MAC-910163 -

GZA GEOENVIRONMENTAL, INC.

ENGINEERS AND SCIENTISTS
140 BROADWAY
PROVIDENCE, RHODE ISLAND 02903
(401) 421-4140
FAX (401) 751-8613

LETTER OF TRANSMITTAL

DATE:	16-Nov-05	JOB NO.:	31751.33
ATTENTION:	RGP-NOC Processing		
RE:	NPDES Exclusion #98-100		
	DEP Release Tracking #4-11904		
	Quinaquisset Avenue Site (Map 69, Block 117)		
	Mashpee, Massachusetts		

TO US Environmental Protection Agency
RGP-NOC Processing
Municipal Assistance Unit (CMU)
1 Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

WE ARE SENDING YOU

- [X] Attached
- [ ] Under Separate cover via
- [ ] Shop Drawings
- [ ] Prints
- [ ] Plans
- [ ] Samples
- [ ] Specifications
- [ ] Copy of Letter
- [ ] Change Order
- [ ] Other

HOW SHIPPED

- [X] Federal Express
- [ ] Courier
- [ ] Regular Mail

COPIES	DATE	NO.	DESCRIPTION
1	11/16/2005		Notice of Intent

THESE ARE TRANSMITTED as checked below:

- [ ] For approval
- [X] For your use
- [ ] As requested
- [ ] For review and comment
- [ ] FOR BIDS DUE _____ 19____
- [ ] Approved as submitted
- [ ] Approved as noted
- [ ] Returned for corrections
- [ ] _____
- [ ] Resubmit copies for approval
- [ ] Submit copies for distribution
- [ ] Return corrected prints
- [ ] PRINTS RETURNED AFTER LOAN TO US

REMARKS:

cc: Mashpee Conservation Commission (reg. mail)
Om Chopra, T&B (reg. mail)
David Wood, Willowbend Country Club (reg. mail)
Mark Wood, DEP (reg. mail)

SIGNED: Anthony B. Urbano, P.E., Senior Project Manager

If enclosures are not as noted, kindly notify us at once.

NOV 17 2005

GZA
GeoEnvironmental, Inc.

Engineers and Scientists

November 16, 2005
File No. 31751.33

U.S. Environmental Protection Agency
RGP-NOC Processing
Municipal Assistance Unit (CMU)
1 Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

140 Broadway
Providence
Rhode Island
02903
401-421-4140
Fax: 401-751-8613
www.gza.com

Re: Notice of Intent
Groundwater Remediation System
Quinaquisset Avenue
Map 69, Block 117
Mashpee, Massachusetts
NPDES Exclusion #98-100
DEP Release Tracking #4-11904

To Whom it May Concern:

On behalf of our client, the Thomas & Betts Corporation, GZA GeoEnvironmental, Inc. (GZA) is submitting this Notice of Intent (NOI) for the groundwater remediation system installed along Quinaquisset Avenue (Map 69, Block 117) in Mashpee, Massachusetts. The NOI is being submitted as requested by Michael O'Brien (from EPA) on October 7, 2005 in accordance with the new Remediation General Permit (RGP). The above-referenced site is discharging treated groundwater from a remediation system under NPDES Exclusion #98-100.

If you have any questions, please do not hesitate to call us at 401-421-4140.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Anthony B. Urbano
Senior Project Manager

Michael A. Powers, P.E., LSP
Senior Principal

ABU/MAP:etb

Cc: Om Chopra, T&B Corp.
Mark Wood, MADEP
Mashpee Conservation Commission
David Wood, Willowbend Country Club

NOV 17 2005

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An Equal Opportunity Employer M/F/V/H

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

1. General site information. Please provide the following information about the site:

a) Name of **facility/site**: Groundwater Remediation System at Quinaquisset Avenue (Map 69, Block 177)		**Facility/site** address: Quinaquisset Avenue Map 69, Block 117, Mashpee, MA 02649		
Location of **facility/site**: longitude:_____ latitude:_____ 70°27'46" 41°37'18"	Facility SIC code(s): NA	Street: Quinaquisset Avenue		
b) Name of **facility/site owner:** Thomas & Betts Corporation		Town: Mashpee		
Email address of owner: om_chopra@tnb.com		State: MA	Zip: 02649	County: Barnstable
Telephone no.of facility/site **owner**: (901) 252-5937				
Fax no. of facility/site **owner**: (901) 252-1340		**Owner** is (check one): 1. Federal____ 2. State/Tribal_____ 3. Private_✓_ 4. other, if so, describe:		
Address of **owner** (if different from site):				
Street: 8155 T&B Boulevard				
Town: Memphis	State: TN	Zip: 38125	County:	
c) Legal name of **operator**: GZA GeoEnvironmental, Inc.	**Operator** telephone no: (401) 421-4140			
	Operator fax no.: (401) 751-8613	**Operator** email: aurbano@gza.com		
Operator contact name and title: Anthony Urbano, Senior Project Manager				

Address of **operator** (if different from owner): GZA GeoEnvironmental, Inc.	Street: 140 Broadway		
Town: Providence	State: RI	Zip: 02903	County:

d) Check "yes" or "no" for the following:
1. Has a prior NPDES permit exclusion been granted for the discharge? Yes ✓ No___, if "yes," number: 98-100
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes___ No ✓, if "yes," date and tracking #:
3. Is the discharge a "new discharge"as defined by 40 CFR 122.2? Yes No ✓
4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes ✓ No__

e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes ✓ No___
If "yes," please list:
1. site identification # assigned by the state of NH or MA: MA-RTN4-11904
2. permit or license # assigned: MCP
3. state agency contact information: name, location, and telephone number:
Mark Wood, DEP Southeast (508) 946-2874

f) Is the site/facility covered by any other EPA permit, including:
1. multi-sector storm water general permit? Y___ N ✓, if Y, number:
2. phase I or II construction storm water general permit? Y___ N ✓, if Y, number:
3. individual NPDES permit? Y___ N ✓, if Y, number:
4. any other water quality related permit? Y___ N ✓, if Y, number:

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

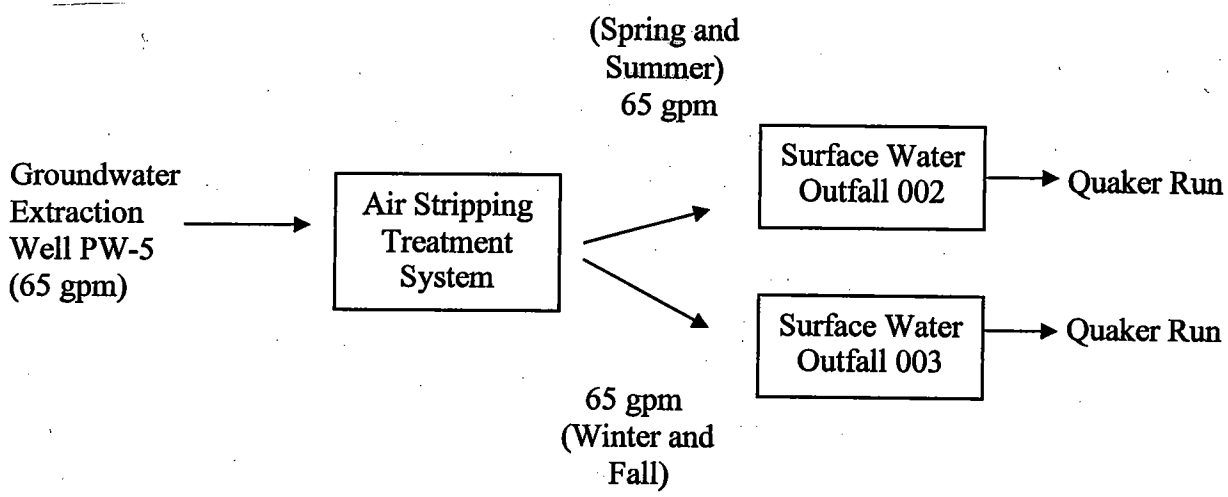
a) Describe the discharge activities for which the owner/applicant is seeking coverage:

Since October 3, 2000 groundwater has been pumped from extraction well PW-5, treated to remove chlorinated volatile organic compounds (VOCs) using a shallow tray air stripper, and then dischargd to the surface outfall in accordance with NPDES exclusion permit #98-100.

b) Provide the following information about each discharge:	1) Number of discharge points: 2	2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)? Max. flow 0.18 Average flow 0.15 Is maximum flow a **design value**? Y ✓ N___ For average flow, include the units and appropriate notation if this value is a design value or estimate if not available. Cubic feet per second - measured flow.

3) Latitude and longitude of each discharge within 100 feet: pt.1:long._____ lat._____; pt.2: long._____ lat._____; pt.3: long._____ lat._____; pt.4:long._____ lat._____; pt.5: long._____ lat._____; pt.6:long._____ lat._____; pt.7: long._____ lat._____; pt.8:long._____ lat._____; etc.
Pt1: outfall#002 Long 70°27'46" Lat 41°37'26" Pt2: outfall#003 Long 70°27'46" Lat 41°37'18"

4) If hydrostatic testing, total volume of the discharge (gals):	5) Is the discharge intermittent No or seasonal No ? Is discharge ongoing Yes ✓ No_____?
c) Expected dates of discharge (mm/dd/yy): start ongoing end 2010	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).	



3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for **all** of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only	VOC Only ✓	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method (ug/l)	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids	✓		1	grab	160.2	2,000	<2,000			
2. Total Residual Chlorine	✓		1	grab	330.5	100	<100			
3. Total Petroleum Hydrocarbons	✓		1	grab	8100	200	<200			
4. Cyanide	✓		1	grab	335.2	10	<10			
5. Benzene	✓		1	grab	8260	1	<1			
6. Toluene	✓		1	grab	8260	1	<1			
7. Ethylbenzene	✓		1	grab	8260	1	<1			
8. (m,p,o) Xylenes	✓		1	grab	8260	1	<1			
9. Total BTEX[4]	✓		1	grab	8260	1	<1			

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

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method (ug/l)	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg) per day	concentration (ug/l)	mass (kg) per day
10. Ethylene Dibromide (1,2- Dibromo-methane)	✓		1	grab	8260	2	<2			
11. Methyl-tert-Butyl Ether (MtBE)	✓		1	grab	8260	1	<1			
12. tert-Butyl Alcohol (TBA)	✓		1	grab	8260	25	<25			
13. tert-Amyl Methyl Ether (TAME)	✓		1	grab	8260	2	<2			
14. Naphthalene	✓		1	grab	8260	1	<1			
15. Carbon Tetra-chloride	✓		1	grab	8260	1	<1			
16. 1,4 Dichlorobenzene	✓		1	grab	8260	1	<1			
17. 1,2 Dichlorobenzene	✓		1	grab	8260	1	<1			
18. 1,3 Dichlorobenzene	✓		1	grab	8260	1	<1			
19. 1,1 Dichloroethane	✓		1	grab	8260	1	<1			
20. 1,2 Dichloroethane	✓		1	grab	8260	1	<1			
21. 1,1 Dichloroethylene		✓	12	grab	8260	1	2	0.0007	0.7	0.0003
22. cis-1,2 Dichloro-ethylene	✓		1	grab	8260	1	<1			
23. Dichloromethane (Methylene Chloride)	✓		1	grab	8260	1	<1			
24. Tetrachloroethylene		✓	12	grab	8260	1	23	0.008	12	0.004

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method (ug/l)	Maximum daily value		Avg. daily Value	
							concentration (ug/l)	mass (kg) per day	concentration (ug/l)	mass (kg) per day
25. 1,1,1 Trichloroethane	✓		1	grab	8260	1	1.9			
26. 1,1,2 Trichloroethane	✓		1	grab	8260	1	<1			
27. Trichloroethylene		✓	12	grab	8260	1	12	0.004	2.5	0.0009
28. Vinyl Chloride	✓		1	grab	8260	1	<1			
29. Acetone	✓		1	grab	8260	25	<25			
30. 1,4 Dioxane	✓		1	grab	8260	100	<100			
31. Total Phenols	✓		1	grab	8270	10	<10			
32. Pentachlorophenol	✓		1	grab	8270	50	<50			
33. Total Phthalates [5] (Phthalate esthers)	✓		1	grab	8270	15	<15			
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✓		1	grab	8270	15	<15			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	grab	8270	2	<2			
a. Benzo(a) Anthracene	✓		1	grab	8270	2	<2			
b. Benzo(a) Pyrene	✓		1	grab	8270	2	<2			
c. Benzo(b)Fluoranthene	✓		1	grab	8270	2	<2			
d. Benzo(k) Fluoranthene	✓		1	grab	8270	2	<2			
e. Chrysene	✓		1	grab	8270	2	<2			

[5] The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method (ug/l)	Maximum daily value		Average daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	✓		1	grab	8270	2	<2			
g. Indeno(1,2,3-cd) Pyrene	✓		1	grab	8270	2	<2			
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	grab	8270	2	<2			
h. Acenaphthene	✓		1	grab	8270	2	<2			
i. Acenaphthylene	✓		1	grab	8270	2	<2			
j. Anthracene	✓		1	grab	8270	2	<2			
k. Benzo(ghi) Perylene	✓		1	grab	8270	2	<2			
l. Fluoranthene	✓		1	grab	8270	2	<2			
m. Fluorene	✓		1	grab	8270	2	<2			
n. Naphthalene-	✓		1	grab	8270	2	<2			
o. Phenanthrene	✓		1	grab	8270	2	<2			
p. Pyrene	✓		1	grab	8270	2	<2			
37. Total Polychlorinated Biphenyls (PCBs)	✓		1	grab	8082	0.4	<0.4			
38. Antimony	✓		1	grab	6010B	25	<25			
39. Arsenic	✓		1	grab	6010B	10	<10			
40. Cadmium	✓		1	grab	6010B	5	<5			
41. Chromium III	✓		1	grab	6010B	5	<5			
42. Chromium VI	✓		1	grab	35000-CRD	20	<20			

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method (µg/l)	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper	✓		1	grab	6010B	15	<15			
44. Lead	✓		1	grab	6010B	10	<10			
45. Mercury	✓		1	grab	7470A	0.5	<0.5			
46. Nickel	✓		1	grab	6010B	10	<10			
47. Selenium	✓		1	grab	6010B	25	<25			
48. Silver	✓		1	grab	6010B	5	<5			
49. Zinc	✓		1	grab	6010B	10	<10			
50. Iron	✓		1	grab	6010B	25	43			
Other (describe):										

c) For discharges where **metals** are believed present, please fill out the following:

Step 1: Do any of the metals in the influent have a **reasonable potential** to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y____ N✓	If yes, which metals?
Step 2: For any metals which have **reasonable potential** to exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c) (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metals:_____ DF: _____	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y____ N____ If "Yes," list which metals:

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

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

PW-5 Groundwater Extraction Well → Shallow Tray Air Stripper NEEP Model 2641 → Outfall

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

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system:
Average flow rate of discharge 65 Maximum flow rate of treatment system 80 Design flow rate of treatment system 80

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

None

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

a) Identify the discharge pathway:	Direct ✓	Within facility	Storm drain	River/brook ✓	Wetlands	Other (describe):

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

The treated groundwater is discharged to Quaker Run (a brook) via an existing culvert pipe.

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water: See Figure A
1. For multiple discharges, number the discharges sequentially.
2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water
The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water Class B

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water N/A 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? Yes ✓ No____ If yes, for which pollutant(s)?
Nutrients and pathogens

Is there a TMDL? Yes____ No ✓ If yes, for which pollutant(s)?

6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes ✓ No____
Has any consultation with the federal services been completed ? No ✓ or is consultation underway? Yes ✓ No____
What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine 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?

b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?
Yes_____ No ✓ Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes_____ No ✓

7. Supplemental information. :

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

ESA Section 7 Consultation was submitted to U.S. Fish and Wildlife on October 24, 2005. Waiting for response from U.S. Fish and Wildlife Service. Response will be forwarded to EPA NPDES Section.

Analytical data sheets are attached.

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

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

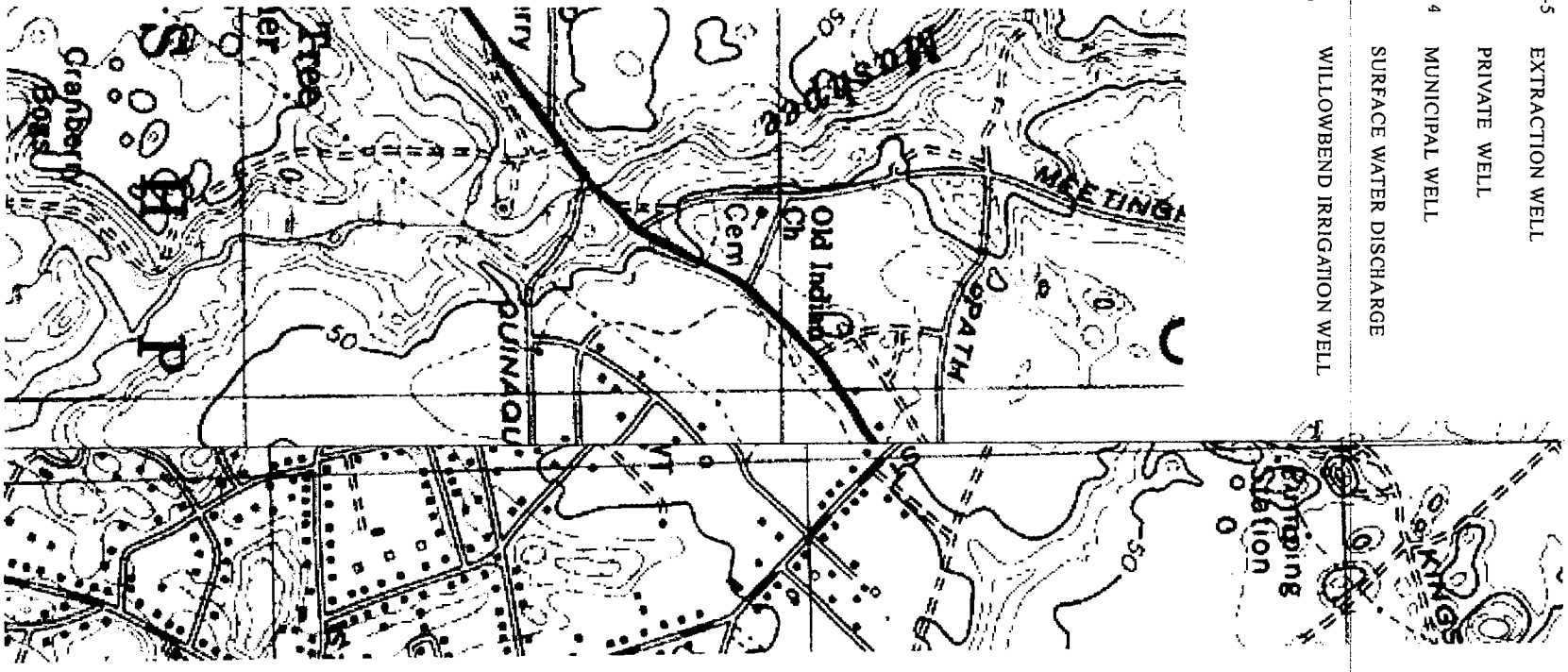
Facility/Site Name: Groundwater Remediation System at Quinaquisset Avenue (Map 69, Block 117, Mashpee, MA)

Operator signature: Anthony Urbano

Title: Senior Project Manager

Date: 11/10/05

2000 GZA GEOENVIRONMENTAL, INC. (CAD FILE: 31751\31751-33\LOCPLAN.CDR)



LEGEND:

- PW-5 EXTRACTION WELL
- PRIVATE WELL
- T-4 MUNICIPAL WELL
- SURFACE WATER DISCHARGE
- WILLOWBEND IRRIGATION WELL

REV. NO:	DESCRIPTION	BY	DATE

QUINAQUISSET AVENUE SITE

MASHPEE, MASSACHUSETTS

LOCUS PLAN

GRAPHIC SCALE

0' 500' 1000' 2000'

PROJ. Manager ABU
CHECKED BY: ABU
REVIEWED BY: MAP

DRAWN BY: BAW
SCALE: 1"=1000'
DATE: OCT 2005

GZA GeoEnvironmental, Inc.

PROJECT NO: 31751.33

FIGURE NO: A

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
(781) 278-4700

Laboratory Identification Numbers:
MA and ME: MA092 NH: 2028
CT: PH0579 RI: LAO00236
NELAC - NYS DOH: 11063

ANALYTICAL DATA REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903
(401)421-4140
Anthony Urbano

Project No.:	03.0031751.33
Work Order No.:	0510-00181
Date Received:	10/25/05
Date Reported:	11/01/05

SAMPLE INFORMATION

Date Sampled	Matrix	Laboratory ID	Sample ID
10/24/2005	Aqueous	0510-00181 001	PW-5 INFLUENT

The laboratory report shall not be reproduced except in full without the written consent of the laboratory.

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Anthony Urbano

Project Name: 106 Falmouth Rd.
Project No.: 03.0031751.33

Date Received: 10/25/05
Date Reported: 11/01/05
Work Order No.: 0510-00181

PROJECT NARRATIVE:

1. Sample Receipt

The samples were received on 10/25/05 via _x_GZA courier, __EC, __FEDEX, or ___hand delivered. The temperature of the __temperature blank/_x_cooler air, was 3.1 degrees C. The samples were received intact for all requested analyses.

The samples were appropriately preserved in accordance with the method they reference.

2. EPA Method 8260 - VOCs

Attach QC 8260 10/25/05 - Aqueous

3. EPA Method 6010B/7470A - Metals

Attach QC 6010B 10/26/05 - Aqueous
Attach QC Mercury 10/26/05 - Aqueous

4. EPA Method 8082 - PCBs

Attach QC 8082 10/26/05 - Aqueous

5. EPA Method 8270 - SVOCs

Attach QC 8270 10/28/05 - Aqueous

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Anthony Urbano

Project Name: 106 Falmouth Rd.
Project No.: 03.0031751.33

Date Received: 10/25/05
Date Reported: 11/01/05
Work Order No.: 0510-00181

Data Authorized By: _____

% R = % Recovery
DF = Dilution Factor
DFS = Dilution Factor Solids
DO = Diluted Out

Method 8260: The current version of the method is 8260B.
Method 8021: The current version of the method is 8021B.
Method 8270: The current version of the method is 8270C.
Method 6010: The current version of the method is 6010B.

Please note that the laboratory signed copy of the chain of custody record is an integral part of the data report.

The laboratory report shall not be reproduced except in full without the written consent of the laboratory.

Soil data is reported on a dry weight basis unless otherwise specified.

Matrix Spike / Matrix Spike Duplicate sets are performed as per each method and are reported at the end of the analytical report if assigned on the chain of custody.

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748

ANALYTICAL REPORT

GZA GeoEnvironmental, Inc.
140 Broadway
Providence, RI 02903

Anthony Urbano

Project Name: 106 Falmouth Rd.
Project No.: 03.0031751.33

Date Received: 10/25/05
Date Reported: 11/01/05
Work Order No.: 0510-00181

Sample ID: PW-5 INFLUENT
Sample Date: 10/24/2005

Sample No.: 001

Test Performed	Method	Results	Units	Tech	Analysis Date
SEMI-VOLATILE ORGANICS	EPA 8270			CMG	10/28/05
ACID FRACTION:	EPA 8270				
Phenol	EPA 8270	<10	ug/L	CMG	10/28/05
2-Chlorophenol	EPA 8270	<10	ug/L	CMG	10/28/05
2-Methylphenol	EPA 8270	<10	ug/L	CMG	10/28/05
3&4-Methylphenol	EPA 8270	<10	ug/L	CMG	10/28/05
2-Nitrophenol	EPA 8270	<10	ug/L	CMG	10/28/05
2,4-Dimethylphenol	EPA 8270	<10	ug/L	CMG	10/28/05
Benzoic Acid	EPA 8270	<10	ug/L	CMG	10/28/05
2,4-Dichlorophenol	EPA 8270	<10	ug/L	CMG	10/28/05
4-Chloro-3-Methylphenol	EPA 8270	<20	ug/L	CMG	10/28/05
2,4,6-Trichlorophenol	EPA 8270	<10	ug/L	CMG	10/28/05
2,4,5-Trichlorophenol	EPA 8270	<10	ug/L	CMG	10/28/05
2,4-Dinitrophenol	EPA 8270	<100	ug/L	CMG	10/28/05
4-Nitrophenol	EPA 8270	<50	ug/L	CMG	10/28/05
4,6-Dinitro-2-Methylphenol	EPA 8270	<50	ug/L	CMG	10/28/05
Pentachlorophenol	EPA 8270	<50	ug/L	CMG	10/28/05
BASE-NEUTRAL FRACTION:					
n-Nitrosodimethylamine	EPA 8270	<10	ug/L	CMG	10/28/05
bis(2-Chloroethyl)Ether	EPA 8270	<10	ug/L	CMG	10/28/05
1,3-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	10/28/05
1,4-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	10/28/05
Benzyl Alcohol	EPA 8270	<20	ug/L	CMG	10/28/05
1,2-Dichlorobenzene	EPA 8270	<10	ug/L	CMG	10/28/05
bis(2-Chloroisopropyl)Ether	EPA 8270	<10	ug/L	CMG	10/28/05
n-Nitrosodi-n-Propylamine	EPA 8270	<10	ug/L	CMG	10/28/05
Hexachloroethane	EPA 8270	<10	ug/L	CMG	10/28/05
Nitrobenzene	EPA 8270	<10	ug/L	CMG	10/28/05
Isophorone	EPA 8270	<10	ug/L	CMG	10/28/05
bis(2-Chloroethoxy)Methane	EPA 8270	<10	ug/L	CMG	10/28/05
1,2,4-Trichlorobenzene	EPA 8270	<10	ug/L	CMG	10/28/05
Naphthalene	EPA 8270	<2.0	ug/L	CMG	10/28/05

GZA GeoEnvironmental, Inc.

ANALYTICAL REPORT

Project Name: 106 Falmouth Rd.
Project No.: 03.0031751.33

Work Order No.: 0510-00181

Sample ID: PW-5 INFLUENT
Sample Date: 10/24/2005

Sample No.: 001

Test Performed	Method	Results	Units	Tech	Analysis Date
4-Chloroaniline	EPA 8270	<20	ug/L	CMG	10/28/05
Hexachlorobutadiene	EPA 8270	<10	ug/L	CMG	10/28/05
2-Methylnaphthalene	EPA 8270	<2.0	ug/L	CMG	10/28/05
Hexachlorocyclopentadiene	EPA 8270	<50	ug/L	CMG	10/28/05
2-Chloronaphthalene	EPA 8270	<10	ug/L	CMG	10/28/05
2-Nitroaniline	EPA 8270	<50	ug/L	CMG	10/28/05
Dimethylphthalate	EPA 8270	<10	ug/L	CMG	10/28/05
Acenaphthylene	EPA 8270	<2.0	ug/L	CMG	10/28/05
2,6-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	10/28/05
3-Nitroaniline	EPA 8270	<50	ug/L	CMG	10/28/05
Acenaphthene	EPA 8270	<2.0	ug/L	CMG	10/28/05
Dibenzofuran	EPA 8270	<10	ug/L	CMG	10/28/05
2,4-Dinitrotoluene	EPA 8270	<10	ug/L	CMG	10/28/05
Diethylphthalate	EPA 8270	<10	ug/L	CMG	10/28/05
Fluorene	EPA 8270	<2.0	ug/L	CMG	10/28/05
4-Chlorophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	10/28/05
4-Nitroaniline	EPA 8270	<20	ug/L	CMG	10/28/05
n-Nitrosodiphenylamine	EPA 8270	<10	ug/L	CMG	10/28/05
4-Bromophenyl Phenyl Ether	EPA 8270	<10	ug/L	CMG	10/28/05
Hexachlorobenzene	EPA 8270	<10	ug/L	CMG	10/28/05
Phenanthrene	EPA 8270	<2.0	ug/L	CMG	10/28/05
Anthracene	EPA 8270	<2.0	ug/L	CMG	10/28/05
Carbazole	EPA 8270	<10	ug/L	CMG	10/28/05
di-n-Butylphthalate	EPA 8270	<15	ug/L	CMG	10/28/05
Fluoranthene	EPA 8270	<2.0	ug/L	CMG	10/28/05
Pyrene	EPA 8270	<2.0	ug/L	CMG	10/28/05
Butylbenzylphthalate	EPA 8270	<10	ug/L	CMG	10/28/05
Benzo [a] Anthracene	EPA 8270	<2.0	ug/L	CMG	10/28/05
3,3'-Dichlorobenzidine	EPA 8270	<20	ug/L	CMG	10/28/05
Chrysene	EPA 8270	<2.0	ug/L	CMG	10/28/05
bis(2-Ethylhexyl)Phthalate	EPA 8270	<15	ug/L	CMG	10/28/05
di-n-Octylphthalate	EPA 8270	<10	ug/L	CMG	10/28/05
Benzo [b] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	10/28/05
Benzo [k] Fluoranthene	EPA 8270	<2.0	ug/L	CMG	10/28/05
Benzo [a] Pyrene	EPA 8270	<2.0	ug/L	CMG	10/28/05
Indeno [1,2,3-cd] Pyrene	EPA 8270	<2.0	ug/L	CMG	10/28/05
Dibenzo [a,h] Anthracene	EPA 8270	<2.0	ug/L	CMG	10/28/05
Benzo [g,h,i] Perylene	EPA 8270	<2.0	ug/L	CMG	10/28/05
Surrogates:	EPA 8270				
***2-Fluorophenol	EPA 8270	24.4	% R	CMG	10/28/05

GZA GeoEnvironmental, Inc.

ANALYTICAL REPORT

Project Name: 106 Falmouth Rd.
Project No.: 03.0031751.33

Work Order No.: 0510-00181

Sample ID: PW-5 INFLUENT
Sample Date: 10/24/2005

Sample No.: 001

Test Performed	Method	Results	Units	Tech	Analysis Date
***Phenol-D6	EPA 8270	15.5	% R	CMG	10/28/05
***Nitrobenzene-D5	EPA 8270	67.1	% R	CMG	10/28/05
***2-Fluorobiphenyl	EPA 8270	72.3	% R	CMG	10/28/05
***2,4,6-Tribromophenol	EPA 8270	56.1	% R	CMG	10/28/05
***P-Terphenyl-D14	EPA 8270	72.0	% R	CMG	10/28/05
Extraction	EPA 3510C	1.0	DF	JEJ	10/28/05
POLYCHLORINATED BIPHENYLS	EPA 8082			TAJ	10/27/05
Aroclor 1268	EPA 8082	<0.40	ug/L	TAJ	10/27/05
Aroclor 1262	EPA 8082	<0.40	ug/L	TAJ	10/27/05
Aroclor 1260	EPA 8082	<0.40	ug/L	TAJ	10/27/05
Aroclor 1254	EPA 8082	<0.40	ug/L	TAJ	10/27/05
Aroclor 1248	EPA 8082	<0.40	ug/L	TAJ	10/27/05
Aroclor 1242/1016	EPA 8082	<0.40	ug/L	TAJ	10/27/05
Aroclor 1232	EPA 8082	<0.80	ug/L	TAJ	10/27/05
Aroclor 1221	EPA 8082	<0.40	ug/L	TAJ	10/27/05
Surrogates:	EPA 8082				
***Tetrachloro-m-xylene	EPA 8082	88.6	% R	TAJ	10/27/05
***Tetrachloro-m-xylene	EPA 8082	124	% R	TAJ	10/27/05
***Decachlorobiphenyl	EPA 8082	111	% R	TAJ	10/27/05
***Decachlorobiphenyl	EPA 8082	121	% R	TAJ	10/27/05
Extraction	EPA 3510C	1.0	DF	TAJ	10/26/05
TOTAL PETROLEUM HYDROCARBONS	Mod. EPA 8100			RJD	10/28/05
Hydrocarbon Content		<200	ug/L	RJD	10/28/05
Surrogate:					
***p-Terphenyl		75.0	% R	RJD	10/28/05
Extraction	EPA 3510C	1.0	DF	JEJ	10/28/05
PRIORITY POLLUTANT METALS				AJY	10/26/05
Silver	EPA 6010B	<0.0050	mg/L	AJY	10/26/05
Arsenic	EPA 6010B	<0.010	mg/L	AJY	10/26/05
Beryllium	EPA 6010B	<0.0050	mg/L	AJY	10/26/05
Cadmium	EPA 6010B	<0.0050	mg/L	AJY	10/26/05
Chromium	EPA 6010B	<0.0050	mg/L	AJY	10/26/05
Copper	EPA 6010B	<0.015	mg/L	AJY	10/26/05
Mercury	EPA 7470A	<0.00050	mg/L	AJY	10/26/05
Nickel	EPA 6010B	<0.010	mg/L	AJY	10/26/05
Lead	EPA 6010B	<0.010	mg/L	AJY	10/26/05
Antimony	EPA 6010B	<0.025	mg/L	AJY	10/26/05
Selenium	EPA 6010B	<0.025	mg/L	AJY	10/26/05
Thallium	EPA 6010B	<0.025	mg/L	AJY	10/26/05
Zinc	EPA 6010B	<0.010	mg/L	AJY	10/26/05

GZA GeoEnvironmental, Inc.

ANALYTICAL REPORT

Project Name: 106 Falmouth Rd.
Project No.: 03.0031751.33

Work Order No.: 0510-00181

Sample ID: PW-5 INFLUENT
Sample Date: 10/24/2005

Sample No.: 001

Test Performed	Method	Results	Units	Tech	Analysis Date
Iron	EPA 6010B	0.043	mg/L	AJY	10/26/05
SUBCONTRACTED ANALYTES					
Total Suspended Solids	EPA 160.2	<2.0	mg/L	XXX	10/28/05
Total Cyanide	EPA 335.2	<0.01	mg/L	XXX	10/31/05
Residual Chlorine	EPA 330.5	<0.1	mg/L	XXX	10/28/05
Hexavalent Chromium	SM35000-CR D	<0.02	mg/L	XXX	10/25/05
VOLATILE ORGANICS	EPA 8260			MQS	10/25/05
Dichlorodifluoromethane	EPA 8260	<2.0	ug/L	MQS	10/25/05
Chloromethane	EPA 8260	<2.0	ug/L	MQS	10/25/05
Vinyl Chloride	EPA 8260	<1.0	ug/L	MQS	10/25/05
Bromomethane	EPA 8260	<2.0	ug/L	MQS	10/25/05
Chloroethane	EPA 8260	<1.0	ug/L	MQS	10/25/05
Trichlorofluoromethane	EPA 8260	<2.0	ug/L	MQS	10/25/05
Diethylether	EPA 8260	<5.0	ug/L	MQS	10/25/05
Acetone	EPA 8260	<25	ug/L	MQS	10/25/05
1,1-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/25/05
Carbon Disulfide	EPA 8260	<50	ug/L	MQS	10/25/05
Dichloromethane	EPA 8260	<1.0	ug/L	MQS	10/25/05
tert-Butyl alcohol (TBA)	EPA 8260	<25	ug/L	MQS	10/25/05
Methyl-Tert-Butyl-Ether	EPA 8260	<1.0	ug/L	MQS	10/25/05
trans-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,1-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/25/05
Di-isopropyl ether (DIPE)	EPA 8260	<2.0	ug/L	MQS	10/25/05
Ethyl tert-butyl ether (ETBE)	EPA 8260	<2.0	ug/L	MQS	10/25/05
2-Butanone	EPA 8260	<25	ug/L	MQS	10/25/05
2,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/25/05
cis-1,2-Dichloroethene	EPA 8260	<1.0	ug/L	MQS	10/25/05
Chloroform	EPA 8260	1.8	ug/L	MQS	10/25/05
Bromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/25/05
Tetrahydrofuran	EPA 8260	<10	ug/L	MQS	10/25/05
1,1,1-Trichloroethane	EPA 8260	1.9	ug/L	MQS	10/25/05
1,1-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/25/05
Carbon Tetrachloride	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,2-Dichloroethane	EPA 8260	<1.0	ug/L	MQS	10/25/05
Benzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
tert-Amyl methyl ether (TAME)	EPA 8260	<2.0	ug/L	MQS	10/25/05
Trichloroethene	EPA 8260	1.5	ug/L	MQS	10/25/05
1,4-Dioxane	EPA 8260	<100	ug/L	MQS	10/25/05
1,2-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/25/05
Bromodichloromethane	EPA 8260	<1.0	ug/L	MQS	10/25/05

GZA GeoEnvironmental, Inc.

ANALYTICAL REPORT

Project Name: 106 Falmouth Rd.
Project No.: 03.0031751.33

Work Order No.: 0510-00181

Sample ID: PW-5 INFLUENT
Sample Date: 10/24/2005

Sample No.: 001

Test Performed	Method	Results	Units	Tech	Analysis Date
Dibromomethane	EPA 8260	<1.0	ug/L	MQS	10/25/05
4-Methyl-2-Pentanone	EPA 8260	<2.0	ug/L	MQS	10/25/05
cis-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/25/05
Toluene	EPA 8260	<1.0	ug/L	MQS	10/25/05
trans-1,3-Dichloropropene	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,1,2-Trichloroethane	EPA 8260	<1.0	ug/L	MQS	10/25/05
2-Hexanone	EPA 8260	<2.0	ug/L	MQS	10/25/05
1,3-Dichloropropane	EPA 8260	<1.0	ug/L	MQS	10/25/05
Tetrachloroethene	EPA 8260	9.7	ug/L	MQS	10/25/05
Dibromochloromethane	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,2-Dibromoethane (EDB)	EPA 8260	<2.0	ug/L	MQS	10/25/05
Chlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,1,1,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/25/05
Ethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
m&p-xylene	EPA 8260	<1.0	ug/L	MQS	10/25/05
o-Xylene	EPA 8260	<1.0	ug/L	MQS	10/25/05
Styrene	EPA 8260	<1.0	ug/L	MQS	10/25/05
Bromoform	EPA 8260	<2.0	ug/L	MQS	10/25/05
Isopropylbenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,1,2,2-Tetrachloroethane	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,2,3-Trichloropropane	EPA 8260	<1.0	ug/L	MQS	10/25/05
Bromobenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
N-Propylbenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
2-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,3,5-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
4-Chlorotoluene	EPA 8260	<1.0	ug/L	MQS	10/25/05
tert-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,2,4-Trimethylbenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
sec-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
p-Isopropyltoluene	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,3-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,4-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
n-Butylbenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,2-Dichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,2-Dibromo-3-Chloropropane	EPA 8260	<5.0	ug/L	MQS	10/25/05
1,2,4-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
Hexachlorobutadiene	EPA 8260	<1.0	ug/L	MQS	10/25/05
Naphthalene	EPA 8260	<1.0	ug/L	MQS	10/25/05
1,2,3-Trichlorobenzene	EPA 8260	<1.0	ug/L	MQS	10/25/05
Surrogates:	EPA 8260				

GZA GeoEnvironmental, Inc.

ANALYTICAL REPORT

Project Name: 106 Falmouth Rd.
Project No.: 03.0031751.33

Work Order No.: 0510-00181

Sample ID: PW-5 INFLUENT
Sample Date: 10/24/2005

Sample No.: 001

Test Performed	Method	Results	Units	Tech	Analysis Date
***1,2-Dichloroethane-D4	EPA 8260	102	% R	MQS	10/25/05
***Toluene-D8	EPA 8260	98.0	% R	MQS	10/25/05
***4-Bromofluorobenzene	EPA 8260	107	% R	MQS	10/25/05
Preparation	EPA 5030B	1.0	DF	MQS	10/25/05

GZA GeoEnvironmental, Inc.
108 South Street
Hopkinton, MA 01748

EPA Method 8260 / 524.2 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Analyzed:	10/25/05	
Volatile Organics	Conc. ug/L	Acceptance Limit
dichlorodifluoromethane	< 1.0	< 1.0
chloromethane	< 1.0	< 1.0
vinyl chloride	< 1.0	< 1.0
bromomethane	< 1.0	< 1.0
chloroethane	< 1.0	< 1.0
trichlorofluoromethane	< 1.0	< 1.0
diethyl ether	< 2.0	< 2.0
acetone	< 25	< 25
1,1-dichloroethene	< 0.5	< 0.5
FREON-113	< 1.0	< 1.0
carbon disulfide	< 1.0	< 1.0
dichloromethane	< 1.0	< 1.0
tert-butyl alcohol (TBA)	< 25	< 25
methyl-tert-butyl-ether	< 1.0	< 1.0
trans-1,2-dichloroethene	< 0.5	< 0.5
1,1-dichloroethane	< 0.5	< 0.5
di-isopropyl ether (DIPE)	< 1.0	< 1.0
ethyl tert-butyl ether (EtBE)	< 1.0	< 1.0
2-butanone	< 25	< 25
2,2-dichloropropane	< 0.5	< 0.5
cis-1,2-dichloroethene	< 0.5	< 0.5
chloroform	< 0.5	< 0.5
bromochloromethane	< 0.5	< 0.5
tetrahydrofuran	< 5.0	< 5.0
1,1,1-trichloroethane	< 0.5	< 0.5
1,1-dichloropropene	< 0.5	< 0.5
carbon tetrachloride	< 0.5	< 0.5
1,2-dichloroethane	< 0.5	< 0.5
benzene	< 0.5	< 0.5
tert-amyl methyl ether (TAME)	< 1.0	< 1.0
trichloroethene	< 0.5	< 0.5
1,2-dichloropropane	< 0.5	< 0.5
bromodichloromethane	< 0.5	< 0.5
1,4-Dioxane	< 50	< 50
dibromomethane	< 0.5	< 0.5
4-methyl-2-pentanone	< 1.0	< 1.0
cis-1,3-dichloropropene	< 0.5	< 0.5
toluene	< 0.5	< 0.5
trans-1,3-dichloropropene	< 0.5	< 0.5
1,1,2-trichloroethane	< 1.0	< 1.0
2-hexanone	< 1.0	< 1.0
1,3-dichloropropane	< 0.5	< 0.5
tetrachloroethene	< 0.5	< 0.5
dibromochloromethane	< 0.5	< 0.5
1,2-dibromoethane (EDB)	< 0.5	< 0.5
chlorobenzene	< 0.5	< 0.5
1,1,1,2-tetrachloroethane	< 0.5	< 0.5
ethylbenzene	< 0.5	< 0.5
1,1,2,2-tetrachloroethane	< 0.5	< 0.5
m&p-xylene	< 0.5	< 0.5
o-xylene	< 0.5	< 0.5
styrene	< 0.5	< 0.5
bromoform	< 0.5	< 0.5
isopropylbenzene	< 0.5	< 0.5
1,2,3-trichloropropane	< 0.5	< 0.5
bromobenzene	< 0.5	< 0.5
n-propylbenzene	< 0.5	< 0.5
2-chlorotoluene	< 0.5	< 0.5
1,3,5-trimethylbenzene	< 0.5	< 0.5
4-chlorotoluene	< 0.5	< 0.5
tert-butyl-benzene	< 0.5	< 0.5
1,2,4-trimethylbenzene	< 0.5	< 0.5
sec-butyl-benzene	< 0.5	< 0.5
p-isopropyltoluene	< 2.5	< 2.5
1,3-dichlorobenzene	< 0.5	< 0.5
1,4-dichlorobenzene	< 0.5	< 0.5
n-butylbenzene	< 0.5	< 0.5
1,2-dichlorobenzene	< 0.5	< 0.5
1,2-dibromo-3-chloropropene	< 1.0	< 1.0
1,2,4-trichlorobenzene	< 0.5	< 0.5
hexachlorobutadiene	< 0.5	< 0.5
naphthalene	< 0.5	< 0.5
1,2,3-trichlorobenzene	< 0.5	< 0.5

Laboratory Control Sample

Date Analyzed:	10/25/05		
Spike Concentration = 20ug/L	% Recovery	Acceptance Limits	Verdict
dichlorodifluoromethane	129	70-130	ok
chloromethane	107	70-130	ok
vinyl chloride	108	70-130	ok
bromomethane	117	70-130	ok
chloroethane	101	70-130	ok
trichlorofluoromethane	101	70-130	ok
diethyl ether	92.1	70-130	ok
acetone	84.4	70-130	ok
1,1-dichloroethene	92.1	70-130	ok
FREON-113	104	70-130	ok
carbon disulfide	89.0	70-130	ok
dichloromethane	96.4	70-130	ok
tert-butyl alcohol (TBA)	82.8	70-130	ok
methyl-tert-butyl-ether	90.9	70-130	ok
trans-1,2-dichloroethene	93.7	70-130	ok
1,1-dichloroethane	87.6	70-130	ok
di-isopropyl ether (DIPE)	95.1	70-130	ok
ethyl tert-butyl ether (EtBE)	100	70-130	ok
2-butanone	83.6	70-130	ok
2,2-dichloropropane	98.4	70-130	ok
cis-1,2-dichloroethene	91.4	70-130	ok
chloroform	92.1	70-130	ok
bromochloromethane	97.6	70-130	ok
tetrahydrofuran	90.0	70-130	ok
1,1,1-trichloroethane	91.4	70-130	ok
1,1-dichloropropene	90.1	70-130	ok
carbon tetrachloride	90.6	70-130	ok
1,2-dichloroethane	83.9	70-130	ok
benzene	91.9	70-130	ok
tert-amyl methyl ether (TAME)	98.2	70-130	ok
trichloroethene	98.3	70-130	ok
1,2-dichloropropane	87.1	70-130	ok
bromodichloromethane	86.7	70-130	ok
1,4-Dioxane	86.9	70-130	ok
dibromomethane	103	70-130	ok
4-methyl-2-pentanone	83.1	70-130	ok
cis-1,3-dichloropropene	90.3	70-130	ok
toluene	99.1	70-130	ok
trans-1,3-dichloropropene	95.6	70-130	ok
1,1,2-trichloroethane	98.6	70-130	ok
2-hexanone	86.7	70-130	ok
1,3-dichloropropane	93.1	70-130	ok
tetrachloroethene	110	70-130	ok
dibromochloromethane	97.5	70-130	ok
1,2-dibromoethane (EDB)	97.8	70-130	ok
chlorobenzene	101	70-130	ok
1,1,1,2-tetrachloroethane	101	70-130	ok
ethylbenzene	104	70-130	ok
1,1,2,2-tetrachloroethane	91.1	70-130	ok
m&p-xylene	97.6	70-130	ok
o-xylene	91.0	70-130	ok
styrene	94.0	70-130	ok
bromoform	98.9	70-130	ok
isopropylbenzene	92.9	70-130	ok
1,2,3-trichloropropane	84.9	70-130	ok
bromobenzene	99.9	70-130	ok
n-propylbenzene	91.2	70-130	ok
2-chlorotoluene	93.7	70-130	ok
1,3,5-trimethylbenzene	94.3	70-130	ok
4-chlorotoluene	89.3	70-130	ok
tert-butyl-benzene	90.3	70-130	ok
1,2,4-trimethylbenzene	94.0	70-130	ok
sec-butyl-benzene	92.3	70-130	ok
p-isopropyltoluene	95.4	70-130	ok
1,3-dichlorobenzene	95.9	70-130	ok
1,4-dichlorobenzene	95.4	70-130	ok
n-butylbenzene	92.1	70-130	ok
1,2-dichlorobenzene	92.1	70-130	ok
1,2-dibromo-3-chloropropane	80.8	70-130	ok
1,2,4-trichlorobenzene	98.7	70-130	ok
hexachlorobutadiene	108	70-130	ok
naphthalene	89.2	70-130	ok
1,2,3-trichlorobenzene	95.3	70-130	ok

SMF criteria allows 5 compounds to be outside acceptance limits

Surrogates:	Recovery (%)	Acceptance Limits
DIBROMOFLUOROMETHANE	97.5	70-130
1,2-DICHLOROETHANE-D4	101	70-130
TOLUENE-D8	97.3	70-130
4-BROMOFLUOROBENZENE	111	70-130
1,2-DICHLOROBENZENE-D4	107	70-130

Surrogates:	Recovery (%)	Acceptance Limits	Verdict
DIBROMOFLUOROMETHANE	96.1	70-130	ok
1,2-DICHLOROETHANE-D4	99.5	70-130	ok
TOLUENE-D8	97.5	70-130	ok
4-BROMOFLUOROBENZENE	106	70-130	ok
1,2-DICHLOROBENZENE-D4	104	70-130	ok

Instrument: HP GC/MS "S"

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 6010B ANALYSIS
Metals by ICP

QUALITY CONTROL - AQUEOUS

DATE PREPARED: 10/26/2005

QC Sample	Method Blank	Lab Control Sample
Units	mg/L	% Recovery
Acceptance Limits	Results	80-120
Analyte		
Silver (Ag)	<0.005	89.5
Aluminum (Al)	NA	NA
Arsenic (As)	<0.010	93.3
Boron (B)	NA	NA
Barium (Ba)	NA	NA
Beryllium (Be)	<0.005	91.7
Calcium (Ca)	NA	NA
Cadmium (Cd)	<0.005	93.5
Cobalt (Co)	NA	NA
Chromium (Cr)	<0.005	97.8
Copper (Cu)	<0.015	102
Iron (Fe)	<0.025	102
Magnesium (Mg)	NA	NA
Manganese (Mn)	NA	NA
Molybdenum (Mo)	NA	NA
Nickel (Ni)	<0.010	97.3
Lead (Pb)	<0.010	92.4
Antimony (Sb)	<0.025	94.1
Selenium (Se)	<0.025	90.5
Strontium (Sr)	NA	NA
Titanium (Ti)	NA	NA
Thallium (Tl)	<0.025	89.8
Vanadium (V)	NA	NA
Zinc (Zn)	<0.010	93.6

Matrix Spike / Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH ST, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 7470A ANALYSIS
Mercury by Cold Vapor Atomic Absorption

QUALITY CONTROL - Aqueous

Date Prepared: 10/26/2005

QC Sample	Method Blank	Lab Control Sample
Units	mg/L	% Recovery
Acceptance Limits	Results	85-115%
Analyte		
Mercury (Hg)	<0.00050	105

Matrix Spike / Duplicate Spike performed as per method and reported if assigned on Chain of Custody.

GZA GEOENVIRONMENTAL, INC.
ENVIRONMENTAL CHEMISTRY LABORATORY
106 SOUTH STREET, HOPKINTON, MA 01748
MASSACHUSETTS LABORATORY I.D. NO. MA092

EPA METHOD 8082 ANALYSIS
QUALITY CONTROL AQUEOUS

DATE EXTRACTED: 10/26/05
DATE ANALYZED: 10/26/05

METHOD BLANK POLYCHLORINATED BIPHENYLS as AROCLORS	Concentration ug/L-PPB		Quantitation Limit ug/L-PPB
Aroclor 1262	ND		0.2
Aroclor 1260	ND		0.2
Aroclor 1254	ND		0.2
Aroclor 1248	ND		0.2
Aroclor 1242/1016	ND		0.2
Aroclor 1232	ND		0.2
Aroclor 1221	ND		0.2
Surrogates:	(A)	(B)	
Tetrachloro-m-xylene	52.7	57.7	30-150
Decachlorobiphenyl	55.6	59.8	30-150

LABORATORY CONTROL SAMPLE (LCS)	% Recovery		Acceptance Limits
	(A)	(B)	
Aroclor 1016	123	120	40-140
Aroclor 1260	121	106	40-140
Surrogates:			
Tetrachloro-m-xylene	58.3	78.4	30-150
Decachlorobiphenyl	106	126	30-150

*Matrix Spike / Duplicate Spike performed as required per method if sufficient sample is provided, and reported if requested on Chain of Custody.

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
MA092

EPA Method 8270 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Method Blank

Date Extracted:	10/26/05	
Date Analyzed:	10/28/05	
File Name:	K9185	
Semi-Volatile Organics	Result	Reporting Limit
n-nitrosodimethylamine	ND	10
pyridine	ND	100
phenol	ND	10
bis(2-chloroethyl)ether	ND	10
2-chlorophenol	ND	10
1,3-dichlorobenzene	ND	10
1,4-dichlorobenzene	ND	10
benzyl alcohol	ND	20
1,2-dichlorobenzene	ND	10
2-methylphenol	ND	10
bis(2-chloroisopropyl)ether	ND	10
3&4-methylphenol	ND	10
n-nitrosodi-n-propylamine	ND	10
hexachloroethane	ND	10
nitrobenzene	ND	10
isophorone	ND	10
2-nitrophenol	ND	10
2,4-dimethylphenol	ND	10
benzoic acid	ND	10
bis(2-chloroethoxy)methane	ND	10
2,4-dichlorophenol	ND	10
1,2,4-trichlorobenzene	ND	10
naphthalene	ND	2.0
4-chloroaniline	ND	10
hexachlorobutadiene	ND	10
4-chloro-3-methylphenol	ND	20
2-methylnaphthalene	ND	2.0
aniline	ND	10
hexachlorocyclopentadiene	ND	50
2,4,6-trichlorophenol	ND	10
2,4,5-trichlorophenol	ND	10
2-chloronaphthalene	ND	10
2-nitroaniline	ND	50
dimethylphthalate	ND	10
acenaphthylene	ND	2.0
2,6-dinitrotoluene	ND	10
3-nitroaniline	ND	50
acenaphthene	ND	2.0
2,4-dinitrophenol	ND	100
dibenzofuran	ND	10
4-nitrophenol	ND	50
2,4-dinitrotoluene	ND	10
diethylphthalate	ND	10
fluorene	ND	2.0
4-chlorophenyl phenyl ether	ND	10
4-nitroaniline	ND	20
4,6-dinitro-2-methylphenol	ND	50
n-nitrosodiphenylamine	ND	10
4-bromophenyl phenyl ether	ND	10
hexachlorobenzene	ND	10
pentachlorophenol	ND	50
phenanthrene	ND	2.0
anthracene	ND	2.0
carbazole	ND	10
di-n-butylphthalate	ND	15
fluoranthene	ND	2.0
benzidine	ND	10
pyrene	ND	2.0
butylbenzylphthalate	ND	10
benz [a] anthracene	ND	2.0
3,3'-dichlorobenzidine	ND	20
chrysene	ND	2.0
bis(2-ethylhexyl)phthalate	ND	10
di-n-octylphthalate	ND	10
benzo [b] fluoranthene	ND	2.0
benzo [k] fluoranthene	ND	2.0
benzo [a] pyrene	ND	2.0
indeno [1,2,3-cd] pyrene	ND	2.0
dibenz [a,h] anthracene	ND	2.0
benzo [ghi] perylene	ND	2.0

Surrogates:	Recovery (%)	Acceptance Limits
2-FLUOROPHENOL	14.1	15-110
PHENOL-D6	8.28	15-110
NITROBENZENE-D5	45.3	30-130
2-FLUOROBIPHENYL	45.9	30-130
2,4,6-TRIBROMOPHENOL	32.0	15-110
p-TERPHENYL-D14	53.9	30-130

GZA GeoEnvironmental, Inc.
106 South Street
Hopkinton, MA 01748
MA092

EPA Method 8270 Aqueous Method Blank (MB) and Laboratory Control Sample (LCS) Data

Laboratory Control Sample

Date Extracted:	10/28/05		
Date Analyzed:	10/28/05		
File Name:	K9165		
Spike Concentration = 20ug/L	**% Recovery**	**Acceptance Limits**	**Verdict**
n-nitrosodimethylamine	21.8	40-140	out
pyridine	5.68	40-140	out
phenol	19.8	30-130	out
bis(2-chloroethyl)ether	81.1	40-140	ok
2-chlorophenol	67.3	30-130	ok
1,3-dichlorobenzene	67.9	40-140	ok
1,4-dichlorobenzene	67.7	40-140	ok
benzyl alcohol	55.2	40-140	ok
1,2-dichlorobenzene	71.3	40-140	ok
2-methylphenol	54.8	30-130	ok
bis(2-chloroisopropyl)ether	82.1	40-140	ok
3&4-methylphenol	80.8	30-130	ok
n-nitroso-n-propylamine	80.0	40-140	ok
hexachloroethane	61.3	40-140	ok
nitrobenzene	78.6	40-140	ok
isophrene	91.6	40-140	ok
2-nitrophenol	78.6	30-130	ok
2,4-dimethylphenol	79.4	30-130	ok
benzoic acid	0.11	30-130	out
bis(2-chloroethoxy)methane	84.0	40-140	ok
2,4-dichlorophenol	80.3	30-130	ok
1,2,4-trichlorobenzene	78.8	40-140	ok
napthalene	78.3	40-140	ok
4-chloroaniline	64.3	40-140	ok
hexachlorobutadiene	69.7	40-140	ok
4-chloro-3-methylphenol	75.0	30-130	ok
2-methylnapthalene	80.3	40-140	ok
aniline	61.3	40-140	ok
hexachlorocyclopentadiene	33.1	40-140	out
2,4,6-trichlorophenol	80.5	30-130	ok
2,4,5-trichlorophenol	81.3	30-130	ok
2-chloronapthalene	80.9	40-140	ok
2-nitroaniline	81.0	40-140	ok
dimethylphthalate	84.8	40-140	ok
acenapthylene	85.9	40-140	ok
2,6-dinitrotoluene	88.3	40-140	ok
3-nitroaniline	81.0	40-140	ok
acenaphthene	82.9	40-140	ok
2,4-dinitrophenol	50.2	30-130	ok
dibenzofuran	84.6	40-140	ok
4-nitrophenol	16.3	30-130	out
2,4-dinitrotoluene	90.7	40-140	ok
diethylphthalate	86.5	40-140	ok
fluorene	88.3	40-140	ok
4-chlorophenyl phenyl ether	80.3	40-140	ok
4-nitroaniline	95.9	40-140	ok
4,6-dinitro-2-methylphenol	63.3	30-130	ok
n-nitrosodiphenylamine	91.3	40-140	ok
4-bromophenyl phenyl ether	74.2	40-140	ok
hexachlorobenzene	73.7	40-140	ok
pentachlorophenol	83.6	30-130	ok
phenanthrene	89.4	40-140	ok
anthracene	93.0	40-140	ok
carbazole	97.5	40-140	ok
di-n-butylphthalate	95.9	40-140	ok
fluoranthene	85.4	40-140	ok
benzidine	0.02	40-140	out
pyrene	88.9	40-140	ok
butylbenzylphthalate	83.0	40-140	ok
benz [a] anthracene	81.4	40-140	ok
3,3'-dichlorobenzidine	99.1	40-140	ok
chrysene	88.1	40-140	ok
bis(2-ethylhexyl)phthalate	125	40-140	ok
di-n-octylphthalate	93.8	40-140	ok
benzo [b] fluoranthene	77.6	40-140	ok
benzo [k] fluoranthene	82.3	40-140	ok
benzo [a] pyrene	82.6	40-140	ok
indeno [1,2,3-cd] pyrene	81.8	40-140	ok
dibenz [a,h] anthracene	82.7	40-140	ok
benzo [ghi] perylene	82.7	40-140	ok

CAM criteria allows 15% of analytes to exceed criteria.

Surrogates:	**Recovery (%)**	**Acceptance Limits**	**Verdict**
2-FLUOROPHENOL	24.7	15-110	ok
PHENOL-D6	15.6	15-110	ok
NITROBENZENE-D5	69.9	30-130	ok
2-FLUOROBIPHENYL	73.6	30-130	ok
2,4,6-TRIBROMOPHENOL	57.4	15-110	ok
p-TERPHENYL-D14	72.8	30-130	ok

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Project Manager

CHAIN-OF-CUSTODY RECORD

W.O. # 0510-00181 (for lab use only)

A. Urbano 10/25/05

Sample I.D.	Date/Time Sampled (Very important)	Matrix (A=Air, S=Soil, GW=Ground W., SW=Surface W., WW=Waste W., DW=Drinking W., Other (specify))	Clp1 DCont.	GC Screen (VOA)	D596-2 D5512	624	D601 D602	RCB 608	Formaldehyde	8260 C	8021	8021 - 8010 List	8021 - 8020 List	8270 SIM-8/NA+DBT	8082-PCBs Only	8081 - Pest Only	TPH-GC (Mod. 8100)	TPH-IR (1664)	EPH (MA DEP)	VPH (MA DEP)	TCLP (Spec. Below)	Filtering (✓ if requested)	Metals (CP/PM-13 Cl Rus)	Metals (List Below)				Total # of Cont.	Note #
PW-5 INFLUENT	10/24/05 1400	GW						X	X				X				X						X	X	X	X	X	11	
PRESERVATIVE (Cl - HCl, M=MeOH, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*								I	HCL				I				I						P	—	P	NAOH			
CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)*								G	V				G				G						HNO3	P	P	P			

RELINQUISHED BY: [signature] DATE/TIME: RECEIVED BY: [signature] 10-25-05 10:55

RELINQUISHED BY: [signature] DATE/TIME: 10-25-05 RECEIVED BY: [signature] 10/25/05 1310

RELINQUISHED BY: DATE/TIME: RECEIVED BY:

NOTES: Preservatives, special reporting limits, known contamination, additional testing parameters, etc.:
(1) METALS INCLUDE; ANTIMONY, ARSENIC, CADMIUM, CHROMIUM, HEXAVALENT CHROMIUM, COPPER, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, ZINC AND IRON (2) TPH 1664 (3) VOCs 8260C (4) SVOCs 8270D (5) PCB 608 (6) CYANIDE ~~160.2~~ 335.4 (7) TSS 160-2 (8) Total Residual Chlorine 330.5

PROJECT MANAGER: A. URBANO EXT: 3132 REQ'D

DATA REPORT ☑ PDF (Adobe) ☐ ASCII ☐ EXCEL Specify State

LAB USE: CA 0568

TURNAROUND TIME: Standard Rush___ Days, Approved by: TEMP. OF COOLER 3.1 °C 10/25/05 1310 KG

GZA FILE NO: 03.0031 > 51-33 P.O. NO.

PROJECT 106 Falmouth Rd.

LOCATION Mashpee, MA

COLLECTOR(S) W.T. Fortune SHEET 1 OF 1

GZA GEOENVIRONMENTAL, INC.
ENGINEERS AND SCIENTISTS
106 South Street
Hopkinton, MA 01748
(508) 435-9244
FAX (508) 435-9912

GZAP003

R.I. Analytical

Specialists in Environmental Services

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Attn: Ms. Michelle Mirenda
Engineers and Scientists
106 South Street
Hopkinton, MA 01748

Date Received: 10/25/05
Date Reported: 11/1/05
P.O. #: 08-28456
Work Order #: 0510-18263

DESCRIPTION: GZA FILE# 03.0031751.33 106 FALMOUTH ROAD - MASHPEE, MA

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies and all NELAC requirements were met. The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844, NY-11726

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:

Data Reporting

enc: Chain of Custody

41 Illinois Avenue, Warwick, RI 02888
Tel: (401) 737-8500 Fax: (401) 738-1970

ACCREDITED IN ACCORDANCE WITH

131 Coolidge Street, Bldg 2, Hudson, MA 01749
Tel: (978) 568-0041 Fax: (978) 568-0078

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

GZA GeoEnvironmental Labs
Date Received: 10/25/05
Work Order #: 0510-18263

Approved by: _____
Data Reporting

Sample # 001
SAMPLE DESCRIPTION: PW-5 INFLUENT
SAMPLE TYPE: GRAB
SAMPLE DATE/TIME: 10/24/2005 @ 14:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
T. SUSPENDED SOLIDS	<2.0	2.0	mg/l	EPA 160.2	10/28/05	SR
T. RESIDUAL CHLORINE	<0.1	0.1	mg/l	EPA 330.5	10/28/05	ML
TOTAL CYANIDE	<0.01	0.01	mg/l	EPA 335.2	10/31/05	EC
HEXAVALENT CHROMIUM	<0.02	0.02	mg/l	SM3500-CR D	10/25/05	ML

WHITE COPY - Original YELLOW COPY - Lab Files PINK COPY - Project Manager

CHAIN-OF-CUSTODY RECORD

Bial

W.O. # 0510-00181 (for lab use only)

Sample I.D.	Date/Time Sampled (Very Important)	Matrix A=Air S=Soil GW=Ground W. SW=Surface W. WW=Waste W. DW=Drinking W. Other (specify)	Total # of Cont.	Note #
PW-5 Influent	10/24/05 1100	GW	5	

ANALYSIS REQUIRED: Bial Residual Chlorine; TSS; Cyanide; Hex-Chrom

WW ONLY: Cl2 (Cond.); DO Screen (VOA); CBOD-5 (CBOD-5); COD; DWH (DWH); TOC; Formaldehyde

8260; 8021; 8021 - 1010/1016 Lite; 8021 - 8020/8015 Lite; 8270 (EPA) DRH (DRH); 8082-PCBs Only; 8081 - Pest Only; TPH-GC (Mod. 8100); TPH-GC w/FNG; EPH (MA DEP); VPH (MA DEP); VOLP (Spec. Delim); Filtering (✓ if requested); Metals (DWH-13 or 8-4); Matrix (List Below)

PRESERVATIVE (Cl - HCl, M=MeOH, N - HNO3, S - H2SO4, Na - NaOH, O - Other)*: P P Na P

CONTAINER TYPE (P-Plastic, G-Glass, V-Vial, O-Other)*: P P P P

RELINQUISHED BY: [illegible] DATE/TIME 10/25/05 1430 RECEIVED BY: Bill Manuel 10-25-05 1505

RELINQUISHED BY: Bill Manuel 1545 DATE/TIME 10-25/5 RECEIVED BY: EASTERN CONNECTION 10-25/5 1646

RELINQUISHED BY: EASTERN CONNECTION DATE/TIME 10/25/05 1835 RECEIVED BY: L R Ray

NOTES: Preservatives, special reporting limits, known contamination, additional testing parameters, etc.:
① Residual Chlorine 330.5
② TSS - 160.2
③ Cyanide 335.4
0510-18263 due 11/1/05

PROJECT MANAGER: Michelle Miranda EXT: 4710

DATA REPORT ☑ PDF (Adobe) ☐ ASCII ☐ EXCEL Specify State _____

TURNAROUND TIME: Standard Rush ___ Days, Approved by: _____

LAB USE: TEMP. OF COOLER _____ °C

GZA GEOENVIRONMENTAL, INC.
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GZA FILE NO: 03.0031751.33 P.O. NO. 8-28456

PROJECT 86 Falmouth Rd.

LOCATION Mashpee, MA

COLLECTOR(S) W.T.F.

SHEET 1 OF 1

GZAP003