	09/09/11 13:27	CUI0051	CI108
enzo(g,h,i)perylene	ND (0.20)			1	09/09/11 13:27	CUI0051	CI108
enzo(b)fluoranthene	ND (0.20)			1	09/09/11 13:27	CU10051	CI108
enzo(a)pyrene	ND (0.10)			1	09/09/11 13:27	CUI0051	CI108
enzo(a)anthracene	ND (0.20)			1	09/09/11 13:27	CUI0051	CI108
nthracene	ND (0.20)			1	09/09/11 13:27	CUI0051	CI108
cenaphthylene	ND (0.20)			1	09/09/11 13:27	CU10051	CI108
enanthrene	ND (0.50)			1	09/09/11 13:27	CU10051	CI108
aphthalene	ND (0.50)	95)		1	09/09/11 13:27	CUI0051	CI10
enaphthene	ND (0.20)			1	09/09/11 13:27	CU10051	CI10
Methylnaphthalene	ND (0.50)			1	09/09/11 13:27	CU10051	CI10
11-C22 Aromatics1,2	ND (100)				09/09/11 13:27		[CAI
11-C22 Unadjusted Aromatics1	ND (100)			1	09/08/11 21:55	CUI0052	CI10
19-C36 Aliphatics1	ND (100)			1	09/09/11 8:54	CUI0055	CI10
nalyte -C18 Aliphatics1	Results (MRL) ND (100)		Limit	DF 1	Analyzed 09/09/11 8:54	Sequence CUI0055	Bat CI10

	June covery	Qualiner	Linius
Surrogate: 1-Chlorooctadecane	78 %		40-140
Surrogate: 2-Bromonaphthalene	100 %		40-140
Surrogate: 2-Fluorobiphenyl	92 %		40-140
Surrogate: O-Terphenyl	73 %		40-140

185 Frances Avenue, Cranston, RI 02910-2211 Tel: 401-461-7181 Quality

Dependability ٠ Fax: 401-461-4486 Service ٠



Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW102 Date Sampled: 09/06/11 15:05 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

## **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-02 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### MADEP-VPH-04-1.1 Volatile Petroleum Hydrocarbon

	%Recovery	Qualifier Limits	della company and a second	
Preservative:	pH <= 2			CI11317
C9-C12 Aliphatics2,3	ND (150)	1	09/13/11 17:17	[CALC]
C5-C8 Aliphatics1,2	257 (150)	1	09/13/11 17:17	[CALC]
Analyte C9-C10 Aromatics	Results (MRL) ND (100)	Limit DF	Analyzed 09/13/11 17:17 Sequence CU10075	Batch CI11317

 Surrogate: 2,5-Dibromotoluene - FID
 112 %
 70-130

 Surrogate: 2,5-Dibromotoluene - PID
 111 %
 70-130

Page 16 of 49



**BAL Laboratory** 

The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW103 Date Sampled: 09/06/11 17:25 Percent Solids: N/A

ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-03 Sample Matrix: Ground Water Units: ug/L

### 3005A/3020A/6000/7000 Dissolved Metals

Analyte Antimony	Results (MRL) ND (2.5)	Method Lim 7010	it <u>DF</u>	Analyst SVD	Analyzed 09/13/11 17:10	<u>I/V</u> 50	<u>F/V</u> 25	Batch CI10901	
Arsenic	ND (2.5)	7010	1	SVD	09/14/11 0:02	50	25	CI10901	
Barium	43 (25)	6010B	- 1	SVD	09/09/11 18:22	50	25	C110901	
Beryllium	ND (0.5)	6010B	1	SVD	09/09/11 18:22	50	25	CI10901	
Cadmium	ND (2.5)	6010B	1	SVD	09/09/11 18:22	50	25	CI10901	
Chromium	ND (10)	6010B	1	SVD	09/09/11 18:22		25	CI10901	
Lead	ND (10)	6010B	1	SVD	09/09/11 18:22		25	C110901	
Nickel	ND (25)	6010B	1	SVD	09/09/11 18:22		25	CI10901	
Selenium	ND (25)	6010B	1	SVD	09/09/11 18:22		25	CI10901	
Silver	ND (5)	6010B		SVD	09/09/11 18:22		25	CI10901	
Thallium	ND (1.5)	7010	1	SVD	09/13/11 20:02		25	C110901	
Vanadium	ND (10)	6010B	1	SVD	09/09/11 18:22		25	C110901	
Zinc	ND (10)	6010B	1	SVD	09/09/11 18:22	202	25	CI10901	
	(23)	00100	1	340	09/09/11 18:22	50	20		



Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW103 Date Sampled: 09/06/11 17:25 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

## **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-03 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### 8260B Volatile Organic Compounds

Analyte 1,1,1,2-Tetrachloroethane	Results (MRL) ND (1.0)	Limit	<u>DF</u>	Analyzed 09/08/11 18:18	Sequence CU10037	Batch C110809	
1,1,1-Trichloroethane	ND (1.0)		1	09/08/11 18:18	CUI0037	CI10809	
1,1,2,2-Tetrachloroethane	ND (0.5)		1	09/08/11 18:18	CUI0037	CI10809	
1,1,2-Trichloroethane	ND (1.0)		1	09/08/11 18:18	CUI0037	CI10809	
1,1-Dichloroethane	ND (1.0)		1	09/08/11 18:18	CUI0037	CI10809	
1,1-Dichloroethene	ND (1.0)		1	09/08/11 18:18	CUI0037	CI10809	
1,1-Dichloropropene	ND (2.0)		1	09/08/11 18:18	CU10037	C110809	
1,2,3-Trichlorobenzene	ND (1.0)		1	09/08/11 18:18	CU10037	C110809	
1,2,3-Trichloropropane	ND (1.0)		1	09/08/11 18:18	CUI0037	CI10809	
1,2,4-Trichlorobenzene	ND (1.0)		1	09/08/11 18:18	CU10037	C110809	
1,2,4-Trimethylbenzene	ND (1.0)		1	09/08/11 18:18	CUI0037	CI10809	
1,2-Dibromo-3-Chloropropane	ND (5.0)		1	09/08/11 18:18	CU10037	CI10809	
1,2-Dibromoethane	ND (1.0)		1	09/08/11 18:18	CU10037	CI10809	
1,2-Dichlorobenzene	ND (1.0)		1	09/08/11 18:18	CU10037	CI10809	
1,2-Dichloroethane	ND (1.0)		1	09/08/11 18:18	CUI0037	CI10809	
1,2-Dichloropropane	ND (1.0)		1	09/08/11 18:18	CUI0037	CI10809	
1,3,5-Trimethylbenzene	ND (1.0)		1	09/08/11 18:18	CUI0037	C110809	
1,3-Dichlorobenzene	ND (1.0)		1	09/08/11 18:18	CU10037	CI10809	
1,3-Dichloropropane	ND (1.0)		1	09/08/11 18:18	CUI0037	CI10809	
1,4-Dichlorobenzene	ND (1.0)		1	09/08/11 18:18	CU10037	C110809	
1,4-Dioxane - Screen	ND (500)	1	1	09/08/11 18:18	CUI0037	C110809	
2,2-Dichloropropane	ND (1.0)		-1	09/08/11 18:18	CUI0037	CI10809	
2-Butanone	ND (10.0)		1	09/08/11 18:18	CUI0037	CI10809	
2-Chlorotoluene	ND (1.0)		1	09/08/11 18:18	CUI0037	CI10809	
2-Hexanone	ND (10.0)		1	09/08/11 18:18	CUI0037	CI10809	
4-Chlorotoluene	ND (1.0)		1	09/08/11 18:18	CUI0037	CI10809	
4-Isopropyltoluene	ND (1.0)		1	09/08/11 18:18	CU10037	CI10809	
4-Methyl-2-Pentanone	ND (10.0)		1	09/08/11 18:18	CUI0037	CI10809	
Acetone	ND (10.0)		1	09/08/11 18:18	CUI0037	CI10809	
Benzene	ND (1.0)		1	09/08/11 18:18	CU10037	CI10809	
Bromobenzene	ND (2.0)		1	09/08/11 18:18	CU10037	CI10809	



Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW103 Date Sampled: 09/06/11 17:25 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

# **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.

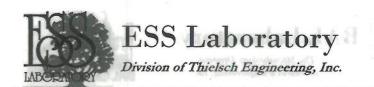


ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-03 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### 8260B Volatile Organic Compounds

Analyte Bromochloromethane	Results (MRL) ND (1.0)			<u>Limit</u>	$\frac{\mathbf{DF}}{1}$	Analyz 09/08/11		Sequence CUI0037	Batch CI10809	
Bromodichloromethane	ND (0.6)				1	09/08/11				
Bromoform	ND (0.0)		0		1	09/08/11		CUI0037 CUI0037	CI10809	
Bromomethane	ND (1.0)				1	09/08/11		CU10037	C110809 C110809	
Carbon Disulfide	ND (2.0)				1	09/08/11		CU10037	CI10809 CI10809	
Carbon Tetrachloride	ND (1.0)				1	09/08/11		CU10037	CI10809	
Chlorobenzene	ND (1.0)				1	09/08/11		CUI0037	CI10809	
Chloroethane	ND (1.0)				1	09/08/11		CU10037	CI10809 CI10809	
Chloroform	ND (2.0)				1	09/08/11		CU10037	CI10809 CI10809	
Chloromethane	ND (1.0) ND (2.0)				1	09/08/11		CU10037	CI10809	
cis-1,2-Dichloroethene	ND (2.0) ND (1.0)				1	09/08/11		CU10037	CI10809 CI10809	
cis-1,3-Dichloropropene	ND (0.4)				1	09/08/11		CU10037	CI10809	
Dibromochloromethane	ND (0.4)					09/08/11		CU10037	CI10809	
Dibromomethane	ND (1.0)				1	09/08/11		CU10037	CI10809	
Dichlorodifluoromethane	ND (1.0)				- 1	09/08/11		CU10037	CI10809	
Diethyl Ether	ND (2.0)				1	09/08/11		CU10037	CI10809	
Di-isopropyl ether	ND (1.0)				- î	09/08/11		CU10037	CI10809	
Ethyl tertiary-butyl ether	ND (1.0)				1	09/08/11		CUI0037	CI10809	
Ethylbenzene	ND (1.0)				1	09/08/11		CU10037	CI10809	
Hexachlorobutadiene	ND (0.6)				1	09/08/11		CUI0037	CI10809	
Hexachloroethane	ND (0.0)				1	09/08/11		CUI0037	CI10809	
Isopropylbenzene	ND (1.0)				1	09/08/11		CU10037	CI10809	
Methyl tert-Butyl Ether	5.8 (1.0)				1	09/08/11		CU10037	CI10809	
Methylene Chloride	ND (2.0)		20.2		1	09/08/11		CU10037	CI10809	
Naphthalene	ND (1.0)				1	09/08/11	18:18	CU10037	CI10809	
n-Butylbenzene	ND (1.0)				1	09/08/11	18:18	CU10037	CI10809	
n-Propylbenzene	ND (1.0)				1	09/08/11		CU10037	CI10809	
sec-Butylbenzene	ND (1.0)				1	09/08/11		CU10037	CI10809	
Styrene	ND (1.0)				1	09/08/11		CU10037	CI10809	
tert-Butylbenzene	ND (1.0)	19 —			1	09/08/11		CUI0037	CI10809	
Tertiary-amyl methyl ether	ND (1.0)				1	09/08/11		CUI0037	CI10809	
					1.5					

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Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW103 Date Sampled: 09/06/11 17:25 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

# **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-03 Sample Matrix: Ground Water Units: ug/L Analyst: MD

#### 8260B Volatile Organic Compounds

Analyte Tetrachloroethene	Results (MRL) ND (1.0)	<u>AQ</u> Umid	<u>Limit</u> D	DF <u>Analyzed</u> 1 09/08/11 18:18	Sequence Batch CU10037 C110809
Tetrahydrofuran	ND (5.0)			1 09/08/11 18:18	
Toluene	ND (1.0)			1 09/08/11 18:18	
trans-1,2-Dichloroethene	ND (1.0)			1 09/08/11 18:18	CU10037 CI10809
trans-1,3-Dichloropropene	ND (0.4)			1 . 09/08/11 18:18	CUI0037 CI10809
Trichloroethene	ND (1.0)			1 09/08/11 18:18	CUI0037 CI10809
Trichlorofluoromethane	ND (1.0)			1 09/08/11 18:18	CU10037 CI10809
Vinyl Chloride	ND (1.0)			1 09/08/11 18:18	CUI0037 CI10809
Xylene O	ND (1.0)	A CONTRACTOR		1 09/08/11 18:18	CUI0037 CI10809
Xylene P,M	ND (2.0)			1 09/08/11 18:18	CU10037 CI10809
Xylenes (Total)	ND (3.0)			1 09/08/11 18:18	[CALC]
	A REAL AND A	%Recovery Qualifier	Limits		- Alberteine and Alberteine
Surrogate: 1,2-Dichloroethane-d4		89 %	70-130		
Surrogate: 4-Bromofluorobenzene		101 %	70-130		
Surrogate: Dibromofluoromethane		92 %	70-130		
Surrogate: Toluene-d8		99 %	70-130		
		N	12		
		1 ( 1/2) X		1 × 1	

Den Stand



Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW103 Date Sampled: 09/06/11 17:25 Percent Solids: N/A Initial Volume: 1000 Final Volume: 1 Extraction Method: 3510C

# **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-03 Sample Matrix: Ground Water Units: ug/L Analyst: IBM Prepared: 9/8/11 13:00

### MADEP-EPH-04-1.1/8270D Extractable Petroleum Hydrocarbons

Analyte C9-C18 Aliphatics1	Results (MRL) ND (100)		<u>Limit</u>	$\frac{\mathbf{DF}}{1}$	FUST dis.	Analyzed 09/09/11 9:45	Sequence CU10055	Batch CI10817
C19-C36 Aliphatics1	ND (100)			1		09/09/11 9:45	CU10055	CI10817
C11-C22 Unadjusted Aromatics1	ND (100)			1		09/08/11 22:42	CU10052	CI10817
C11-C22 Aromatics1,2	ND (100)					09/09/11 14:12		[CALC]
2-Methylnaphthalene	ND (0.50)			1		09/09/11 14:12	CUI0051	CI10817
Acenaphthene	ND (0.20)			1		09/09/11 14:12	CUI0051	C110817
Naphthalene	<b>0.53</b> (0.50)			1		09/09/11 14:12	CUI0051	C110817
Phenanthrene	ND (0.50)			1		09/09/11 14:12	CUI0051	C110817
Acenaphthylene	ND (0.20)			1		09/09/11 14:12	CUI0051	C110817
Anthracene	ND (0.20)			1		09/09/11 14:12	CUI0051	CI10817
Benzo(a)anthracene	ND (0.20)			1		09/09/11 14:12	CUI0051	C110817
Benzo(a)pyrene	ND (0.10)			1		09/09/11 14:12	CUI0051	CI10817
Benzo(b)fluoranthene	ND (0.20)			1		09/09/11 14:12	CUI0051	C110817
Benzo(g,h,i)perylene	ND (0.20)			1		09/09/11 14:12	CUI0051	CI10817
Benzo(k)fluoranthene	ND (0.20)			1		09/09/11 14:12	CUI0051	CI10817
Chrysene	ND (0.20)			1		09/09/11 14:12	CUI0051	CI10817
Dibenzo(a,h)Anthracene	ND (0.20)			1		09/09/11 14:12	CUI0051	CI10817
Fluoranthene	ND (0.20)			1		09/09/11 14:12	CUI0051	CI10817
Fluorene	ND (0.20)			1		09/09/11 14:12	CUI0051	CI10817
Indeno(1,2,3-cd)Pyrene	ND (0.20)			1		09/09/11 14:12	CUI0051	CI10817
Pyrene	ND (0.20)			1		09/09/11 14:12	CUI0051	CI10817
Preservative:	pH <= 2							CI10817

	%Recovery	Quaimer	Limits
Surrogate: 1-Chlorooctadecane	80 %		40-140
Surrogate: 2-Bromonaphthalene	94 %		40-140
Surrogate: 2-Fluorobiphenyl	90 %		40-140
Surrogate: O-Terphenyl	76 %		40-140



**BAL Laboratory** 

The Microbiology Division of Thielsch Engineering, Inc.



CERTIFICATE OF ANALYSIS

Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW103 Date Sampled: 09/06/11 17:25 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-03 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### MADEP-VPH-04-1.1 Volatile Petroleum Hydrocarbon

Analyte C9-C10 Aromatics	Results (MRL) ND (100)		<u>Limit</u>	<u>DF</u>	Analyzed 09/13/11 17:51	Sequence CUI0075	Batch C111317
C5-C8 Aliphatics1,2	ND (150)			1	09/13/11 17:51		[CALC]
C9-C12 Aliphatics2,3	ND (150)			1	09/13/11 17:51		[CALC]
Preservative:	pH <= 2						CI11317
	%Recovery	Qualifier	Limits		( () - (, 1))e.		<u> (Maganini</u> s'

70-130

70-130

119 %

119 %

Surrogate: 2,5-Dibromotoluene - FID Surrogate: 2,5-Dibromotoluene - PID

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### CERTIFICATE OF ANALYSIS

Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW104 Date Sampled: 09/06/11 16:50 Percent Solids: N/A

ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-04 Sample Matrix: Ground Water Units: ug/L

### 3005A/3020A/6000/7000 Dissolved Metals

Analyte Antimony	A Country to the state of the second	esults (MRL) (2.5)	1.12i ( <u>N</u>	<b>Method</b> 7010	<u>Limit</u>	DF 1	Analyst SVD	Analyz 09/13/11		<u>I/V</u> 50	<u>F/V</u> 25	Batch CI10901	
Arsenic	22.	9 (2.5)		7010		1	SVD	09/14/11	0:08	50	25	CI10901	
Barium	34	(25)		6010B		1	SVD	09/09/11	18:26	50	25	C110901	
Beryllium	ND	0 (0.5)	1	6010B		1	SVD	09/09/11	18:26	50	25	C110901	
Cadmium	NE	) (2.5)		6010B		1	SVD	09/09/11	18:26	50	25	C110901	
Chromium	ND	0 (10)		6010B		1	SVD	09/09/11	18:26	50	25	C110901	
Lead	NE	0 (10)	•	6010B		1	SVD	09/09/11	18:26	.50	25	C110901	
Nickel	ND	) (25)	i	6010B		1	SVD	09/09/11	18:26	50	25	CI10901	
Selenium	NE	) (25)		6010B		i	SVD	09/09/11	18:26	50	25	C110901	
Silver	NE	) (5)		6010B		1	SVD	09/09/11	18:26	50	25	CI10901	
Thallium	ND	0 (1.5)		7010		1	SVD	09/13/11	20:07	50	25	C110901	
Vanadium	NE	0 (10)		6010B		1	SVD	09/09/11	18:26	50	25	C110901	
Zinc	NE	) (25)	à	6010B		1	SVD	09/09/11	18:26	50	25	CI10901	

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Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW104 Date Sampled: 09/06/11 16:50 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

**BAL Laboratory** 

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-04 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### 8260B Volatile Organic Compounds

Analyte 1,1,1,2-Tetrachloroethane	Results (MRL) ND (1.0)		Limit	DF	Analyzed 09/08/11 18:50	Sequence CUI0037	Batch CI10809	
1,1,1-Trichloroethane	ND (1.0)		22	1	09/08/11 18:50	CUI0037	CI10809	
1,1,2,2-Tetrachloroethane	ND (0.5)			1	09/08/11 18:50	CU10037	CI10809	
1,1,2-Trichloroethane	ND (1.0)	8		1	09/08/11 18:50	CUI0037	CI10809	
1,1-Dichloroethane	ND (1.0)			1	09/08/11 18:50	CU10037	C110809	
1,1-Dichloroethene	ND (1.0)			1	09/08/11 18:50	CUI0037	CI10809	
1,1-Dichloropropene	ND (2.0)			1	09/08/11 18:50	CU10037	CI10809	
1,2,3-Trichlorobenzene	ND (1.0)			1	09/08/11 18:50	CU10037	C110809	
1,2,3-Trichloropropane	ND (1.0)			1	09/08/11 18:50	CUI0037	CI10809	
1,2,4-Trichlorobenzene	ND (1.0)			1	09/08/11 18:50	CUI0037	CI10809	
1,2,4-Trimethylbenzene	ND (1.0)	8		1	09/08/11 18:50	CUI0037	CI10809	
1,2-Dibromo-3-Chloropropane	ND (5.0)			1	09/08/11 18:50	CU10037	C110809	
1,2-Dibromoethane	ND (1.0)			1	09/08/11 18:50	CU10037	CI10809	
1,2-Dichlorobenzene	ND (1.0)		8	1	09/08/11 18:50	CU10037	CI10809	
1,2-Dichloroethane	ND (1.0)			1	09/08/11 18:50	CU10037	CI10809	
1,2-Dichloropropane	ND (1.0)			1	09/08/11 18:50	CUI0037	CI10809	
1,3,5-Trimethylbenzene	ND (1.0)			1	09/08/11 18:50	CUI0037	CI10809	
1,3-Dichlorobenzene	ND (1.0)			1	09/08/11 18:50	CUI0037	CI10809	
1,3-Dichloropropane	ND (1.0)			1	09/08/11 18:50	CU10037	CI10809	
1,4-Dichlorobenzene	ND (1.0)			1	09/08/11 18:50	CUI0037	CI10809	
1,4-Dioxane - Screen	ND (500)			1	09/08/11 18:50	CU10037	CI10809	
2,2-Dichloropropane	ND (1.0)			1	09/08/11 18:50	CUI0037	CI10809	
2-Butanone	ND (10.0)		.*	1	09/08/11 18:50	CUI0037	CI10809	
2-Chlorotoluene	ND (1.0)			1	09/08/11 18:50	CU10037	CI10809	
2-Hexanone	ND (10.0)			1	09/08/11 18:50	CUI0037	CI10809	
4-Chlorotoluene	ND (1.0)			1	09/08/11 18:50	CUI0037	CI10809	
4-Isopropyltoluene	ND (1.0)			1	09/08/11 18:50	CU10037	CI10809	
4-Methyl-2-Pentanone	ND (10.0)			1	09/08/11 18:50	CUI0037	CI10809	
Acetone	ND (10.0)			I	09/08/11 18:50	CU10037	CI10809	
Benzene	ND (1.0)			< 1	09/08/11 18:50	CU10037	CI10809	
Bromobenzene	ND (2.0)			1	09/08/11 18:50	CU10037	CI10809	

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Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW104 Date Sampled: 09/06/11 16:50 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

# **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-04 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### 8260B Volatile Organic Compounds

Analyte Bromochloromethane	Results (MRL) ND (1.0)			<u>Limit</u>	<u>DF</u>		Analyze		Sequence CUI0037	Batch C110809	
Bromodichloromethane	ND (0.6)				1		09/08/11	18:50	CU10037	CI10809	
Bromoform	ND (1.0)				1		09/08/11	18:50	CUI0037	CI10809	
Bromomethane	ND (2.0)				1		09/08/11	18:50	CUI0037	CI10809	
Carbon Disulfide	ND (1.0)				1		09/08/11	18:50	CU10037	C110809	
Carbon Tetrachloride	ND (1.0)				1		09/08/11	18:50	CU10037	CI10809	
Chlorobenzene	ND (1.0)				1		09/08/11	18:50	CUI0037	CI10809	
Chloroethane	ND (2.0)		22 -		× 1		09/08/11	18:50	CU10037	CI10809	
Chloroform	ND (1.0)				1		09/08/11	18:50	CU10037	CI10809	
Chloromethane	ND (2.0)				1		09/08/11	18:50	CU10037	CI10809	
cis-1,2-Dichloroethene	ND (1.0)	-			1		09/08/11	18:50	CU10037	CI10809	
cis-1,3-Dichloropropene	ND (0.4)				1		09/08/11	18:50	CU10037	CI10809	
Dibromochloromethane	ND (1.0)				1		09/08/11	18:50	CU10037	CI10809	
Dibromomethane	ND (1.0)				1		09/08/11	18:50	CU10037	CI10809	
Dichlorodifluoromethane	ND (2.0)				1		09/08/11	18:50	CUI0037	C110809	
Diethyl Ether	ND (1.0)				1		09/08/11	18:50	CUI0037	CI10809	
Di-isopropyl ether	ND (1.0)				1		09/08/11	18:50	CU10037	CI10809	
Ethyl tertiary-butyl ether	ND (1.0)				1	к.).	09/08/11	18:50	CUI0037	CI10809	
Ethylbenzene	ND (1.0)				1		09/08/11	18:50	· CUI0037	CI10809	
Hexachlorobutadiene	ND (0.6)				1		09/08/11	18:50	CUI0037	CI10809	
Hexachloroethane	ND (1.0)				1		09/08/11	18:50	CUI0037	CI10809	
Isopropylbenzene	ND (1.0)				1	12	09/08/11	18:50	CUI0037	CI10809	
Methyl tert-Butyl Ether	11.6 (1.0)				1		09/08/11	18:50	CUI0037	CI10809	
Methylene Chloride	ND (2.0)	E.			1	<u>.</u>	09/08/11	18:50	CUI0037	CI10809	
Naphthalene	ND (1.0)				1		09/08/11	18:50	CU10037	C110809	
n-Butylbenzene	ND (1.0)				1		09/08/11	18:50	CUI0037	C110809	
n-Propylbenzene	ND (1.0)				1		09/08/11	18:50	CUI0037	C110809	
sec-Butylbenzene	ND (1.0)				1		09/08/11	18:50	CUI0037	CI10809	
Styrene	ND (1.0)				1		09/08/11	18:50	CU10037	C110809	
tert-Butylbenzene	ND (1.0)				1		09/08/11	18:50	CUI0037	CI10809	
Tertiary-amyl methyl ether	ND (1.0)				1		09/08/11	18:50	CUI0037	CI10809	
					14						

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Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW104 Date Sampled: 09/06/11 16:50 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

Surrogate: Dibromofluoromethane

Surrogate: Toluene-d8

# **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-04 Sample Matrix: Ground Water Units: ug/L Analyst: MD

### 8260B Volatile Organic Compounds

Analyte Tetrachloroethene		Results (MRL) D (1.0)				<u>Limit</u>	<u>DF</u> 1		Analy: 09/08/11		Sequence CUI0037	Batch CI10809	
Tetrahydrofuran		D (5.0)					1		09/08/11	18:50		CI10809	
Toluene	N	D (1.0)					1		09/08/11	18:50	CUI0037	CI10809	
trans-1,2-Dichloroethene	N	D (1.0)					1		09/08/11	18:50	CUI0037	CI10809	
trans-1,3-Dichloropropene	N	D (0.4)					1	en <mark>h</mark> a	09/08/11	18:50	CUI0037	CI10809	
Trichloroethene	N	D (1.0)					1		09/08/11	18:50	CUI0037	CI10809	
Trichlorofluoromethane	N	D (1.0)					1		09/08/11	18:50	CUI0037	CI10809	
Vinyl Chloride	N	D (1.0)					1		09/08/11	18:50	CUI0037	CI10809	
Xylene O	N	D (1.0)					1		09/08/11	18:50	CUI0037	CI10809	
Xylene P,M	N	D (2.0)					1		09/08/11	18:50	CUI0037	CI10809	
Xylenes (Total)	N	D (3.0)					1		09/08/11	18:50		[CALC]	
egolari (Dişt	and a second	ş	KRecovery	v Qu	alifier	Limits		 	1.1			energia de la constante de la c	
Surrogate: 1,2-Dichloroethane-d4			86 %			70-130				22			
Surrogate: 4-Bromofluorobenzene			106 %			70-130							

70-130

70-130

90 %

102 %



Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW104 Date Sampled: 09/06/11 16:50 Percent Solids: N/A Initial Volume: 1000 Final Volume: 1 Extraction Method: 3510C

# **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-04 Sample Matrix: Ground Water Units: ug/L Analyst: IBM Prepared: 9/8/11 13:00

#### MADEP-EPH-04-1.1/8270D Extractable Petroleum Hydrocarbons

Analyte C9-C18 Aliphatics1	Results (MRL) ND (100)			Limit	DF		Analyzed 09/09/11 10:36	Sequence CUI0055	Batch C110817
C19-C36 Aliphatics1	ND (100)				1		09/09/11 10:36		CI10817
C11-C22 Unadjusted Aromatics1	ND (100)				1		09/08/11 23:29		CI10817
C11-C22 Aromatics1,2	ND (100)						09/09/11 14:58		[CALC]
2-Methylnaphthalene	ND (0.50)		8		1		09/09/11 14:58	CUI0051	C110817
Acenaphthene	ND (0.20)				1		09/09/11 14:58	CUI0051	CI10817
Naphthalene	ND (0.50)				1		09/09/11 14:58	CU10051	CI10817
Phenanthrene	ND (0.50)				1		09/09/11 14:58	CUI0051	C110817
Acenaphthylene	ND (0.20)				1		09/09/11 14:58	CUI0051	CI10817
Anthracene	ND (0.20)				1		09/09/11 14:58	CUI0051	CI10817
Benzo(a)anthracene	ND (0.20)				1		09/09/11 14:58	CUI0051	CI10817
Benzo(a)pyrene	ND (0.10)				1		09/09/11 14:58	CU10051	CI10817
Benzo(b)fluoranthene	ND (0.20)				1		09/09/11 14:58	CUI0051	CI10817
Benzo(g,h,i)perylene	ND (0.20)				1		09/09/11 14:58	CUI0051	CI10817
Benzo(k)fluoranthene	ND (0.20)				1		09/09/11 14:58	CUI0051	CI10817
Chrysene	ND (0.20)				1		09/09/11 14:58	CUI0051	CI10817
Dibenzo(a,h)Anthracene	ND (0.20)				1		09/09/11 14:58	CU10051	CI10817
Fluoranthene	ND (0.20)			÷	1		09/09/11 14:58	CUI0051	CI10817
Fluorene	ND (0.20)				1		09/09/11 14:58	CUI0051	CI10817
Indeno(1,2,3-cd)Pyrene	ND (0.20)				1		09/09/11 14:58	CUI0051	CI10817
Pyrene	ND (0.20)				1		09/09/11 14:58	CUI0051	CI10817
Preservative:	pH <= 2								CI10817

	%Recovery	Quaimer	Limits	
Surrogate: 1-Chlorooctadecane	88 %		40-140	
Surrogate: 2-Bromonaphthalene	104 %		40-140	
Surrogate: 2-Fluorobiphenyl	95 %		40-140	
Surrogate: O-Terphenyl	80 %		40-140	

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Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: TW104 Date Sampled: 09/06/11 16:50 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

## **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-04 Sample Matrix: Ground Water Units: ug/L Analyst: MD

## MADEP-VPH-04-1.1 Volatile Petroleum Hydrocarbon

Analyte C9-C10 Aromatics	Results (MRL) ND (100)		<u>Limit</u>	$\frac{\mathbf{DF}}{1}$	Analyzed 09/13/11 18:26	Sequence CUI0075	Batch CI11317
C5-C8 Aliphatics1,2	ND (150)			1	09/13/11 18:26		[CALC]
C9-C12 Aliphatics2,3	ND (150)			1	09/13/11 18:26		[CALC]
Preservative:	pH <= 2						CI11317
- Control of the state of the second se	%Recovery	Qualifier	Limits		en la c		ning a set

70-130

70-130

125 %

124 %

Surrogate: 2,5-Dibromotoluene - FID Surrogate: 2,5-Dibromotoluene - PID

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Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: Trip Blank Date Sampled: 09/06/11 00:00 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

# **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-05 Sample Matrix: Aqueous Units: ug/L Analyst: MD

### 8260B Volatile Organic Compounds

Analyte 1,1,1,2-Tetrachloroethane	Results (MRI ND (1.0)	<b>_)</b>	Limit	<u><b>DF</b></u> 1		alvzed 3/11 15:06	Sequence CUI0037	Batch CI10809	
1,1,1-Trichloroethane	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
1,1,2,2-Tetrachloroethane	ND (0.5)			1	09/0	8/11 15:06		CI10809	
1,1,2-Trichloroethane	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
1,1-Dichloroethane	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
1,1-Dichloroethene	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
1,1-Dichloropropene	ND (2.0)			1	09/0	8/11 15:06	5 CU10037	CI10809	
1,2,3-Trichlorobenzene	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
1,2,3-Trichloropropane	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
1,2,4-Trichlorobenzene	ND (1.0)			1	09/0	8/11 15:06	5 CU10037	CI10809	
1,2,4-Trimethylbenzene	ND (1.0)			1	09/0	3/11 15:06	5 CUI0037	CI10809	
1,2-Dibromo-3-Chloropropan	e ND (5.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
1,2-Dibromoethane	ND (1.0)			1	09/0	3/11 15:06	5 CUI0037	CI10809	
1,2-Dichlorobenzene	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
1,2-Dichloroethane	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
1,2-Dichloropropane	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
1,3,5-Trimethylbenzene	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
1,3-Dichlorobenzene	ND (1.0)	221		1	09/0	8/11 15:06	5 CUI0037	CI10809	
1,3-Dichloropropane	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	C110809	
1,4-Dichlorobenzene	ND (1.0)			1	09/0	8/11 15:06	5 CU10037	CI10809	
1,4-Dioxane - Screen	ND (500)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
2,2-Dichloropropane	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
2-Butanone	ND (10.0)			1	09/0	8/11 15:06	5 CU10037	CI10809	
2-Chlorotoluene	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
2-Hexanone	ND (10.0)			1	09/0	3/11 15:06	5 CUI0037	CI10809	
4-Chlorotoluene	ND (1.0)			1	09/0	8/11 15:06	5 CU10037	CI10809	
4-Isopropyltoluene	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
4-Methyl-2-Pentanone	ND (10.0)	2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -		1	09/0	8/11 15:06	5 CU10037	CI10809	
Acetone	ND (10.0)			1	09/0	8/11 15:06	5 CU10037	CI10809	
Benzene	ND (1.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	
Bromobenzene	ND (2.0)			1	09/0	8/11 15:06	5 CUI0037	CI10809	



Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: Trip Blank Date Sampled: 09/06/11 00:00 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

# **BAL** Laboratory

The Microbiology Division of Thielsch Engineering, Inc.



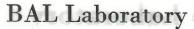
ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-05 Sample Matrix: Aqueous Units: ug/L Analyst: MD

### 8260B Volatile Organic Compounds

Analyte Bromochloromethane		Results (MRL ND (1.0)	) <u>HG</u>		<u>Limit</u>	<u>DF</u>		Analyz 09/08/11		Sequence CUI0037	Batch C110809	
Bromodichloromethane	a da menj	ND (0.6)				1		09/08/11	15:06	CU10037	CI10809	
Bromoform	1	ND (1.0)				1		09/08/11	15:06	CU10037	CI10809	
Bromomethane	0.00 0.00	ND (2.0)				1		09/08/11	15:06	CUI0037	CI10809	
Carbon Disulfide	1	ND (1.0)				1		09/08/11	15:06	CU10037	CI10809	
Carbon Tetrachloride	1	ND (1.0)				1		09/08/11	15:06	CUI0037	CI10809	
Chlorobenzene		ND (1.0)				1		09/08/11	15:06	CUI0037	CI10809	
Chloroethane	1	ND (2.0)				1		09/08/11	15:06	CUI0037	C110809	
Chloroform		ND (1.0)				1		09/08/11	15:06	CU10037	CI10809	
Chloromethane	1	ND (2.0)				1		09/08/11	15:06	CU10037	CI10809	
cis-1,2-Dichloroethene	1	ND (1.0)				1		09/08/11	15:06	CU10037	CI10809	
cis-1,3-Dichloropropene	1	ND (0.4)				1		09/08/11	15:06	CUI0037	CI10809	
Dibromochloromethane	1	ND (1.0)				1		09/08/11	15:06	CU10037	CI10809	
Dibromomethane	1	ND (1.0)				1		09/08/11	15:06	CUI0037	CI10809	
Dichlorodifluoromethane	1	ND (2.0)				1		09/08/11	15:06	CUI0037	CI10809	
Diethyl Ether	1	ND (1.0)				1		09/08/11	15:06	CU10037	CI10809	
Di-isopropyl ether	1	ND (1.0)				1		09/08/11	15:06	CUI0037	CI10809	
Ethyl tertiary-butyl ether	1	ND (1.0)				1		09/08/11	15:06	CU10037	CI10809	
Ethylbenzene	1	ND (1.0)				1		09/08/11	15:06	CUI0037	CI10809	
Hexachlorobutadiene	1	ND (0.6)				1		09/08/11	15:06	CUI0037	CI10809	
Hexachloroethane	1	ND (1.0)				1		09/08/11	15:06	CUI0037	CI10809	
Isopropylbenzene		ND (1.0)				1	~	09/08/11	15:06	CUI0037	CI10809	
Methyl tert-Butyl Ether	1	ND (1.0)				1		09/08/11	15:06	CUI0037	CI10809	
Methylene Chloride	N	ND (2.0)				1		09/08/11	15:06	CUI0037	CI10809	
Naphthalene	1	ND (1.0)				1		09/08/11	15:06	CUI0037	CI10809	
n-Butylbenzene	ľ	ND (1.0)				1		09/08/11	15:06	CUI0037	CI10809	
n-Propylbenzene		ND (1.0)				1		09/08/11	15:06	CUI0037	CI10809	
sec-Butylbenzene		ND (1.0)				1		09/08/11		CUI0037	CI10809	
Styrene		ND (1.0)				1		09/08/11		CUI0037	CI10809	
tert-Butylbenzene		ND (1.0)				I		09/08/11		CUI0037	CI10809	
Tertiary-amyl methyl ether		ND (1.0)				1		09/08/11		CUI0037	CI10809	
											2110007	



Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: Trip Blank Date Sampled: 09/06/11 00:00 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B



The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-05 Sample Matrix: Aqueous Units: ug/L Analyst: MD

## 8260B Volatile Organic Compounds

Analyte	Results (MRL)				Limit	DF		Analyzed	Sequence	Batch
Tetrachloroethene	ND (1.0)					1		09/08/11 15:		CI10809
Tetrahydrofuran	ND (5.0)					1		09/08/11 15:	06 CUI0037	CI10809
Toluene	ND (1.0)					1		09/08/11 15:	06 CUI0037	CI10809
trans-1,2-Dichloroethene	ND (1.0)					1		09/08/11 15:	06 CUI0037	CI10809
trans-1,3-Dichloropropene	ND (0.4)					1		09/08/11 15:	06 CUI0037	CI10809
Trichloroethene	ND (1.0)					1		09/08/11 15:	06 CUI0037	CI10809
Trichlorofluoromethane	ND (1.0)					1		09/08/11 15:0	06 CUI0037	CI10809
Vinyl Chloride	ND (1.0)					1		09/08/11 15:	06 CUI0037	CI10809
Xylene O	ND (1.0)					1		09/08/11 15:	06 CUI0037	CI10809
Xylene P,M	ND (2.0)					1		09/08/11 15:	06 CUI0037	CI10809
Xylenes (Total)	ND (3.0)					1		09/08/11 15:		[CALC]
		%Recover	ry Qua	əlifier	Limits		5 m	······		
Comparing 1.2 Disking athread da										

Surrogate: 1,2-Dichloroethane-d4	88 %	70-130
Surrogate: 4-Bromofluorobenzene	102 %	70-130
Surrogate: Dibromofluoromethane	92 %	70-130
Surrogate: Toluene-d8	103 %	70-130



Client Name: Ransom Environmental Consultants, Inc. Client Project ID: CVS - W. Bridgewater Client Sample ID: Trip Blank Date Sampled: 09/06/11 00:00 Percent Solids: N/A Initial Volume: 5 Final Volume: 5 Extraction Method: 5030B

# **BAL Laboratory**

The Microbiology Division of Thielsch Engineering, Inc.



ESS Laboratory Work Order: 1109075 ESS Laboratory Sample ID: 1109075-05 Sample Matrix: Aqueous Units: ug/L Analyst: MD

### MADEP-VPH-04-1.1 Volatile Petroleum Hydrocarbon

Analyte C9-C10 Aromatics		Results (MRL) ND (100)	2 79		Limit	<u>DF</u> 1	Analyzed 09/13/11 13:50	Sequence Batch CU10075 CI11317
C5-C8 Aliphatics1,2		ND (200)				1	09/13/11 13:50	[CALC]
C9-C12 Aliphatics2,3		ND (200)				1	09/13/11 13:50	[CALC]
south total	NO1 III		%Recovery	Quali	ifier Limits		1 11 10 10 10 10 10 10 10 10 10 10 10 10	
Surrogate: 2,5-Dibromotoluene - FID			118 %		70-130			
Surrogate: 2,5-Dibromotoluene - PID			118 %		70-130			- A State of State of State
						80		10 A A A A A A A A A A A A A A A A A A A