

October 25, 2012

US Environmental Protection Agency  
Dewatering GP Processing  
Municipal Assistance Unit (CMU)  
1 Congress Street, Suite 1100  
Boston, MA 02114-2023

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

**Re: Dewatering General Permit – Notice of Intent**  
1 Republic Road  
Billerica, Massachusetts 01862

To Whom It May Concern:

At the request of Global Montello Group Corp (Global), Groundwater & Environmental Services, Inc. (GES) is submitting the attached Dewatering General Permit (DGP) – Notice of Intent (NOI) for the temporary discharge of groundwater that is anticipated to be generated during construction activities located at 1 Republic Road in Billerica, Massachusetts (the site). The DGP-NOI form is included as Attachment A.

Global intends to re-develop the property as a retail petroleum station. Based upon the available information, the site was used as a restaurant from approximately 1972 to the late 1990s, after which the former restaurant building has been vacant. The site has been used solely as a restaurant and prior to use as a restaurant, the property was vacant land. No known releases to the environment have occurred at the site. According to the on-line Massachusetts Department of Environmental Protection (MassDEP) searchable database, there is one MassDEP listed site within 500 feet of the site. The release condition which triggered notification to the MassDEP in August 2007 (sudden release of 20 gallons of potassium hydroxide solution) at a Town of Billerica wastewater treatment facility located on 270 Treble Cove Road achieved regulatory closure with a Class A-1 Response Action Outcome (RAO) in October 10, 2007. Due to relative elevation of this facility, the release does not have implications for the proposed discharge. A Site Location Map and Site Map are provided as Figures 1 and 2, respectively.

As part of the proposed re-development, an excavation measuring approximately 30 ft by 30 ft by 15 ft below ground surface (bgs) will be required for the installation of underground storage tanks (USTs). Based upon gauging data of monitoring wells at the site, the depth to groundwater is approximately 7.5 feet bgs. Therefore, temporary construction dewatering with an assumed duration of 30 days or less will be required to facilitate the installation of USTs.

On October 17, 2012, a groundwater sample was obtained from monitoring well MW-5 which is located in the area of the proposed excavation area. In accordance with DGP application, the groundwater sample was analyzed for pH, chloride, and metals (antimony, arsenic, cadmium, total chromium, hexavalent chromium, copper, iron, mercury, nickel, silver and zinc). Laboratory analytical results are summarized in Table 1 and the laboratory report is included as Attachment B. Laboratory analytical results indicated that the concentrations of antimony, cadmium, total chromium, hexavalent chromium, copper, mercury, nickel and silver were not detected. Zinc was detected at a concentration of 0.0206 mg/L and below the Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) MA effluent limits for discharge into freshwater, of 0.0666 mg/L. The concentrations of arsenic (0.169 mg/L) and iron (22.1 mg/L) exceeded the EPA NPDES MA freshwater effluent limits of 0.1 and 1.0 mg/L, respectively. Laboratory results indicated that the concentration of total suspended solids (TSS) was detected at 10 mg/L and below the EPA NPDES MA effluent limit of 30 mg/L. Analytical results indicated a pH of 5.4 standard units (s.u.) in the groundwater sample which is below the range of 6.5 to 8.3 s.u. As described in detail below, the proposed discharge will terminate at a storm drain line that discharges into vegetated areas rather than freshwater, therefore comparison to freshwater effluent limits is conservative. A schematic drawing, or process flow diagram of the proposed treatment system (if required based upon analytical data from the frac tank), is included in Attachment C.

During the construction dewatering process, groundwater will be pumped from the excavation into a fractionation tank for settling and equalization. Prior to discharging, a grab water sample collected from the fractionation tank will be submitted for analyses by the applicable EPA methods for pH, arsenic, and iron to determine if additional treatment (i.e. bag filters, ion exchange vessels, pH neutralization) will be required prior to discharging at 50 gallons per minute or less into the catch basin that is located northwest of the site on the north side of Republic Road. If required based upon analytical data, the treatment process may utilize pH adjustment using sodium hydroxide within the frac tank, filtration using two trains of two 10 micron bag filters, and two resin vessels plumbed in series and each containing 20 cu ft of CGS resin. A flow totalizer will record the volumes groundwater discharged each day.

The location of the site, the catch basin, the storm drain line and the outfalls are depicted on the aerial photo (Attachment D) provided by the Town of Billerica Engineering Department. As shown on the aerial photo, the storm drain line from the catch basin extends northeast for approximately 230 feet and then approximately 150 feet east-northeast to the first outfall which discharges to a vegetated area south of the Route 3 ramp. The storm drain line extends northwest beneath the Route 3 on-ramp to a second outfall which discharges to a vegetated area.

The site is not located at or near any location subject to consultation with the U.S. Fisheries and Wildlife Service or the National Fisheries Service. According to the Massachusetts Division of Fisheries and Wildlife, the site is not located within a National Heritage Endangered Species Program (NHESP) Estimated or Priority Habitat (<http://www.mass.gov/dfwele/dfw/nhesp/nhesp.htm>). As shown on the attached MassDEP Bureau of Waste Site Cleanup (BWSC) Site Scoring Map, the site is not located within an Area of Critical Environmental Concern (ACEC). According to the National Park Service's National Register Information System (NRIS) (<http://www.nps.gov/nr/>), there are more than 1,300 listed historical sites in Middlesex county and eight listed for the Town of Billerica, Massachusetts. All of the listed historical sites are over a mile away from the site and will therefore not be adversely affected by the proposed discharge. Copies of the NHESP, NRIS, and BWSC listings and /or maps are included in Attachment E.



If you have any questions or require further information, please contact the undersigned at (800) 221-6119.

Sincerely,

***Groundwater & Environmental Services, Inc.***

A handwritten signature in blue ink that reads "Mary W. Cathey". The signature is fluid and cursive, with the first name being the most prominent.

Mary W. Cathey  
Project Geologist

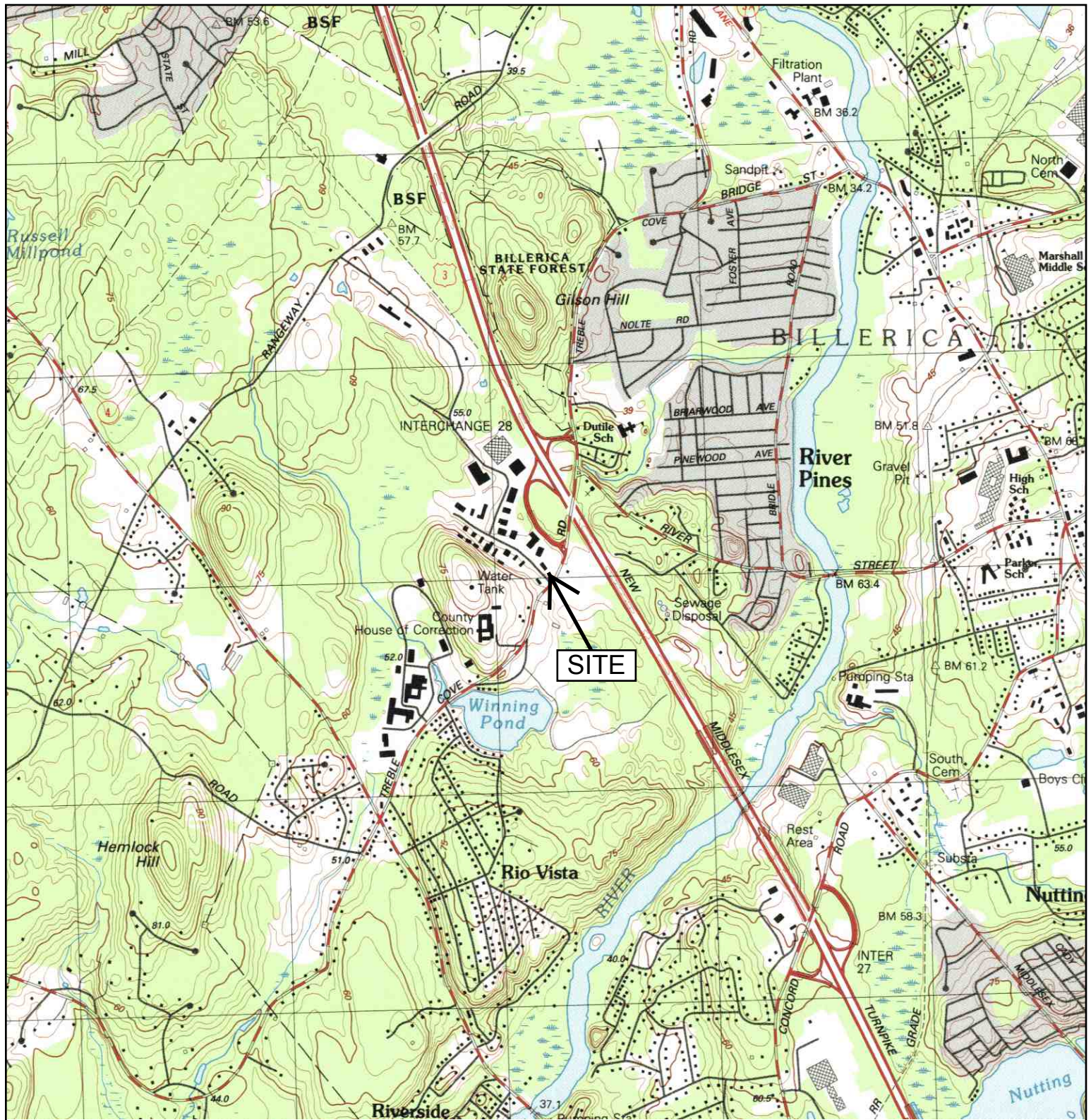
A handwritten signature in blue ink that reads "Michael Decoteau". The signature is more angular and less cursive than the one to its left.

Michael Decoteau, PE  
Senior Project Engineer

cc: Global

## Figures and Table

Figure 1



<p>N ↑</p>	<p><b>TARGET QUAD</b>  <b>NAME:</b> BILLERICA  <b>MAP YEAR:</b> 1987    <b>SERIES:</b> 7.5  <b>SCALE:</b> 1:25000</p>	<p><b>SITE NAME:</b> 1 Republic Road  <b>ADDRESS:</b> 1 Republic Road  North Billerica, MA 01862  <b>LAT/LONG:</b> 42.5578 / -71.2989</p>	<p><b>CLIENT:</b> Groundwater &amp; Env. Svcs. LLC  <b>CONTACT:</b> Mary W. Cathey  <b>INQUIRY#:</b> 3245464.4  <b>RESEARCH DATE:</b> 01/25/2012</p>
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LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- ⊕ MONITORING WELL
- ⊙ SOIL BORING

EXISTING  
SCHOOL BUS  
GARAGE

MW5

MW4

EXISTING  
BUILDING

MW1

SB1

MW3

SB2

MW2

REPUBLIC ROAD

TREBLE COVE ROAD

DRAFTED BY: W.G.S. (N.J.)	SITE MAP		
CHECKED BY:	GLOBAL COMPANIES 1 REPUBLIC ROAD BILLERICA, MASSACHUSETTS		
REVIEWED BY:	Groundwater & Environmental Services, Inc. 364 LITTLETON ROAD SUITE 4 WESTFORD, MA 01886		
<div>NORTH</div> <div></div>	SCALE IN FEET	DATE	FIGURE
	<div><div></div></div> <div>0 APPROXIMATE 40</div>	2-20-12	2



## **Attachment A**

## II. Suggested Notice of Intent (NOI) Form

### 1. General facility information. Please provide the following information about the facility.

<b>a) Name of facility:</b> 1 Republic Road, Billerica, MA		<b>Mailing Address for the Facility:</b> 241 Treble Cove Road, Billerica, MA, 01862	
<b>b) Location Address of the Facility (if different from mailing address):</b> 1 Republic Road, Billerica, MA		<b>Facility Location</b> longitude: <u>-71.298862</u> latitude: <u>42.557839</u>	<b>Type of Business:</b> current: vacant (former restaurant); proposed: retail petrol <b>Facility SIC codes:</b>
<b>c) Name of facility owner:</b> <u>Black Cove LLC</u> <b>Owner's email:</b> _____ <b>Owner's Tel #:</b> <u>508-574-3000</u> <b>Owner's Fax #:</b> _____ <b>Address of owner (if different from facility address)</b> PO Box 755 Randolph, MA 02368 <b>Owner is (check one):</b> 1. Federal _____ 2. State _____ 3. Tribal _____ 4. Private <input checked="" type="checkbox"/> 4. Other _____ (Describe)			
<b>Legal name of Operator, if not owner:</b> <u>Global Montello Group Corp.</u> <b>Operator Contact Name:</b> <u>Steven Charron</u> <b>Operator Tel Number:</b> <u>(781) 786-6320</u> <b>Fax Number:</b> <u>(781) 398-9270</u> <b>Operator's email:</b> <u>scharron@globalp.com</u> <b>Operator Address (if different from owner)</b> 404 Wyman Street, Suite 425, Waltham, MA, 02451			
<b>d) Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water. Map attached?</b> <input checked="" type="checkbox"/>			
<b>e) Check Yes or No for the following:</b> 1. Has a prior NPDES permit been granted for the discharge? Yes _____ No <input checked="" type="checkbox"/> If Yes, Permit Number: _____ 2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes <input checked="" type="checkbox"/> No _____ 3. Is the facility covered by an individual NPDES permit? Yes _____ No <input checked="" type="checkbox"/> If Yes, Permit Number _____ 4. Is there a pending application on file with EPA for this discharge? Yes _____ No <input checked="" type="checkbox"/> If Yes, date of submittal: _____			

**2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed)**

a) Name of receiving water into which discharge will occur: discharge will occur in a vegetated area along Route 4

State Water Quality Classification: NA Freshwater: NA Marine Water: NA

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

1. Construction dewatering of groundwater intrusion and/or storm water accumulation.
2. Short-term or long-term dewatering of foundation sumps.
3. Other.

c) Number of outfalls 1

For each outfall:

d) Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow 72,000 GPD  
Average Monthly Flow 72,000 GPD

e) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 8.3 Min pH 5.84

f) Identify the source of the discharge (i.e. potable water, surface water, or groundwater). If groundwater, the facility shall submit effluent test results, as required in Section 4.4.5 of the General Permit. groundwater (see attached laboratory report in Attachment B for sampling results)

g) What treatment does the wastewater receive prior to discharge? equalization/sedimentation tank (additional information provided in attached letter)

h) Is the discharge continuous? Yes \_\_\_\_\_ No ✓ If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B) I  
If (P), number of days or months per year of the discharge \_\_\_\_\_ and the specific months of discharge \_\_\_\_\_;  
If (I), number of days/year there is a discharge 30  
Is the discharge temporary? Yes ✓ No \_\_\_\_\_  
If yes, approximate start date of dewatering 11/15/12 approximate end date of dewatering 12/15/12

i) Latitude and longitude of each discharge within 100 feet (See [http://www.epa.gov/tri/report/siting\\_tool](http://www.epa.gov/tri/report/siting_tool)): Outfall 1: long. -71.29974 lat. 42.55824;  
Outfall 2: long. \_\_\_\_\_ lat. \_\_\_\_\_; Outfall 3: long. \_\_\_\_\_ lat. \_\_\_\_\_.

j) If the source of the discharge is potable water, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water and attach any calculation sheets used to support stream flow and dilution calculations NA cfs  
(See Appendix VII for equations and additional information)

**MASSACHUSETTS FACILITIES:** See Section 3.4 and Appendix 1 of the General Permit for more information on Areas of Critical Environmental Concern (ACEC):

- k) Does the discharge occur in an ACEC? Yes \_\_\_\_\_ No ✓  
If yes, provide the name of the ACEC:

**3. Contaminant Information**

- a) Are any pH neutralization and/or dechlorination chemicals used in the discharge? If so, include the chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC<sub>50</sub> in percent for aquatic organism(s)).
- b) Please report any known remediation activities or water-quality issues in the vicinity of the discharge.

**4. Determination of Endangered Species Act Eligibility:** Provide documentation of ESA eligibility as required at Part 3.4 and Appendices III and IV. In addition, respond to the following questions.

- a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes \_\_\_\_\_ No ✓
- b) Has any consultation with the federal services been completed? Yes \_\_\_\_\_ No ✓
- c) Is consultation underway? Yes \_\_\_\_\_ No ✓
- d) What were the results of the consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service (check one): a "no jeopardy" opinion \_\_\_\_\_ or written concurrence \_\_\_\_\_ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat.
- e) Which of the five eligibility criteria listed in Appendix 2, Section B (A,B,C,D,or E) have you met? A
- f) Please attach a copy of the most current federal listing of endangered and threatened species, found at USF&W website.

**5. Documentation of National Historic Preservation Act requirements:** Please respond to the following questions:

- a) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes \_\_\_\_\_ No ✓
- b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes \_\_\_\_\_ or No ✓ If yes, attach the results of the consultation(s).
- c) Which of the three National Historic Preservation Act requirements listed in Appendix 3, Section C (1,2 or 3) have you met? 1

**6. Supplemental Information:** Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit

**7. Signature Requirements:** The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the dewatering system; (2) the discharge consists solely of dewatering and authorized pH adjustment and/or

dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product or finished product; (4) if the discharge of dewatering subsequently mixes with other permitted wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for dewatering discharge; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Name: 1 Republic Road, Billerica, MA

Operator signature:

Title: Thomas Keefe Vice President Environmental Health & Safety

Date: 10/24/12

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.



## **Attachment B**

Report Date:  
19-Oct-12 14:49



- ☒ Final Report  
☐ Re-Issued Report  
☐ Revised Report

**SPECTRUM ANALYTICAL, INC.**

*Featuring*

**HANIBAL TECHNOLOGY**

***Laboratory Report***

GES, Inc.  
364 Littleton Road, Suite 4  
Westford, MA 01886  
Attn: Brian Horan

Project: 1 Republic Road - Billerica, MA  
Project #: 1604282

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SB58333-01	MW-5	Ground Water	17-Oct-12 09:00	17-Oct-12 16:15

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.  
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110  
Connecticut # PH-0777  
Florida # E87600/E87936  
Maine # MA138  
New Hampshire # 2538  
New Jersey # MA011/MA012  
New York # 11393/11840  
Pennsylvania # 68-04426/68-02924  
Rhode Island # 98  
USDA # S-51435



Authorized by:

Nicole Leja  
Laboratory Director

Spectrum Analytical holds certification in the State of Massachusetts for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of Massachusetts does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 7 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

*Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at [www.spectrum-analytical.com](http://www.spectrum-analytical.com) for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).*

*Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.*

**CASE NARRATIVE:**

The samples were received 1.0 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

**EPA 245.1/7470A****Laboratory Control Samples:**

1225414 BS

---

Mercury percent recovery 81 (85-115) is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-5

**SW846 6010C****Blanks:**

1225422-BLK1

---

The method blank contains analyte at a concentration above the MRL; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.

Iron

**Laboratory Control Samples:**

1225422-BS1

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Iron

1225422-BSD1

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Iron

**Samples:**

SB58333-01                      MW-5

---

Analyte is found in the associated blank as well as in the sample (CLP B-flag).

Iron

Sample Identification

MW-5

SB58333-01

Client Project #

1604282

Matrix

Ground Water

Collection Date/Time

17-Oct-12 09:00

Received

17-Oct-12

<i>CAS No.</i>	<i>Analyte(s)</i>	<i>Result</i>	<i>Flag</i>	<i>Units</i>	<i>*RDL</i>	<i>MDL</i>	<i>Dilution</i>	<i>Method Ref.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Analyst</i>	<i>Batch</i>	<i>Cert.</i>
<b>Total Metals by EPA 200/6000 Series Methods</b>													
	Preservation	Field Preserved		N/A			1	EPA 200/6000 methods			ZJG	1225520	
<b>Total Metals by EPA 6000/7000 Series Methods</b>													
7440-22-4	Silver	< 0.0050		mg/l	0.0050	0.0014	1	SW846 6010C	18-Oct-12	18-Oct-12	EDT	1225422	
7440-38-2	Arsenic	0.169		mg/l	0.0040	0.0024	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0002	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0026	1	"	"	"	"	"	
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0014	1	"	"	"	"	"	
7439-89-6	Iron	22.1	B	mg/l	0.0150	0.0100	1	"	"	"	"	"	
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0005	1	"	"	"	"	"	
7440-36-0	Antimony	< 0.0060		mg/l	0.0060	0.0033	1	"	"	"	"	"	
7440-66-6	Zinc	0.0206		mg/l	0.0050	0.0022	1	"	"	"	"	"	
<b>Total Metals by EPA 200 Series Methods</b>													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.00007	1	EPA 245.1/7470A	18-Oct-12	19-Oct-12	EDT	1225414	X
<b>General Chemistry Parameters</b>													
16887-00-6	Chloride	91.7		mg/l	1.00	0.448	1	EPA 300.0	17-Oct-12	18-Oct-12	KK	1225450	X
18540-29-9	Hexavalent Chromium	< 0.005		mg/l	0.005	0.003	1	SW846 7196A/SM3500C rD	17-Oct-12 19:42	17-Oct-12 19:50	TDD/C	1225458	
	pH	5.84	pH	pH Units			1	ASTM D 1293-99B	17-Oct-12 17:55	17-Oct-12 17:55	SPW	1225350	X
	Total Suspended Solids	10		mg/l	5	2	1	SM2540D	18-Oct-12	19-Oct-12	SPW	1225504	X

*This laboratory report is not valid without an authorized signature on the cover page.*

**Total Metals by EPA 6000/7000 Series Methods - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1225422 - SW846 3005A</b>										
<b><u>Blank (1225422-BLK1)</u></b>	<b><u>Prepared &amp; Analyzed: 18-Oct-12</u></b>									
Iron	<b>0.0288</b>	QB1	mg/l	0.0150						
Nickel	< 0.0050		mg/l	0.0050						
Antimony	< 0.0060		mg/l	0.0060						
Zinc	< 0.0050		mg/l	0.0050						
Chromium	< 0.0050		mg/l	0.0050						
Silver	< 0.0050		mg/l	0.0050						
Cadmium	< 0.0025		mg/l	0.0025						
Copper	< 0.0050		mg/l	0.0050						
Arsenic	< 0.0040		mg/l	0.0040						
<b><u>LCS (1225422-BS1)</u></b>	<b><u>Prepared &amp; Analyzed: 18-Oct-12</u></b>									
Zinc	<b>1.23</b>		mg/l	0.0050	1.25		98	85-115		
Antimony	<b>1.15</b>		mg/l	0.0060	1.25		92	85-115		
Nickel	<b>1.19</b>		mg/l	0.0050	1.25		95	85-115		
Iron	<b>1.29</b>	B	mg/l	0.0150	1.25		103	85-115		
Silver	<b>1.19</b>		mg/l	0.0050	1.25		95	85-115		
Copper	<b>1.18</b>		mg/l	0.0050	1.25		94	85-115		
Chromium	<b>1.21</b>		mg/l	0.0050	1.25		97	85-115		
Cadmium	<b>1.22</b>		mg/l	0.0025	1.25		97	85-115		
Arsenic	<b>1.18</b>		mg/l	0.0040	1.25		95	85-115		
<b><u>LCS Dup (1225422-BSD1)</u></b>	<b><u>Prepared &amp; Analyzed: 18-Oct-12</u></b>									
Antimony	<b>1.15</b>		mg/l	0.0060	1.25		92	85-115	0.2	20
Nickel	<b>1.20</b>		mg/l	0.0050	1.25		96	85-115	1	20
Zinc	<b>1.26</b>		mg/l	0.0050	1.25		101	85-115	3	20
Iron	<b>1.35</b>	B	mg/l	0.0150	1.25		108	85-115	5	20
Copper	<b>1.19</b>		mg/l	0.0050	1.25		95	85-115	0.8	20
Chromium	<b>1.24</b>		mg/l	0.0050	1.25		99	85-115	2	20
Silver	<b>1.20</b>		mg/l	0.0050	1.25		96	85-115	0.8	20
Arsenic	<b>1.20</b>		mg/l	0.0040	1.25		96	85-115	1	20
Cadmium	<b>1.25</b>		mg/l	0.0025	1.25		100	85-115	2	20

# Total Metals by EPA 200 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1225414 - EPA200/SW7000 Series</b>										
<b><u>Blank (1225414-BLK1)</u></b>								<u>Prepared: 18-Oct-12 Analyzed: 19-Oct-12</u>		
Mercury	< 0.00020		mg/l	0.00020						
<b><u>LCS (1225414-BS1)</u></b>								<u>Prepared: 18-Oct-12 Analyzed: 19-Oct-12</u>		
Mercury	<b>0.00403</b>	QC3	mg/l	0.00020	0.00500		81	85-115		

*This laboratory report is not valid without an authorized signature on the cover page.*

## General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1225350 - General Preparation</b>										
<u>Reference (1225350-SRM1)</u>	<u>Prepared &amp; Analyzed: 17-Oct-12</u>									
pH	6.03		pH Units		6.00		100	97.5-102.5		
<u>Reference (1225350-SRM2)</u>	<u>Prepared &amp; Analyzed: 17-Oct-12</u>									
pH	6.03		pH Units		6.00		100	97.5-102.5		
<b>Batch 1225450 - General Preparation</b>										
<u>Blank (1225450-BLK1)</u>	<u>Prepared: 17-Oct-12 Analyzed: 18-Oct-12</u>									
Chloride	< 1.00		mg/l	1.00						
<u>LCS (1225450-BS1)</u>	<u>Prepared: 17-Oct-12 Analyzed: 18-Oct-12</u>									
Chloride	20.6		mg/l	1.00	20.0		103	90-110		
<u>LCS (1225450-BS2)</u>	<u>Prepared: 17-Oct-12 Analyzed: 18-Oct-12</u>									
Chloride	3.84		mg/l	1.00	4.00		96	90-110		
<u>Reference (1225450-SRM1)</u>	<u>Prepared: 17-Oct-12 Analyzed: 18-Oct-12</u>									
Chloride	24.6		mg/l	1.00	25.0		98	90-110		
<u>Reference (1225450-SRM2)</u>	<u>Prepared: 17-Oct-12 Analyzed: 18-Oct-12</u>									
Chloride	4.67		mg/l	1.00	5.00		93	90-110		
<b>Batch 1225458 - General Preparation</b>										
<u>Blank (1225458-BLK1)</u>	<u>Prepared &amp; Analyzed: 17-Oct-12</u>									
Hexavalent Chromium	< 0.005		mg/l	0.005						
<u>LCS (1225458-BS1)</u>	<u>Prepared &amp; Analyzed: 17-Oct-12</u>									
Hexavalent Chromium	0.050		mg/l	0.005	0.0500		100	80-120		
<u>Calibration Blank (1225458-CCB1)</u>	<u>Prepared &amp; Analyzed: 17-Oct-12</u>									
Hexavalent Chromium	0.00		mg/l							
<u>Calibration Blank (1225458-CCB2)</u>	<u>Prepared &amp; Analyzed: 17-Oct-12</u>									
Hexavalent Chromium	0.00		mg/l							
<u>Calibration Check (1225458-CCV1)</u>	<u>Prepared &amp; Analyzed: 17-Oct-12</u>									
Hexavalent Chromium	0.050		mg/l	0.005	0.0500		100	85-115		
<u>Calibration Check (1225458-CCV2)</u>	<u>Prepared &amp; Analyzed: 17-Oct-12</u>									
Hexavalent Chromium	0.050		mg/l	0.005	0.0500		100	85-115		
<u>Duplicate (1225458-DUP1)</u>	<u>Source: SB58333-01 Prepared &amp; Analyzed: 17-Oct-12</u>									
Hexavalent Chromium	< 0.005		mg/l	0.005		BRL				20
<u>Matrix Spike (1225458-MS1)</u>	<u>Source: SB58333-01 Prepared &amp; Analyzed: 17-Oct-12</u>									
Hexavalent Chromium	0.050		mg/l	0.005	0.0500	BRL	100	85-115		
<u>Matrix Spike Dup (1225458-MSD1)</u>	<u>Source: SB58333-01 Prepared &amp; Analyzed: 17-Oct-12</u>									
Hexavalent Chromium	0.050		mg/l	0.005	0.0500	BRL	100	85-115	0	20
<u>Reference (1225458-SRM1)</u>	<u>Prepared &amp; Analyzed: 17-Oct-12</u>									
Hexavalent Chromium	0.025		mg/l	0.005	0.0250		100	85-115		
<b>Batch 1225504 - General Preparation</b>										
<u>Blank (1225504-BLK1)</u>	<u>Prepared: 18-Oct-12 Analyzed: 19-Oct-12</u>									
Total Suspended Solids	< 5		mg/l	5						
<u>LCS (1225504-BS1)</u>	<u>Prepared: 18-Oct-12 Analyzed: 19-Oct-12</u>									
Total Suspended Solids	94		mg/l	10	100		94	90-110		

This laboratory report is not valid without an authorized signature on the cover page.

## Notes and Definitions

B	Analyte is found in the associated blank as well as in the sample (CLP B-flag).
QB1	The method blank contains analyte at a concentration above the MRL; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.
QC3	The spike recovery is outside acceptable limits for the LCS. The batch was accepted based upon the MS and/or MSD meeting the LCS limits criteria.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
pH	The method for pH does not stipulate a specific holding time other than to state that the samples should be analyzed as soon as possible. For aqueous samples the 40 CFR 136 specifies a holding time of 15 minutes from sampling to analysis. Therefore all aqueous pH samples not analyzed in the field are considered out of hold time at the time of sample receipt. All soil samples are analyzed as soon as possible after sample receipt.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

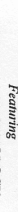
Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:  
Kimberly Wisk  
Rebecca Merz



## HANIBAL TECHNOLOGY

6E5

Westford, MA 01886

Project Mgr. Mary Cather

Invoice To: GFS

364 Littleton Rd, Ste 4

Westford, MA 01886

P.O. No.: 1604282 RQN:

Project No.: 1004202

Site Name: 1 Republic Rd

Location: Billerica State: MA

Sampler(s): Mary Carey

List preservative code<sup>a</sup> below:

**QA/QC Reporting Notes:**  
\* additional charges may apply

\* additional charges may apply

CT DPH RCP Report: Yes ☐ No ☐

### QA/QC Reporting Level

☒ Standard ☐ No QC ☐ DQ

☐ NY ASP A\*    ☐ NY ASP B  
☐ NJ Reduced\*    ☐ NJ Full\*

□ TIER II\* □ TIER V\*

Other \_\_\_\_\_

state-specific reporting standard

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---

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---

---

1

---

2. Deadline - 6pm

3

---

Freezer temp ☐ °C    temp ☐ °C

Revised July 20

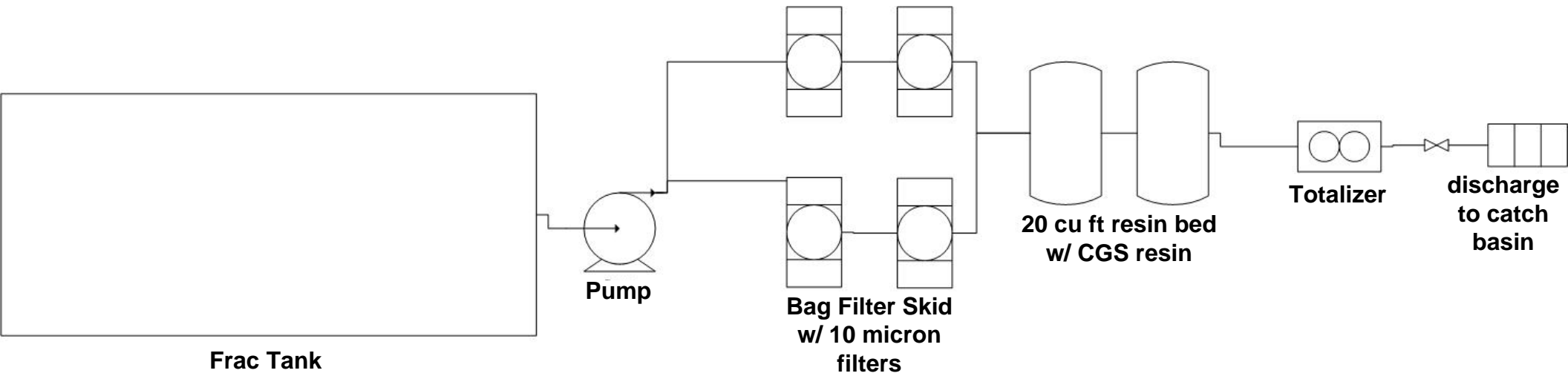
— *Journal of the American Medical Association*

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## **Attachment C**

**Global Partners LP  
1 Republic Road  
Billerica, Massachusetts**





## **Attachment D**



# Town of Billerica

## Drainage Map

U.S. HIGHWAY ROUTE 35

TREBLE COVE ROAD

REPUBLIC ROAD

DRAFT

OUTFALL

CATCH BASIN

SITE

- LEGEND**
- Catchbasin**
    - Catchbasin from Plan
    - GPSed Catchbasin
  - Manhole**
    - Manhole
    - Manhole from Plan
    - GPSed Manhole
  - Outfall**
    - Outfall from GPS
    - Outfall from plan
    - Outfall from plan
  - Flared-End Structure (FES)**
    - ▲ FES from plan
    - ▲ GPSed FES
  - Drainage Swale** □
  - Headwall** ▢
  - Drainage Pipe**
    - Drainage Pipe
    - Approximated location



## **Attachment E**

# MassDEP - Bureau of Waste Site Cleanup

## MCP Numerical Ranking System Map: 500 feet & 0.5 Mile Radii

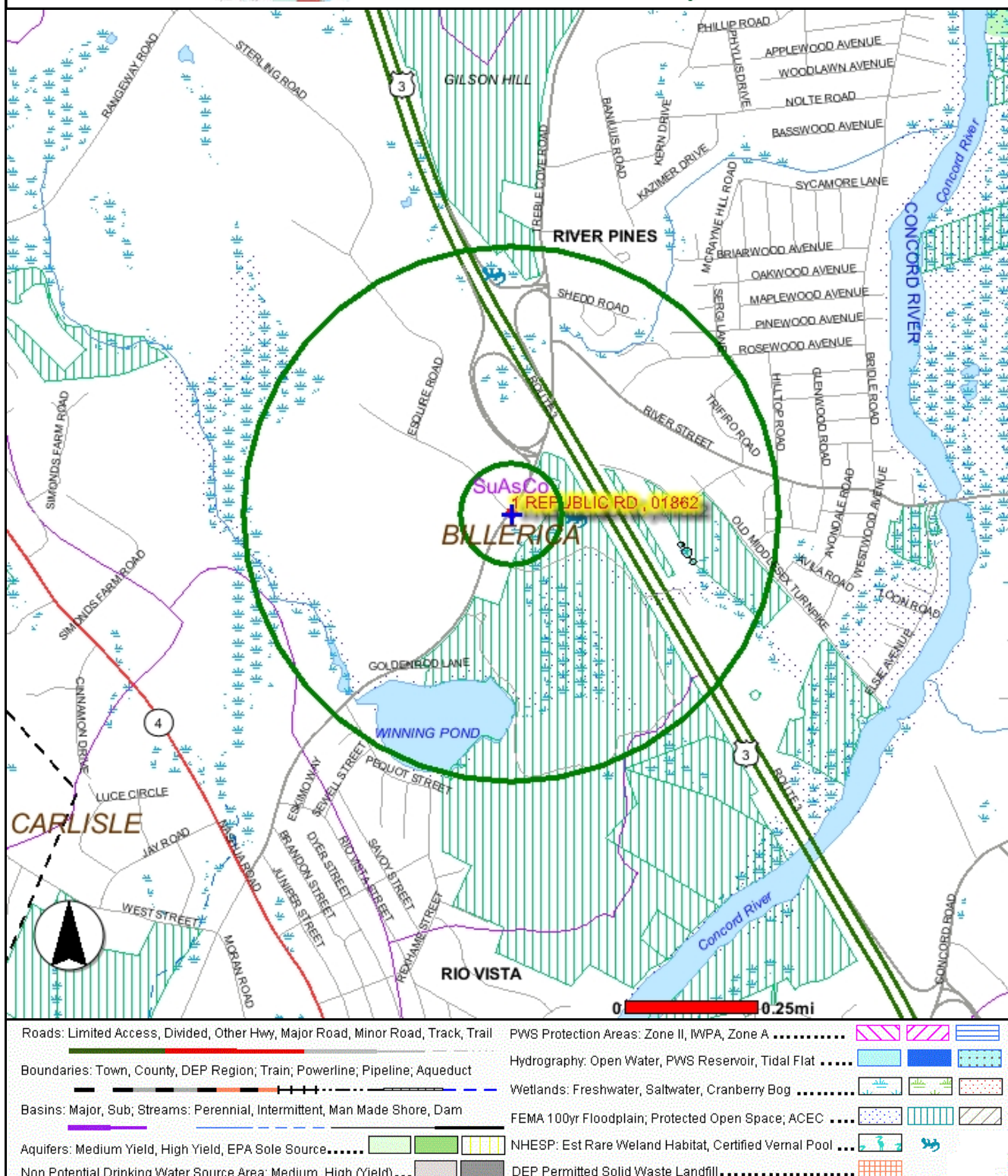
**Site Name:**  
1 Republic Road  
Billerica, MA

**RTN:**  
NAD83 MA Coordinates:  
216545mE, 922974mN

October 21, 2012



The information shown on this map is the best available at the date of printing. For more information please refer to [www.mass.gov/mgis/massgis.htm](http://www.mass.gov/mgis/massgis.htm)





# New England Field Office

Conserving the Nature of New England

Sunday,  
October 21, 2012

## ENDANGERED SPECIES

Overview  
Consultation  
N.E. Listed Species  
Species Under Review  
Recovery Activities  
Habitat Conservation  
Images  
Biological Opinions

## PARTNERS FOR FISH & WILDLIFE

Overview  
Restoration Initiatives  
Species & Habitats of  
Special Concern  
Accomplishments  
How to Participate  
Habitat Restoration  
Links

## ENVIRONMENTAL CONTAMINANTS

Overview  
BTAG  
NRDAR  
Special Studies  
Oil Spills

## FEDERAL ACTIVITIES

Overview  
Federal Projects &  
Permits  
Wetland Permits  
FERC\_ Hydropower  
Projects  
River Flow Protection  
Wind Energy Projects

## OUTREACH

NH Envirothon  
Kids Corner  
Let's Go Outside

## Staff Directory

## Our Location

## HOME



## Endangered Species

### New England Listed Species

The following federally-listed species are protected in New England. This list includes links to species information on our National Fish and Wildlife Service website including current Federal Register documents, HCPs, Recovery Plans, Life History accounts.

#### Vertebrates

##### Mammals

Eastern Cougar - [Puma \(=Felis\) concolor cougar](#)  
Gray Wolf - [Canis lupus](#)  
Indiana Bat - [Myotis sodalis](#)  
Canada Lynx - [Lynx canadensis](#)

##### Birds

Atlantic Coast Piping Plover - [Charadrius melodus](#)  
*Birds of North America Species Account* [Piping Plover](#)  
*Atlantic Coast piping plover website* [Piping Plover](#)  
Roseate Tern - [Sterna dougallii dougallii](#)  
*Birds of North America Species Account* [Roseate Tern](#)

##### Reptiles

Bog Turtle - [Clemmys muhlenbergii](#)  
Northern Redbelly Cooter (Plymouth redbelly turtle) [Pseudemys rubriventris bangsii](#)  
[Northern Redbelly Cooter 5-year Review](#); (pdf size 1.6MB\*) May 2007

##### Fish

Atlantic Salmon - [Salmo salar](#) (Maine only)  
[Maine Atlantic Salmon Atlas](#)

#### Invertebrates

##### Insects

American Burying Beetle - [Nicrophorus americanus](#)  
Karner Blue Butterfly - [Lycaeides melissa samuelis](#)  
*Karner Blue Butterfly* [Fact sheet](#)  
Northeastern Beach Tiger Beetle - [Cicindela dorsalis dorsalis](#)  
Puritan Tiger Beetle - [Cicindela puritana](#)  
[Draft Puritan Tiger Beetle](#); (pdf size 2.4MB\*) 5-year Review

##### Mussels

Dwarf Wedgemussel - [Alasmidonta heterodon](#)  
[Dwarf Wedgemussel 5-Year Status Review 2007](#) (pdf size 1.14MB\*)

##### Plants

Jesup 's Milkvetch - [Astragalus robbinsii var. jesupi](#)  
Northeastern Bulrush - [Scirpus ancistrochaetus](#)  
Sandplain Gerardia - [Agalinis acuta](#)  
Small Whorled Pogonia - [Isotria medeoloides](#)  
Seabeach Amaranth - [Amaranthus pumilus](#) (historic)  
American Chaffseed - [Schwalbea americana](#) (historic)  
Eastern Prairie Fringed Orchid - [Platanthera leucophaea](#) (Maine only)  
Furbish's Lousewort - [Pedicularis furbishiae](#) (Maine only)

Candidate species and species recently delisted are identified below, including links for additional information regarding their status.

#### Candidate Species

*The Service has recently completed a status assessment for the following species and determined that federal listing is "warranted, but precluded", i.e. the status of the species indicates that it should be listed but the listing is superseded by higher listing actions.*

While there is currently no obligation for Federal Agencies to consult with us regarding these species, coordination is encouraged to avoid project delays that may occur as a result of the species becoming federally-listed during the planning or construction phases of a given project. In addition, the Service is interested in promoting conservation actions that may

result in benefits to these species that will prevent the need to list it. Information regarding our [candidate conservation](#) program may help you decide if you would like to become involved.

- [New England Cottontail; Sylvilagus transitionalis](#)
- Red Knot [Calidris canutus rufa](#); [Red Knot Fact Sheet](#)

**Delisted Species**

Bald Eagle - [Haliaeetus leucocephalus](#)  
[Bald Eagle Guidance](#)



**NCTC Eagle Cam**

This Bald Eagle image is a link to a Service website that chronicles the activities of the eagle nest located on the grounds of the USFWS National Conservation Training Center near the Potomac River in Shepherdstown, West Virginia. The nest has been active for four seasons, fledging several juvenile bald eagles.

Files in PDF format will require Acrobat Reader to access the content. If you do not have a copy, please select the link [or click the image] to take you to the Adobe website where you can download a free copy. [Get Adobe Acrobat Reader](#)

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Last updated: October 28, 2010

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## MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN

November 2010

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**Total Approximate Acreage: 268,000 acres**

Approximate acreage and designation date follow ACEC names below.

---

**Bourne Back River**

(1,850 acres, 1989) Bourne

**Canoe River Aquifer and Associated Areas** (17,200 acres, 1991) Easton, Foxborough, Mansfield, Norton, Sharon, and Taunton

**Cedar Swamp**

(1,650 acres, 1975) Hopkinton and Westborough

**Central Nashua River Valley**

(12,900 acres, 1996) Bolton, Harvard, Lancaster, and Leominster

**Cranberry Brook Watershed**

(1,050 acres, 1983) Braintree and Holbrook

**Ellisville Harbor**

(600 acres, 1980) Plymouth

**Fowl Meadow and Ponkapoag Bog**

(8,350 acres, 1992) Boston, Canton, Dedham, Milton, Norwood, Randolph, Sharon, and Westwood

**Golden Hills**

(500 acres, 1987) Melrose, Saugus, and Wakefield

**Great Marsh (originally designated as  
Parker River/Essex Bay)**

(25,500 acres, 1979) Essex, Gloucester, Ipswich, Newbury, and Rowley

**Herring River Watershed**

(4,450 acres, 1991) Bourne and Plymouth

**Hinsdale Flats Watershed**

(14,500 acres, 1992) Dalton, Hinsdale, Peru, and Washington

**Hockomock Swamp**

(16,950 acres, 1990) Bridgewater, Easton, Norton, Raynham, Taunton, and West Bridgewater

**Inner Cape Cod Bay**

(2,600 acres, 1985) Brewster, Eastham, and Orleans

**Kampoosa Bog Drainage Basin**

(1,350 acres, 1995) Lee and Stockbridge

**Karner Brook Watershed**

(7,000 acres, 1992) Egremont and Mount Washington

**Miscoe, Warren, and Whitehall Watersheds**

(8,700 acres, 2000) Grafton, Hopkinton, and Upton

**Neponset River Estuary**

(1,300 acres, 1995) Boston, Milton, and Quincy

**Petapawag**

(25,680 acres, 2002) Ayer, Dunstable, Groton, Pepperell, and Tyngsborough

**Pleasant Bay**

(9,240 acres, 1987) Brewster, Chatham, Harwich, and Orleans

**Pocasset River**

(160 acres, 1980) Bourne

**Rumney Marshes**

(2,800 acres, 1988) Boston, Lynn, Revere, Saugus, and Winthrop

**Sandy Neck Barrier Beach System**

(9,130 acres, 1978) Barnstable and Sandwich

**Schenob Brook Drainage Basin**

(13,750 acres, 1990) Mount Washington and Sheffield

**Squannassit**

(37,420 acres, 2002) Ashby, Ayer, Groton, Harvard, Lancaster, Lunenburg, Pepperell, Shirley, and Townsend

**Three Mile River Watershed**

(14,280 acres, 2008) Dighton, Norton, Taunton

**Upper Housatonic River**

(12,280 acres, 2009) Lee, Lenox, Pittsfield, Washington

**Waquoit Bay**

(2,580 acres, 1979) Falmouth and Mashpee

**Weir River**

(950 acres, 1986) Cohasset, Hingham, and Hull

**Wellfleet Harbor**

(12,480 acres, 1989) Eastham, Truro, and Wellfleet

**Weymouth Back River**

(800 acres, 1982) Hingham and Weymouth

## Towns with ACECs within their Boundaries

November 2010

TOWN	ACEC	TOWN	ACEC
Ashby	Squannassit	Mt. Washington	Karner Brook Watershed
Ayer	Petapawag		Schenob Brook
	Squannassit	Newbury	Great Marsh
Barnstable	Sandy Neck Barrier Beach System	Norton	Hockomock Swamp
Bolton	Central Nashua River Valley		Canoe River Aquifer
Boston	Rumney Marshes		Three Mile River Watershed
	Fowl Meadow and Ponkapoag Bog	Norwood	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary	Orleans	Inner Cape Cod Bay
Bourne	Pocasset River		Pleasant Bay
	Bourne Back River	Pepperell	Petapawag
	Herring River Watershed		Squannassit
Braintree	Cranberry Brook Watershed	Peru	Hinsdale Flats Watershed
Brewster	Pleasant Bay	Pittsfield	Upper Housatonic River
	Inner Cape Cod Bay	Plymouth	Herring River Watershed
Bridgewater	Hockomock Swamp		Ellisville Harbor
Canton	Fowl Meadow and Ponkapoag Bog	Quincy	Neponset River Estuary
Chatham	Pleasant Bay	Randolph	Fowl Meadow and Ponkapoag Bog
Cohasset	Weir River	Raynham	Hockomock Swamp
Dalton	Hinsdale Flats Watershed	Revere	Rumney Marshes
Dedham	Fowl Meadow and Ponkapoag Bog	Rowley	Great Marsh
Dighton	Three Mile River Watershed	Sandwich	Sandy Neck Barrier Beach System
Dunstable	Petapawag	Saugus	Rumney Marshes
Eastham	Inner Cape Cod Bay		Golden Hills
	Wellfleet Harbor	Sharon	Canoe River Aquifer
Easton	Canoe River Aquifer		Fowl Meadow and Ponkapoag Bog
	Hockomock Swamp	Sheffield	Schenob Brook
Egremont	Karner Brook Watershed	Shirley	Squannassit
Essex	Great Marsh	Stockbridge	Kampoosa Bog Drainage Basin
Falmouth	Waquoit Bay	Taunton	Hockomock Swamp
Foxborough	Canoe River Aquifer		Canoe River Aquifer
Gloucester	Great Marsh		Three Mile River Watershed
Grafton	Miscoe-Warren-Whitehall Watersheds	Truro	Wellfleet Harbor
		Townsend	Squannassit
Groton	Petapawag	Tyngsborough	Petapawag
	Squannassit	Upton	Miscoe-Warren-Whitehall Watersheds
Harvard	Central Nashua River Valley		
	Squannassit	Wakefield	Golden Hills
Harwich	Pleasant Bay	Washington	Hinsdale Flats Watershed
Hingham	Weir River		Upper Housatonic River
	Weymouth Back River	Wellfleet	Wellfleet Harbor
Hinsdale	Hinsdale Flats Watershed	W Bridgewater	Hockomock Swamp
Holbrook	Cranberry Brook Watershed	Westborough	Cedar Swamp
Hopkinton	Miscoe-Warren-Whitehall Watersheds	Westwood	Fowl Meadow and Ponkapoag Bog
		Weymouth	Weymouth Back River
	Cedar Swamp	Winthrop	Rumney Marshes
Hull	Weir River		
Ipswich	Great Marsh		
Lancaster	Central Nashua River Valley		
	Squannassit		
Lee	Kampoosa Bog Drainage Basin		
	Upper Housatonic River		
Lenox	Upper Housatonic River		
Leominster	Central Nashua River Valley		
Lunenburg	Squannassit		
Lynn	Rumney Marshes		
Mansfield	Canoe River Aquifer		
Mashpee	Waquoit Bay		
Melrose	Golden Hills		
Milton	Fowl Meadow and Ponkapoag Bog		
	Neponset River Estuary		



# National Register of Historic Places

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