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October 15, 2008

US Environmental Protection Agency
Ann Herrick
Industrial NPDES Permits (CIP)
1 Congress Street, Suite 1100
Boston, MA 02114-2023

RE: Submittal of NOI for RGP, Former Compo Chemical Company, 271 Branch Street, Mansfield, MA, RTN 4-0104, Tier 1B Permit No. 82654

Dear Ms. Herrick:

On behalf of Compo Chemical Company, Inc. (Compo), ENSR Corporation (ENSR) is submitting this Notice of Intent (NOI) for Remediation General Permit (RGP) for the site located at 271 Branch Street in Mansfield, Massachusetts. The RGP is needed for onsite discharge of treated groundwater generated during soil excavation and dewatering activities. The soil excavation is of short-term duration (approximately five weeks out of a ten week excavation period), and is needed to remediate VOC- and PCB-impacted soil in the former Compo Landfill. The activities at the Compo site are conducted under the provisions for Phase IV Remedy Implementation Plan (RIP) (Section 310 CMR 40.0874) of the Massachusetts Contingency Plan (MCP).

Should you have any questions or require additional information regarding this NOI please do not hesitate to contact me at 978-589-3092, or via e-mail at Marybeth.hayes@aecom.com.

Sincerely,
ENSR

Sincerely,

Mary Beth Hayes
Project Manager

David Austin
Licensed Site Professional

Attachment

cc: Mr. Scott Leite, Mansfield Board of Health, 6 Park Row, Mansfield, MA 02048
DEP Southeast Regional Office

J:\Rem_Eng\Project Files\P10 (1000 - 1999)\01817-013 Compo Landfill\005 GW Treatment\EPA Letter for RGP.doc

Prepared for:
Compo Chemical Company, Inc.
Littleton, CO

Notice of Intent (NOI) for EPA Remediation General Permit

Landfill Remediation Project
Former Compo Chemical Company Site

271 Branch Street, Mansfield, Massachusetts

RTN 4-0104, Tier 1B Permit No. 82654

ENSR Corporation
October 2008
Document No.: 01817-013-EPA RGP

ENSR | AECOM

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**: Former Compo Chemical Facility		**Facility/site** address:	
Location of **facility/site**: longitude: 42 01 latitude: 71 12	Facility SIC code(s): 2891	Street: 271 Branch St. (in MassDEP Sites list as 240 Branch)	
b) Name of **facility/site owner:** Jarrett Laraway		Town: Mansfield	
Email address of owner: jlaraway@irgco.com		State: MA	Zip: 02048 / County: Bristol
Telephone no.of facility/site **owner**: (303) 972 - 6633			
Fax no. of facility/site **owner**: (303) 972 – 6655		**Owner** is (check one): 1. Federal____ 2. State/Tribal____ 3. Private__✔___ 4. other, if so, describe:	
Address of **owner** (if different from site):			
Street: 7991 Shaffer Pkwy, Ste 100			
Town: Littleton	State: CO	Zip: 80127	County:
c) Legal name of **operator**: EQ Northeast	**Operator** telephone no: 508-384-6151		
	Operator fax no.: 508-384-6028		**Operator** email: steve.marland@eqonline.com
Operator contact name and title: Steve Marland, Project Manager			
Address of **operator** (if different from owner):	Street: 185 Industrial Road		
Town: Wrentham	State: MA	Zip: 02093	County: Norfolk

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:
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: RTN 4-0104 2. permit or license # assigned: Tie 1B 82654 3. state agency contact information: name, location, and telephone number: Mr. Gerard Martin, MassDEP SRO, 20 Riverside Dr, Lakeville MA 02347	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:

Groundwater will be pumped from the excavation, filtered to remove suspended sediments, treated with GAC, stored and discharged to the on-site Wetland Area. Discharge rate = 25 - 50 gpm.

b) Provide the following information about each discharge:	1) Number of discharge points: 1	2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft3/s)? Max. flow 0.11 Average flow 0.083 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. Discharge rate is between 25 to 50 gpm, and average discharge rate equals 37.5 gpm.

3) Latitude and longitude of each discharge within 100 feet: pt.1:long. 47 lat. 71; 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.

4) If hydrostatic testing, total volume of the discharge (gals): NA	5) Is the discharge intermittent_✔_or seasonal_____? Is discharge ongoing Yes____ No_✔_?__

c) Expected dates of discharge (mm/dd/yy): start 11/15/08 end 12/30/08

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 min-imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids		✔	4	grab	2540D	5 mg/L	60,000	16.3	60,000	12.25
2. Total Residual Chlorine	✔		4	grab	4500 Cl G	0.06 mg/L	ND	0	ND	0
3. Total Petroleum Hydrocarbons	✔		4	grab	1664A	5 mg/L	ND	0	ND	0
4. Cyanide	✔		4	grab	4500 CN CE	0.005 mg/L	ND	0	ND	0
5. Benzene		✔	4	grab	8260	1.0	14.88	0.0040	14.88	0.0040
6. Toluene		✔	4	grab	8260	1.0	807	0.219	807	0.165
7. Ethylbenzene		✔	4	grab	8260	1.0	16.05	0.0044	16.05	0.0044
8. (m,p,o) Xylenes		✔	4	grab	8260	2.0	106.7	0.029	106.7	0.029
9. Total BTEX[4]		✔	4	grab	8260	10.0	933	0.257	933	0.193

[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	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide [5] (1,2- Dibromo-methane)	✔		4	grab	8011	0.01	ND	0	ND	0
11. Methyl-tert-Butyl Ether (MtBE)	✔		4	grab	8260	1.0	ND	0	ND	0
12. tert-Butyl Alcohol (TBA)		✔	4	grab	8260	25	32.3	0.0087	32.3	0.0066
13. tert-Amyl Methyl Ether (TAME)	✔		4	grab	8260	1.0	ND	0	ND	0
14. Naphthalene	✔		4	grab	8260	1.0	ND	0	ND	0
15. Carbon Tetra-chloride	✔		4	grab	8260	1.0	ND	0	ND	0
16. 1,4 Dichlorobenzene	✔		4	grab	8260	1.0	ND	0	ND	0
17. 1,2 Dichlorobenzene	✔		4	grab	8260	1.0	ND	0	ND	0
18. 1,3 Dichlorobenzene	✔		4	grab	8260	1.0	ND	0	ND	0
19. 1,1 Dichloroethane		✔	4	grab	8260	1.0	0.5	0.00014	0.5	0.000102
20. 1,2 Dichloroethane	✔		4	grab	8260	1.0	ND	0	ND	0
21. 1,1 Dichloroethylene	✔		4	grab	8260	1.0	ND	0	ND	0
22. cis-1,2 Dichloro-ethylene	✔		4	grab	8260	1.0	ND	0	ND	0
23. Dichloromethane (Methylene Chloride)	✔		4	grab	8260	5.0	ND	0	ND	0
24. Tetrachloroethylene	✔		4	grab	8260	1.0	ND	0	ND	0

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

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	Maximum daily value		Avg. daily Value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✔		4	grab	8260	1.0	ND	0	ND	0
26. 1,1,2 Trichloroethane	✔		4	grab	8260	1.0	ND	0	ND	0
27. Trichloroethylene	✔		4	grab	8260	1.0	ND	0	ND	0
28. Vinyl Chloride	✔		4	grab	8260	1.0	ND	0	ND	0
29. Acetone	✔		4	grab	8260	25	ND	0	ND	0
30. 1,4 Dioxane		✔	4	grab	8260	3.0	2.04	.00055	2.04	.00042
31. Total Phenols	✔		4	grab	8270	350	ND	0	ND	0
32. Pentachlorophenol	✔		4	grab	8270 SIM	1.0	ND	0	ND	0
33. Total Phthalates [6] (Phthalate esthers)		✔	4	grab	8270C	11.0	4.625	.0012	4.625	.0009
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	✔		4	grab	8270C	6.6	ND	0	ND	0
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
a. Benzo(a) Anthracene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
b. Benzo(a) Pyrene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
c. Benzo(b)Fluoranthene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
d. Benzo(k) Fluoranthene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
e. Chrysene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0

[6] 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	Maximum daily value		Average daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
g. Indeno(1,2,3-cd) Pyrene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	✔		4	grab	8270C(SIM)	0.45	ND	0	ND	0
h. Acenaphthene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
i. Acenaphthylene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
j. Anthracene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
k. Benzo(ghi) Perylene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
l. Fluoranthene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
m. Fluorene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
n. Naphthalene-	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
o. Phenanthrene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
p. Pyrene	✔		4	grab	8270C(SIM)	0.05	ND	0	ND	0
37. Total Polychlorinated Biphenyls (PCBs)		✔	4	grab	8082	0.11	0.275	0.000075	0.275	.000056
38. Antimony	✔		4	grab	7041	2.5	ND	0	ND	0
39. Arsenic		✔	4	grab	6010	2.5	1.76	0.00048	1.76	0.00036
40. Cadmium	✔		4	grab	6010	3.0	ND	0	ND	0
41. Chromium III	✔		4	grab	6010	60	ND	0	ND	0
42. Chromium VI	✔		4	grab	7196	10	ND	0	ND	0

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	Maximum daily value		Avg. daily value	
							concentration (ug/l)	**mass** (kg)	**concentration** (ug/l)	**mass** (kg)
43. Copper	✔		4	grab	6010	10	ND	0	ND	0
44. Lead	✔		4	grab	7421	3	ND	0	ND	0
45. Mercury	✔		4	grab	7470	0.5	ND	0	ND	0
46. Nickel	✔		4	grab	6010	10	ND	0	ND	0
47. Selenium	✔		4	grab	7740	5	ND	0	ND	0
48. Silver	✔		4	grab	6010	3	ND	0	ND	0
49. Zinc		✔	4	grab	6010	25	73.5	0.020	73.5	0.015
50. Iron		✔	4	grab	6010	50	51,400	13.99	51,400	10.5
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? Iron
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: Iron DF: 0.16	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: Iron

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

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:						
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 35 Maximum flow rate of treatment system 100 Design flow rate of treatment system 100						
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: On-site wetland is isolated and not hydrogeologically connected to a tributary to Back Bay Brook, drains to southeast. The receiving water is Canoe River.						
c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water: 1. For multiple discharges, number the discharges sequentially. 2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.						
d) Provide the state water quality classification of the receiving water 2,						
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 0.50 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)? 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 ? Yes___ 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.

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: Former Compo Chemical Facility, Mansfield, MA

Operator signature:

Title: Project Manager

Date: 10/15/08

B. Submission of NOI to EPA - All operators applying for coverage under this General Permit must submit a written Notice of Intent (NOI) to EPA. Signed and completed NOI forms and attachments must be submitted to EPA-NE at:

US Environmental Protection Agency
Ann Herrick
Industrial NPDES Permits (CIP),
1 Congress Street, Suite 1100
Boston, MA 02114-2023

or electronically mailed to NPDES.Generalpermits@epa.gov,
or faxed to the EPA Office at 617-918-0505.

If filling out the suggested NOI form electronically on EPA's website, the signature page must be signed and faxed or mailed to EPA at the phone number or address listed in Section I.B. below.

1. Filing with the states - A copy of any NOI form filed with EPA-NE must also be filed with state agencies. The state agency may elect to develop a state specific form or other information requirements.

a) Discharges in Massachusetts - In addition to the NOI, permit applicants must submit copies of the State Application Form BRPWM 12, Request for General Permit coverage for the RGP. The application form and the Transmittal Form for Permit Application and Payment, may be obtained from the Massachusetts Department of Environmental Protection (MA DEP) website at www.state.ma.us/dep. Municipalities are fee-exempt, but should send a copy of the transmittal form to that address for project tracking purposes. All applicants should keep a copy of the transmittal form and a copy of the application package for their records.

1) A copy of the NOI, the transmittal form, a copy of the check, and Form BRPWM 12 should be sent to:

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

2) A copy of the transmittal form and the appropriate fee should be sent to:

Massachusetts Department of Environmental Protection
P.O. Box 4062
Boston, MA 02111

Please note: Applicants for discharges in Massachusetts should note that under 310 CMR 40.000, *as a matter of state law*, the general permit only applies to discharges that are **not** subject to the Massachusetts Contingency Plan (MCP) and 310 CMR 40.000. Therefore, discharges subject to the MCP are **not** required to fill out and submit the State Application Form BRPWM 12 or pay the state fees. However, they must submit a NOI to EPA.

Table 3. Descriptive information, measured basin characteristics, streamflow-gaging stations used for correlations, discharge measurements, and streamflow statistics for the low-flow partial-record stations in the network operated in Massachusetts from 1989 to 1996—*Continued*

TAUNTON RIVER BASIN

01108320 Canoe River near Norton, MA

LOCATION.--Lat 41°58'38", long 71°08'40", Bristol County, at bridge on Plain Street, 2.4 mi northeast of Norton.

PERIOD OF RECORD.--1965–68, 1978–81, 1983, 1990–91.

REMARKS.-- Streamflow affected by dam regulations and withdrawals by municipal supply wells.

BASIN CHARACTERISTICS.--

Drainage area = 18.3 mi^2	Area of water bodies = 0.18 mi^2	Minimum elevation = 69 ft
Area of stratified drift = 14.1 mi^2	Total length of streams = 56.5 mi	Maximum elevation = 359 ft
Area of wetlands = 1.62 mi^2	Mean basin slope = 0.93 percent	Mean elevation = 211 ft

STATION IDENTIFICATION NUMBERS OF GAGING STATIONS USED FOR CORRELATION.--
01109000, 01111300, 01105600, 01105730, 01105870, 01111200

DISCHARGE MEASUREMENTS.--

Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)	Date	Discharge (ft^3/s)
8-31-65	0.40	9-21-67	4.32	8-18-80	1.70	7-10-90	8.87
9-09-65	.24	10-25-67	6.97	10-08-80	1.20	9-06-90	5.37
8-22-66	.66	9-19-68	2.68	6-19-81	2.90	10-04-90	4.61
9-12-66	2.31	9-12-78	2.00	8-13-81	.83	6-26-91	3.04
8-23-67	9.57	7-10-79	4.50	7-20-83	2.40	7-22-91	.86
9-06-67	8.85	5-15-80	31.0	9-07-83	1.70	8-29-91	7.50
9-14-67	5.50	7-15-80	2.90				

ESTIMATED STREAMFLOW STATISTICS.--

Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)	Exceedance probability (percent)	Estimated discharge (ft^3/s)	Standard error (percent)
99	0.70	11.1	70	10.3	9.8
98	.97	9.5	65	13.6	11.2
97	1.22	8.4	60	17.3	12.4
95	1.66	7.3	55	22.2	13.8
93	2.10	6.6	50	27.3	14.9
90	2.75	6.2	August median	4.71	6.9
85	3.97	6.4	7Q10	.50	14.4
80	5.47	7.2	7Q2	1.64	8.6
75	7.55	8.4			

b) Discharges in New Hampshire - applicants must provide a copy of the Notice of Intent to:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
P.O. Box 95
Concord, New Hampshire 03302-0095.

2. Filing with Municipalities - A copy of the NOI must be submitted to the municipality in which the proposed discharge would be located.

Figures

BRANCH STREET

APPROXIMATE PAVED AREA

EXCAVATED TOPSOIL STOCKPILE

SOIL AMENDMENT BLENDING

GATE

CLEAN SOIL STOCKPILE

LANDSCAPED AREA

ASPHALT PARKING AREA

SCRAP METAL ROLLOFF

TRUCK ENTRANCE

HAUL ROAD

21,000 SQ. FEET HEAVY CLEARING

MW-103

MAXYMILLIAN TREATMENT AREA

COMPO PROPERTY

DRUM STORAGE AREA

OVERSIZE DEBRIS AND METAL SCRAP STOCKPILE

CHAIN LINK FENCE

GATE

HAUL ROAD

TEVET SOIL TREATMENT AREA

CONTAMINATED SOIL STOCKPILE

HAUL ROAD

TRACKING PAD

DECONTAMINATION PAD

TREATMENT BUILDING

GATE

ASPHALT PARKING AREA

CONSTRUCTION TRAILER

MW-613

MW-606

RUBBERY WASTE STOCKPILE

APPROXIMATE TOE OF LANDFILL SLOPE AND EXTENT OF COVER

GROUNDWATER TREATMENT AREA

MW-102R

VELOCITY DIFFUSER AND WATER DISCHARGE AREA

FORMER N.Y. N.H. & H.R.R.

LEGEND:

- PROPERTY BOUNDARY
- WETLAND BORDER
- APPROX. 100' WETLAND BUFFER
- FENCE
- HAY BALES
- PINE TREE SCREEN
- MONITORING WELL
- PIEZOMETER
- SPARGE WELL
- AIR SAMPLING LOCATION

GATE

FORESTED WETLAND

MW-213S

MP-2

MW-208D

MP-1S

MP-4

MP-3

GATE

PLUME MIGRATION CONTROL SYSTEM

MW-405

35 0 35 70

SCALE IN FEET
1" = 35'

REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:	C.M.
DRAWN BY:	P.A.P.
CHECKED BY:	C.M.
APPROVED BY:	M.H.

ENSR | AECOM

ENSR CORPORATION
2 TECHNOLOGY PARK DRIVE
WESTFORD, MASSACHUSETTS 01886
PHONE: (978) 589-3000
FAX: (978) 589-3100
WEB: HTTP://WWW.ENSR.AECOM.COM

SITE LAYOUT & AIR SAMPLING LOCATIONS
COMPO CHEMICAL
240 BRANCH STREET
MANSFIELD, MA

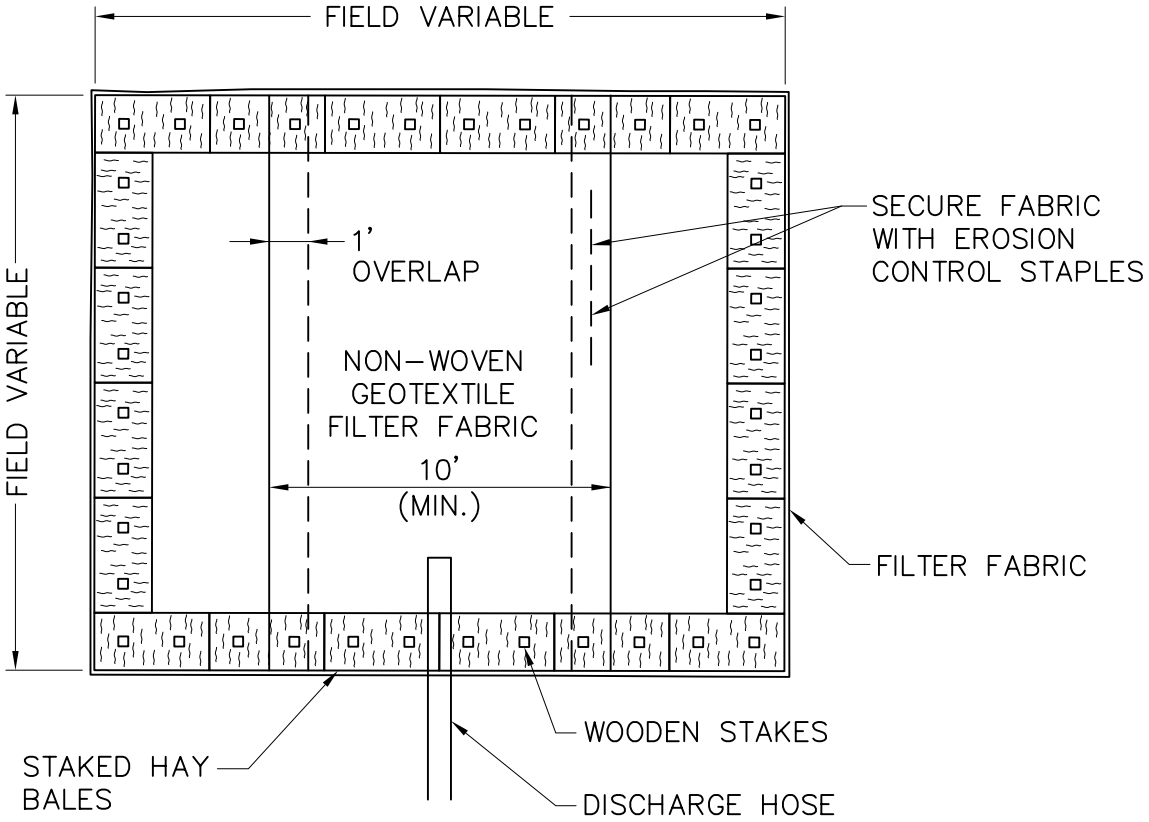
SCALE:	DATE:	PROJECT NUMBER:
1"=35'	8/08	01817-013-01B

DRAWING NUMBER:

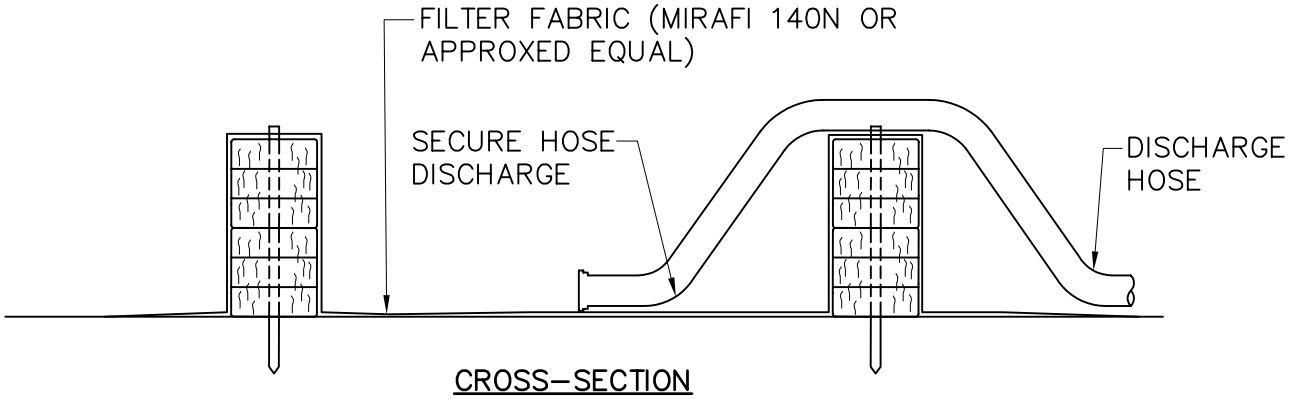
2

SHEET NUMBER:

X



PLAN VIEW



CROSS-SECTION

NOTES:

1. NUMBER OF BALES MAY VARY DEPENDING ON SITE CONDITIONS.
2. THE BASIN TO BE SIZED TO PREVENT DISCHARGE WATER FROM OVERTOPPING BASIN.
3. KEEP AS FAR FROM WETLANDS AS PRACTICAL.
4. CLEAN AND REMOVE AS SOON AS DEWATERING IS COMPLETE.

ENSR | AECOM

ENSR CORPORATION
2 TECHNOLOGY PARK DRIVE
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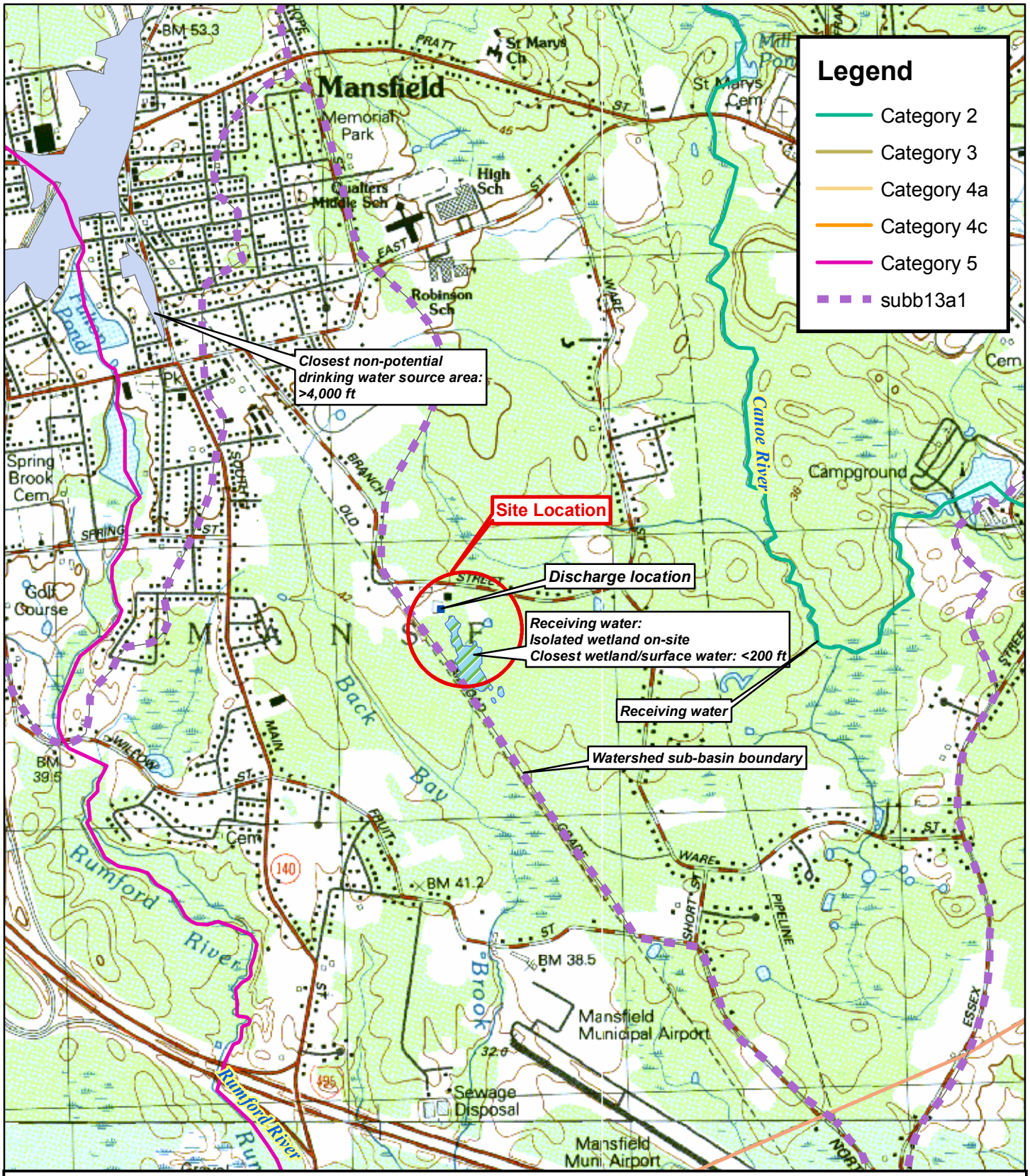
PHONE: (978) 589-3000
FAX: (978) 589-3100
WEB: HTTP://WWW.ENSR.AECOM.COM

DEWATERING HAYBALE BASIN

FIGURE NUMBER: 3

DRAWN BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
J.E.B.	9/06	01817-008-0006	1

FILENAME: 01817-008-02A.DWG



USGS Topographic Quadrangle
Mansfield, MA

N

Meters
0 130 260 520 780 1,040

Feet
0 500 1,000 2,000 3,000 4,000

Site Locus and Drainage Pathway

Compo
140 Branch Street
Mansfield, MA

SCALE	DATE	PROJECT NO.
1:18000	9/06	01817-008

ENSR | AECOM

Figure Number

4

C:\My Documents\GIS projects\Compo.mxd

Appendix A

Laboratory Data - Groundwater Samples

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

PROJECT NARRATIVE

Pete Pelletier
ENSR International
2 Technology Park Drive
Westford, MA 01886

RE: Compo-RGP
ESS Laboratory Work Order Number: 0807252

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this Project Narrative, the entire report has been paginated. The ESS Laboratory Certifications sheet is the final report page. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been mailed. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

Date: July 28, 2008

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration may be used instead of automated integration because it produces more accurate results. All ICP Metals were analyzed using the established linear dynamic range to determine acceptable analytical results.

ESS Laboratory certifies that the test results meet the requirements of NELAC, except where noted within this project narrative.
Samples were analyzed in accordance with the Guidelines Establishing Test Procedures for the Analysis of Pollutants, 40 CFR Part 136, as amended.

Sample Receipt
The following sample(s) were received on July 16, 2008 for the analyses specified on the enclosed Chain of Custody Record.

Laboratory ID	Matrix	Client Sample ID
0807252-01	Ground Water	PZ-04
0807252-02	Ground Water	V-213
0807252-03	Ground Water	MW-402
0807252-04	Ground Water	MW-404
0807252-05	Aqueous	Trip Blank

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

PROJECT NARRATIVE

3005A/6000/7000 Dissolved Metals

0807252-01 **Present in Method Blank.**
Iron

0807252-02 **Present in Method Blank.**
Iron

0807252-03 **Present in Method Blank.**
Iron

0807252-04 **Present in Method Blank.**
Iron

3005A/6000/7000 Total Metals

BG81702-MS1 **Matrix Spike recovery is above upper control limit.**
Iron

8260B Volatile Organic Compounds

BG81812-BS1 **Blank Spike recovery is above upper control limit.**
Acetone

BG81812-BSD1 **Blank Spike recovery is above upper control limit.**
Acetone

BRG0197-CCV1 **Continuing Calibration recovery is below lower control limit.**
1,4-Dioxane - Screen

8270C Semi-Volatile Phenolic Compounds

BG82229-BSD1 **Relative percent difference for duplicate is outside of criteria.**
2,4-Dinitrophenol

8270C(SIM) Polynuclear Aromatic Hydrocarbons

BRG0145-CCV1 **Calibration required quadratic regression.**
Pentachlorophenol

BRG0145-CCV2 **Calibration required quadratic regression.**
Pentachlorophenol

BRG0145-CCV2 **Continuing Calibration recovery is below lower control limit.**
Benzo(g,h,i)perylene

Classical Chemistry

BG81626-MS1 **Matrix Spike recovery is below lower control limit.**
Total Residual Chlorine

No other observations noted.

End of Project Narrative.

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: PZ-04
Date Sampled: 07/16/08 09:45
Percent Solids: N/A
Initial Volume: 950
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-01
Sample Matrix: Ground Water
Analyst: SEP
Prepared: 07/17/08

608 Polychlorinated Biphenyls (PCB)

Analyte		Results	Units	MRL	MDL	Limit	DF	Analyzed
Aroclor 1016		ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1221		ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1232		ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1242		ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1248		ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1254		ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1260	J	**0.06**	ug/L	0.11	0.03		1	07/18/08
Aroclor 1262		ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1268		ND	ug/L	0.11	0.03		1	07/18/08

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*85 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*87 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*76 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*79 %*		*30-150*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: PZ-04
Date Sampled: 07/16/08 09:45
Percent Solids: N/A

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-01
Sample Matrix: Ground Water

3005A/6000/7000 Dissolved Metals

Analyte		Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V
Antimony		ND	ug/L	2.5	7041		1	SVD	07/19/08	100	50
Arsenic		ND	ug/L	2.5	7060A		1	SVD	07/18/08	100	50
Cadmium		ND	ug/L	2.5	6010B		1	SVD	07/17/08	100	50
Copper		ND	ug/L	10	6010B		1	SVD	07/17/08	100	50
Iron	B	**40100**	ug/L	50	6010B		1	SVD	07/17/08	100	50
Lead		ND	ug/L	2.5	7421		1	SVD	07/18/08	100	50
Mercury		ND	ug/L	0.50	7470A		1	JP	07/18/08	20	40
Nickel		ND	ug/L	25	6010B		1	SVD	07/17/08	100	50
Selenium		ND	ug/L	5.0	7740		1	SVD	07/18/08	100	50
Silver		ND	ug/L	5	6010B		1	SVD	07/17/08	100	50
Zinc		ND	ug/L	25	6010B		1	SVD	07/17/08	100	50

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: PZ-04
Date Sampled: 07/16/08 09:45
Percent Solids: N/A

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-01
Sample Matrix: Ground Water

3005A/6000/7000 Total Metals

Analyte	Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V
Antimony	ND	ug/L	2.5	7041		1	SVD	07/19/08	100	50
Arsenic	ND	ug/L	2.5	7060A		1	SVD	07/18/08	100	50
Cadmium	ND	ug/L	2.5	6010B		1	SVD	07/17/08	100	50
Chromium	ND	ug/L	10	6010B		1	SVD	07/17/08	100	50
Chromium III	ND	ug/L	60	calc		1	SVD	07/17/08	1	1
Copper	ND	ug/L	10	6010B		1	SVD	07/17/08	100	50
Iron	**50400**	ug/L	50	6010B		1	SVD	07/17/08	100	50
Lead	ND	ug/L	2.5	7421		1	SVD	07/18/08	100	50
Mercury	ND	ug/L	0.50	7470A		1	JP	07/18/08	20	40
Nickel	ND	ug/L	25	6010B		1	SVD	07/17/08	100	50
Selenium	ND	ug/L	5.0	7740		1	SVD	07/18/08	100	50
Silver	ND	ug/L	5	6010B		1	SVD	07/17/08	100	50
Zinc	**41**	ug/L	25	6010B		1	SVD	07/17/08	100	50

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: PZ-04
Date Sampled: 07/16/08 09:45
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 5030B

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-01
Sample Matrix: Ground Water
Analyst: MD

8260B Volatile Oxygenate Compounds

Analyte		Results	Units	MRL	MDL	Limit	DF	Analyzed
Tertiary-butyl Alcohol	J	**22.0**	ug/L	25.0	10.0		1	07/21/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*107 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*104 %*		*70-130*
Surrogate: Dibromofluoromethane	*106 %*		*70-130*
Surrogate: Toluene-d8	*110 %*		*70-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: PZ-04
Date Sampled: 07/16/08 09:45
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 5030B

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-01
Sample Matrix: Ground Water
Analyst: RES

8260B Volatile Organic Compounds

Analyte		Results	Units	MRL	MDL	Limit	DF	Analyzed
1,1,1-Trichloroethane		ND	ug/L	1.0	0.2		1	07/18/08
1,1,2-Trichloroethane		ND	ug/L	1.0	0.2		1	07/18/08
1,1-Dichloroethane	J	**0.7**	ug/L	1.0	0.2		1	07/18/08
1,1-Dichloroethene		ND	ug/L	1.0	0.3		1	07/18/08
1,2-Dibromoethane		ND	ug/L	1.0	0.2		1	07/18/08
1,2-Dichlorobenzene		ND	ug/L	1.0	0.2		1	07/18/08
1,2-Dichloroethane		ND	ug/L	1.0	0.2		1	07/18/08
1,3-Dichlorobenzene		ND	ug/L	1.0	0.2		1	07/18/08
1,4-Dichlorobenzene		ND	ug/L	1.0	0.1		1	07/18/08
1,4-Dioxane - Screen		ND	ug/L	500	50.0		1	07/18/08
Acetone		ND	ug/L	25.0	5.0		1	07/18/08
Benzene		**4.0**	ug/L	1.0	0.1		1	07/18/08
Carbon Tetrachloride		ND	ug/L	1.0	0.2		1	07/18/08
cis-1,2-Dichloroethene		ND	ug/L	1.0	0.2		1	07/18/08
Ethylbenzene		ND	ug/L	1.0	0.2		1	07/18/08
Methyl tert-Butyl Ether		ND	ug/L	1.0	0.3		1	07/18/08
Methylene Chloride		ND	ug/L	4.0	0.5		1	07/18/08
Naphthalene		ND	ug/L	1.0	0.3		1	07/18/08
Tertiary-amyl methyl ether		ND	ug/L	1.0	0.2		1	07/18/08
Tetrachloroethene		ND	ug/L	1.0	0.2		1	07/18/08
Toluene		ND	ug/L	1.0	0.1		1	07/18/08
Trichloroethene		ND	ug/L	1.0	0.2		1	07/18/08
Vinyl Chloride		ND	ug/L	1.0	0.1		1	07/18/08
Xylene O		ND	ug/L	1.0	0.2		1	07/18/08
Xylene P,M		**2.7**	ug/L	2.0	0.3		1	07/18/08
Xylenes (Total)		ND	ug/L	3.0			1	07/18/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*106 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*85 %*		*70-130*
Surrogate: Dibromofluoromethane	*101 %*		*70-130*
Surrogate: Toluene-d8	*105 %*		*70-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: PZ-04
Date Sampled: 07/16/08 09:45
Percent Solids: N/A
Initial Volume: 910
Final Volume: 0.25
Extraction Method: 3510C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-01
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 07/17/08

8270C(SIM) Polynuclear Aromatic Hydrocarbons

Analyte	Results	Units	MRL	Limit	DF	Analyzed
2-Methylnaphthalene	ND	ug/L	0.22		1	07/17/08
Acenaphthene	ND	ug/L	0.22		1	07/17/08
Acenaphthylene	ND	ug/L	0.22		1	07/17/08
Anthracene	ND	ug/L	0.22		1	07/17/08
Benzo(a)anthracene	ND	ug/L	0.05		1	07/17/08
Benzo(a)pyrene	ND	ug/L	0.05		1	07/17/08
Benzo(b)fluoranthene	ND	ug/L	0.05		1	07/17/08
Benzo(g,h,i)perylene	ND	ug/L	0.22		1	07/17/08
Benzo(k)fluoranthene	ND	ug/L	0.05		1	07/17/08
Chrysene	ND	ug/L	0.05		1	07/17/08
Dibenzo(a,h)Anthracene	ND	ug/L	0.05		1	07/17/08
Fluoranthene	ND	ug/L	0.22		1	07/17/08
Fluorene	ND	ug/L	0.22		1	07/17/08
Indeno(1,2,3-cd)Pyrene	ND	ug/L	0.05		1	07/17/08
Naphthalene	ND	ug/L	0.22		1	07/17/08
Pentachlorophenol	ND	ug/L	1.10		1	07/17/08
Phenanthrene	ND	ug/L	0.22		1	07/17/08
Pyrene	ND	ug/L	0.22		1	07/17/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*60 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*79 %*		*30-130*
Surrogate: Nitrobenzene-d5	*78 %*		*30-130*
Surrogate: p-Terphenyl-d14	*68 %*		*30-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: PZ-04
Date Sampled: 07/16/08 09:45
Percent Solids: N/A
Initial Volume: 920
Final Volume: 1
Extraction Method: 3520C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-01
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 07/22/08

8270C Semi-Volatile Phenolic Compounds

Analyte	Results	Units	MRL	MDL	Limit	DF	Analyzed
2,3,4,6-Tetrachlorophenol	ND	ug/L	54.3	8.7		1	07/23/08
2,4,5-Trichlorophenol	ND	ug/L	10.9	3.6		1	07/23/08
2,4,6-Trichlorophenol	ND	ug/L	10.9	3.6		1	07/23/08
2,4-Dichlorophenol	ND	ug/L	10.9	3.6		1	07/23/08
2,4-Dimethylphenol	ND	ug/L	54.3	4.3		1	07/23/08
2,4-Dinitrophenol	ND	ug/L	54.3	17.4		1	07/23/08
2-Chlorophenol	ND	ug/L	10.9	3.6		1	07/23/08
2-Methylphenol	ND	ug/L	10.9	3.6		1	07/23/08
2-Nitrophenol	ND	ug/L	10.9	3.6		1	07/23/08
3+4-Methylphenol	ND	ug/L	21.7	7.1		1	07/23/08
4,6-Dinitro-2-Methylphenol	ND	ug/L	54.3	17.4		1	07/23/08
4-Chloro-3-Methylphenol	ND	ug/L	10.9	3.6		1	07/23/08
4-Nitrophenol	ND	ug/L	54.3	7.1		1	07/23/08
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.5	2.2		1	07/23/08
Butylbenzylphthalate	ND	ug/L	10.9	3.6		1	07/23/08
Diethylphthalate	ND	ug/L	10.9	3.6		1	07/23/08
Dimethylphthalate	ND	ug/L	10.9	3.3		1	07/23/08
Di-n-butylphthalate	ND	ug/L	10.9	3.6		1	07/23/08
Di-n-octylphthalate	ND	ug/L	10.9	3.6		1	07/23/08
Pentachlorophenol	ND	ug/L	54.3	17.4		1	07/23/08
Phenol	ND	ug/L	10.9	3.6		1	07/23/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*52 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*78 %*		*15-110*
Surrogate: 2-Chlorophenol-d4	*54 %*		*15-110*
Surrogate: 2-Fluorobiphenyl	*59 %*		*30-130*
Surrogate: 2-Fluorophenol	*46 %*		*15-110*
Surrogate: Nitrobenzene-d5	*59 %*		*30-130*
Surrogate: Phenol-d6	*55 %*		*15-110*
Surrogate: p-Terphenyl-d14	*65 %*		*30-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: PZ-04
Date Sampled: 07/16/08 09:45
Percent Solids: N/A

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-01
Sample Matrix: Ground Water

Classical Chemistry

Analyte	Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed
Hexavalent Chromium	ND	ug/L	50	7196A		1	SVD	07/16/08 18:45
Total Cyanide (LL)	ND	mg/L	0.0050	4500 CN CE		1	NMT	07/21/08
Total Petroleum Hydrocarbon	ND	mg/L	5	1664A		1	CAA	07/21/08
Total Residual Chlorine	ND	mg/L	0.06	4500Cl G		1	EEM	07/16/08 17:05
Total Suspended Solids	**26**	mg/L	5	2540D		1	NMT	07/16/08

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: PZ-04
Date Sampled: 07/16/08 09:45
Percent Solids: N/A
Initial Volume: 35
Final Volume: 2
Extraction Method: 504/8011

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-01
Sample Matrix: Ground Water
Analyst: EEB
Prepared: 07/22/08

8011 1,2-Dibromoethane / 1,2-Dibromo-3-chloropropane

Analyte	Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V
1,2-Dibromoethane	ND	ug/L	0.015	8011		1	EEB	07/24/08	35	2

	%Recovery	Qualifier	Limits
Surrogate: Pentachloroethane	*86 %*		*30-150*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: PZ-04
Date Sampled: 07/16/08 09:45
Percent Solids: N/A
Initial Volume: 1000
Final Volume: 1
Extraction Method: 3520C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-01RE1
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 07/17/08

8270C Semi-Volatile Phenolic Compounds

Analyte	Results	Units	MRL	MDL	Limit	DF	Analyzed
1,4-Dioxane	ND	ug/L	2.5	0.8		1	07/19/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*42 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*71 %*		*15-110*
Surrogate: 2-Chlorophenol-d4	*41 %*		*15-110*
Surrogate: 2-Fluorobiphenyl	*57 %*		*30-130*
Surrogate: 2-Fluorophenol	*38 %*		*15-110*
Surrogate: Nitrobenzene-d5	*56 %*		*30-130*
Surrogate: Phenol-d6	*41 %*		*15-110*
Surrogate: p-Terphenyl-d14	*44 %*		*30-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: V-213
Date Sampled: 07/16/08 12:20
Percent Solids: N/A
Initial Volume: 960
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-02
Sample Matrix: Ground Water
Analyst: SEP
Prepared: 07/17/08

608 Polychlorinated Biphenyls (PCB)

Analyte	Results	Units	MRL	MDL	Limit	DF	Analyzed
Aroclor 1016	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1221	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1232	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1242	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1248	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1254	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1260	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1262	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1268	ND	ug/L	0.10	0.03		1	07/18/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*78 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*80 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*72 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*78 %*		*30-150*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: V-213
Date Sampled: 07/16/08 12:20
Percent Solids: N/A

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-02
Sample Matrix: Ground Water

3005A/6000/7000 Dissolved Metals

Analyte		Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V
Antimony		ND	ug/L	2.5	7041		1	SVD	07/19/08	100	50
Arsenic		ND	ug/L	2.5	7060A		1	SVD	07/18/08	100	50
Cadmium		ND	ug/L	2.5	6010B		1	SVD	07/17/08	100	50
Copper		ND	ug/L	10	6010B		1	SVD	07/17/08	100	50
Iron	B	**40900**	ug/L	50	6010B		1	SVD	07/17/08	100	50
Lead		ND	ug/L	2.5	7421		1	SVD	07/18/08	100	50
Mercury		ND	ug/L	0.50	7470A		1	JP	07/18/08	20	40
Nickel		ND	ug/L	25	6010B		1	SVD	07/17/08	100	50
Selenium		ND	ug/L	5.0	7740		1	SVD	07/18/08	100	50
Silver		ND	ug/L	5	6010B		1	SVD	07/17/08	100	50
Zinc		ND	ug/L	25	6010B		1	SVD	07/17/08	100	50

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: V-213
Date Sampled: 07/16/08 12:20
Percent Solids: N/A

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-02
Sample Matrix: Ground Water

3005A/6000/7000 Total Metals

Analyte	Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V
Antimony	ND	ug/L	2.5	7041		1	SVD	07/19/08	100	50
Arsenic	ND	ug/L	2.5	7060A		1	SVD	07/18/08	100	50
Cadmium	ND	ug/L	2.5	6010B		1	SVD	07/17/08	100	50
Chromium	ND	ug/L	10	6010B		1	SVD	07/17/08	100	50
Chromium III	ND	ug/L	60	calc		1	SVD	07/17/08	1	1
Copper	ND	ug/L	10	6010B		1	SVD	07/17/08	100	50
Iron	**41300**	ug/L	50	6010B		1	SVD	07/17/08	100	50
Lead	ND	ug/L	2.5	7421		1	SVD	07/18/08	100	50
Mercury	ND	ug/L	0.50	7470A		1	JP	07/18/08	20	40
Nickel	ND	ug/L	25	6010B		1	SVD	07/17/08	100	50
Selenium	ND	ug/L	5.0	7740		1	SVD	07/18/08	100	50
Silver	ND	ug/L	5	6010B		1	SVD	07/17/08	100	50
Zinc	**129**	ug/L	25	6010B		1	SVD	07/17/08	100	50

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: V-213
Date Sampled: 07/16/08 12:20
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 5030B

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-02
Sample Matrix: Ground Water
Analyst: MD

8260B Volatile Oxygenate Compounds

Analyte	Results	Units	MRL	MDL	Limit	DF	Analyzed
Tertiary-butyl Alcohol	**47.4**	ug/L	25.0	10.0		1	07/21/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*107 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*115 %*		*70-130*
Surrogate: Dibromofluoromethane	*102 %*		*70-130*
Surrogate: Toluene-d8	*105 %*		*70-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: V-213
Date Sampled: 07/16/08 12:20
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 5030B

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-02
Sample Matrix: Ground Water
Analyst: RES

8260B Volatile Organic Compounds

Analyte		Results	Units	MRL	MDL	Limit	DF	Analyzed
1,1,1-Trichloroethane		ND	ug/L	10.0	2.0		10	07/18/08
1,1,2-Trichloroethane		ND	ug/L	10.0	2.0		10	07/18/08
1,1-Dichloroethane		ND	ug/L	10.0	2.0		10	07/18/08
1,1-Dichloroethene		ND	ug/L	10.0	3.0		10	07/18/08
1,2-Dibromoethane		ND	ug/L	10.0	2.0		10	07/18/08
1,2-Dichlorobenzene		ND	ug/L	10.0	2.0		10	07/18/08
1,2-Dichloroethane		ND	ug/L	10.0	2.0		10	07/18/08
1,3-Dichlorobenzene		ND	ug/L	10.0	2.0		10	07/18/08
1,4-Dichlorobenzene		ND	ug/L	10.0	1.0		10	07/18/08
1,4-Dioxane - Screen		ND	ug/L	5000	500		10	07/18/08
Acetone		ND	ug/L	250	50.0		10	07/18/08
Benzene		**13.9**	ug/L	10.0	1.0		10	07/18/08
Carbon Tetrachloride		ND	ug/L	10.0	2.0		10	07/18/08
cis-1,2-Dichloroethene		ND	ug/L	10.0	2.0		10	07/18/08
Ethylbenzene		**31.7**	ug/L	10.0	2.0		10	07/18/08
Methyl tert-Butyl Ether		ND	ug/L	10.0	3.0		10	07/18/08
Methylene Chloride		ND	ug/L	40.0	5.0		10	07/18/08
Naphthalene		ND	ug/L	10.0	3.0		10	07/18/08
Tertiary-amyl methyl ether		ND	ug/L	10.0	2.0		10	07/18/08
Tetrachloroethene		ND	ug/L	10.0	2.0		10	07/18/08
Toluene		**766**	ug/L	10.0	1.0		10	07/18/08
Trichloroethene		ND	ug/L	10.0	2.0		10	07/18/08
Vinyl Chloride		ND	ug/L	10.0	1.0		10	07/18/08
Xylene O	J	**8.2**	ug/L	10.0	2.0		10	07/18/08
Xylene P,M		**24.1**	ug/L	20.0	3.0		10	07/18/08
Xylenes (Total)		**32.3**	ug/L	30.0			10	07/18/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*109 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*86 %*		*70-130*
Surrogate: Dibromofluoromethane	*104 %*		*70-130*
Surrogate: Toluene-d8	*102 %*		*70-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: V-213
Date Sampled: 07/16/08 12:20
Percent Solids: N/A
Initial Volume: 960
Final Volume: 0.25
Extraction Method: 3510C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-02
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 07/17/08

8270C(SIM) Polynuclear Aromatic Hydrocarbons

Analyte	Results	Units	MRL	Limit	DF	Analyzed
2-Methylnaphthalene	ND	ug/L	0.21		1	07/17/08
Acenaphthene	ND	ug/L	0.21		1	07/17/08
Acenaphthylene	ND	ug/L	0.21		1	07/17/08
Anthracene	ND	ug/L	0.21		1	07/17/08
Benzo(a)anthracene	ND	ug/L	0.05		1	07/17/08
Benzo(a)pyrene	ND	ug/L	0.05		1	07/17/08
Benzo(b)fluoranthene	ND	ug/L	0.05		1	07/17/08
Benzo(g,h,i)perylene	ND	ug/L	0.21		1	07/17/08
Benzo(k)fluoranthene	ND	ug/L	0.05		1	07/17/08
Chrysene	ND	ug/L	0.05		1	07/17/08
Dibenzo(a,h)Anthracene	ND	ug/L	0.05		1	07/17/08
Fluoranthene	ND	ug/L	0.21		1	07/17/08
Fluorene	ND	ug/L	0.21		1	07/17/08
Indeno(1,2,3-cd)Pyrene	ND	ug/L	0.05		1	07/17/08
Naphthalene	ND	ug/L	0.21		1	07/17/08
Pentachlorophenol	ND	ug/L	1.04		1	07/17/08
Phenanthrene	ND	ug/L	0.21		1	07/17/08
Pyrene	ND	ug/L	0.21		1	07/17/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*55 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*82 %*		*30-130*
Surrogate: Nitrobenzene-d5	*74 %*		*30-130*
Surrogate: p-Terphenyl-d14	*71 %*		*30-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: V-213
Date Sampled: 07/16/08 12:20
Percent Solids: N/A
Initial Volume: 960
Final Volume: 1
Extraction Method: 3520C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-02
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 07/22/08

8270C Semi-Volatile Phenolic Compounds

Analyte	Results	Units	MRL	MDL	Limit	DF	Analyzed
2,3,4,6-Tetrachlorophenol	ND	ug/L	52.1	8.3		1	07/23/08
2,4,5-Trichlorophenol	ND	ug/L	10.4	3.4		1	07/23/08
2,4,6-Trichlorophenol	ND	ug/L	10.4	3.4		1	07/23/08
2,4-Dichlorophenol	ND	ug/L	10.4	3.4		1	07/23/08
2,4-Dimethylphenol	ND	ug/L	52.1	4.2		1	07/23/08
2,4-Dinitrophenol	ND	ug/L	52.1	16.7		1	07/23/08
2-Chlorophenol	ND	ug/L	10.4	3.4		1	07/23/08
2-Methylphenol	ND	ug/L	10.4	3.4		1	07/23/08
2-Nitrophenol	ND	ug/L	10.4	3.4		1	07/23/08
3+4-Methylphenol	ND	ug/L	20.8	6.8		1	07/23/08
4,6-Dinitro-2-Methylphenol	ND	ug/L	52.1	16.7		1	07/23/08
4-Chloro-3-Methylphenol	ND	ug/L	10.4	3.4		1	07/23/08
4-Nitrophenol	ND	ug/L	52.1	6.8		1	07/23/08
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.2	2.1		1	07/23/08
Butylbenzylphthalate	ND	ug/L	10.4	3.4		1	07/23/08
Diethylphthalate	ND	ug/L	10.4	3.4		1	07/23/08
Dimethylphthalate	ND	ug/L	10.4	3.1		1	07/23/08
Di-n-butylphthalate	ND	ug/L	10.4	3.4		1	07/23/08
Di-n-octylphthalate	ND	ug/L	10.4	3.4		1	07/23/08
Pentachlorophenol	ND	ug/L	52.1	16.7		1	07/23/08
Phenol	ND	ug/L	10.4	3.4		1	07/23/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*58 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*78 %*		*15-110*
Surrogate: 2-Chlorophenol-d4	*58 %*		*15-110*
Surrogate: 2-Fluorobiphenyl	*61 %*		*30-130*
Surrogate: 2-Fluorophenol	*52 %*		*15-110*
Surrogate: Nitrobenzene-d5	*63 %*		*30-130*
Surrogate: Phenol-d6	*61 %*		*15-110*
Surrogate: p-Terphenyl-d14	*46 %*		*30-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: V-213
Date Sampled: 07/16/08 12:20
Percent Solids: N/A

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-02
Sample Matrix: Ground Water

Classical Chemistry

Analyte	Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed
Hexavalent Chromium	ND	ug/L	50	7196A		1	SVD	07/16/08 18:45
Total Cyanide (LL)	ND	mg/L	0.0050	4500 CN CE		1	NMT	07/21/08
Total Petroleum Hydrocarbon	ND	mg/L	5	1664A		1	CAA	07/21/08
Total Residual Chlorine	ND	mg/L	0.06	4500Cl G		1	EEM	07/16/08 17:05
Total Suspended Solids	ND	mg/L	5	2540D		1	NMT	07/16/08

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: V-213
Date Sampled: 07/16/08 12:20
Percent Solids: N/A
Initial Volume: 35
Final Volume: 2
Extraction Method: 504/8011

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-02
Sample Matrix: Ground Water
Analyst: EEB
Prepared: 07/22/08

8011 1,2-Dibromoethane / 1,2-Dibromo-3-chloropropane

Analyte	Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V
1,2-Dibromoethane	ND	ug/L	0.015	8011		1	EEB	07/24/08	35	2

	%Recovery	Qualifier	Limits
Surrogate: Pentachloroethane	*79 %*		*30-150*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: V-213
Date Sampled: 07/16/08 12:20
Percent Solids: N/A
Initial Volume: 1000
Final Volume: 1
Extraction Method: 3520C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-02RE1
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 07/17/08

8270C Semi-Volatile Phenolic Compounds

Analyte	Results	Units	MRL	MDL	Limit	DF	Analyzed
1,4-Dioxane	**4.4**	ug/L	2.5	0.8		1	07/19/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*42 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*78 %*		*15-110*
Surrogate: 2-Chlorophenol-d4	*43 %*		*15-110*
Surrogate: 2-Fluorobiphenyl	*66 %*		*30-130*
Surrogate: 2-Fluorophenol	*38 %*		*15-110*
Surrogate: Nitrobenzene-d5	*62 %*		*30-130*
Surrogate: Phenol-d6	*43 %*		*15-110*
Surrogate: p-Terphenyl-d14	*48 %*		*30-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-402
Date Sampled: 07/16/08 09:50
Percent Solids: N/A
Initial Volume: 960
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-03
Sample Matrix: Ground Water
Analyst: SEP
Prepared: 07/17/08

608 Polychlorinated Biphenyls (PCB)

Analyte	Results	Units	MRL	MDL	Limit	DF	Analyzed
Aroclor 1016	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1221	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1232	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1242	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1248	**0.95**	ug/L	0.10	0.03		1	07/18/08
Aroclor 1254	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1260	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1262	ND	ug/L	0.10	0.03		1	07/18/08
Aroclor 1268	ND	ug/L	0.10	0.03		1	07/18/08

	%Recovery	Qualifier	Limits
Surrogate: Decachlorobiphenyl	*72 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*77 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*83 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*90 %*		*30-150*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-402
Date Sampled: 07/16/08 09:50
Percent Solids: N/A

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-03
Sample Matrix: Ground Water

3005A/6000/7000 Dissolved Metals

Analyte		Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V
Antimony		ND	ug/L	2.5	7041		1	SVD	07/19/08	100	50
Arsenic		ND	ug/L	2.5	7060A		1	SVD	07/18/08	100	50
Cadmium		ND	ug/L	2.5	6010B		1	SVD	07/17/08	100	50
Copper		ND	ug/L	10	6010B		1	SVD	07/17/08	100	50
Iron	B	**46600**	ug/L	50	6010B		1	SVD	07/17/08	100	50
Lead		ND	ug/L	2.5	7421		1	SVD	07/18/08	100	50
Mercury		ND	ug/L	0.50	7470A		1	JP	07/18/08	20	40
Nickel		ND	ug/L	25	6010B		1	SVD	07/17/08	100	50
Selenium		ND	ug/L	5.0	7740		1	SVD	07/18/08	100	50
Silver		ND	ug/L	5	6010B		1	SVD	07/17/08	100	50
Zinc		ND	ug/L	25	6010B		1	SVD	07/17/08	100	50

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-402
Date Sampled: 07/16/08 09:50
Percent Solids: N/A

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-03
Sample Matrix: Ground Water

3005A/6000/7000 Total Metals

Analyte	Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V
Antimony	ND	ug/L	2.5	7041		1	SVD	07/19/08	100	50
Arsenic	ND	ug/L	2.5	7060A		1	SVD	07/18/08	100	50
Cadmium	ND	ug/L	2.5	6010B		1	SVD	07/17/08	100	50
Chromium	ND	ug/L	10	6010B		1	SVD	07/17/08	100	50
Chromium III	ND	ug/L	60	calc		1	SVD	07/17/08	1	1
Copper	ND	ug/L	10	6010B		1	SVD	07/17/08	100	50
Iron	**71000**	ug/L	50	6010B		1	SVD	07/17/08	100	50
Lead	ND	ug/L	2.5	7421		1	SVD	07/18/08	100	50
Mercury	ND	ug/L	0.50	7470A		1	JP	07/18/08	20	40
Nickel	ND	ug/L	25	6010B		1	SVD	07/17/08	100	50
Selenium	ND	ug/L	5.0	7740		1	SVD	07/18/08	100	50
Silver	ND	ug/L	5	6010B		1	SVD	07/17/08	100	50
Zinc	**44**	ug/L	25	6010B		1	SVD	07/17/08	100	50

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-402
Date Sampled: 07/16/08 09:50
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 5030B

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-03
Sample Matrix: Ground Water
Analyst: MD

8260B Volatile Oxygenate Compounds

Analyte		Results	Units	MRL	MDL	Limit	DF	Analyzed
Tertiary-butyl Alcohol	J	**19.0**	ug/L	25.0	10.0		1	07/21/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*107 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*122 %*		*70-130*
Surrogate: Dibromofluoromethane	*103 %*		*70-130*
Surrogate: Toluene-d8	*110 %*		*70-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-402
Date Sampled: 07/16/08 09:50
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 5030B

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-03
Sample Matrix: Ground Water
Analyst: MD

8260B Volatile Organic Compounds

Analyte		Results	Units	MRL	MDL	Limit	DF	Analyzed
1,1,1-Trichloroethane		ND	ug/L	1.0	0.2		1	07/22/08
1,1,2-Trichloroethane		ND	ug/L	1.0	0.2		1	07/22/08
1,1-Dichloroethane	J	**0.3**	ug/L	1.0	0.2		1	07/22/08
1,1-Dichloroethene		ND	ug/L	1.0	0.3		1	07/22/08
1,2-Dibromoethane		ND	ug/L	1.0	0.2		1	07/22/08
1,2-Dichlorobenzene		ND	ug/L	1.0	0.2		1	07/22/08
1,2-Dichloroethane		ND	ug/L	1.0	0.2		1	07/22/08
1,3-Dichlorobenzene		ND	ug/L	1.0	0.2		1	07/22/08
1,4-Dichlorobenzene		ND	ug/L	1.0	0.1		1	07/22/08
1,4-Dioxane - Screen		ND	ug/L	500	50.0		1	07/22/08
Acetone		ND	ug/L	25.0	5.0		1	07/22/08
Benzene		**29.6**	ug/L	1.0	0.1		1	07/22/08
Carbon Tetrachloride		ND	ug/L	1.0	0.2		1	07/22/08
cis-1,2-Dichloroethene		ND	ug/L	1.0	0.2		1	07/22/08
Ethylbenzene	J	**0.4**	ug/L	1.0	0.2		1	07/22/08
Methyl tert-Butyl Ether		ND	ug/L	1.0	0.3		1	07/22/08
Methylene Chloride		ND	ug/L	4.0	0.5		1	07/22/08
Naphthalene		ND	ug/L	1.0	0.3		1	07/22/08
Tertiary-amyl methyl ether		ND	ug/L	1.0	0.2		1	07/22/08
Tetrachloroethene		ND	ug/L	1.0	0.2		1	07/22/08
Toluene	J	**0.3**	ug/L	1.0	0.1		1	07/22/08
Trichloroethene		ND	ug/L	1.0	0.2		1	07/22/08
Vinyl Chloride		ND	ug/L	1.0	0.1		1	07/22/08
Xylene O	J	**0.4**	ug/L	1.0	0.2		1	07/22/08
Xylene P,M		**180**	ug/L	20.0	3.0		10	07/22/08
Xylenes (Total)		**181**	ug/L	21.0			10	07/22/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*102 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*103 %*		*70-130*
Surrogate: Dibromofluoromethane	*98 %*		*70-130*
Surrogate: Toluene-d8	*105 %*		*70-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-402
Date Sampled: 07/16/08 09:50
Percent Solids: N/A
Initial Volume: 910
Final Volume: 0.25
Extraction Method: 3510C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-03
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 07/17/08

8270C(SIM) Polynuclear Aromatic Hydrocarbons

Analyte	Results	Units	MRL	Limit	DF	Analyzed
2-Methylnaphthalene	ND	ug/L	0.22		1	07/17/08
Acenaphthene	ND	ug/L	0.22		1	07/17/08
Acenaphthylene	ND	ug/L	0.22		1	07/17/08
Anthracene	ND	ug/L	0.22		1	07/17/08
Benzo(a)anthracene	ND	ug/L	0.05		1	07/17/08
Benzo(a)pyrene	ND	ug/L	0.05		1	07/17/08
Benzo(b)fluoranthene	ND	ug/L	0.05		1	07/17/08
Benzo(g,h,i)perylene	ND	ug/L	0.22		1	07/17/08
Benzo(k)fluoranthene	ND	ug/L	0.05		1	07/17/08
Chrysene	ND	ug/L	0.05		1	07/17/08
Dibenzo(a,h)Anthracene	ND	ug/L	0.05		1	07/17/08
Fluoranthene	ND	ug/L	0.22		1	07/17/08
Fluorene	ND	ug/L	0.22		1	07/17/08
Indeno(1,2,3-cd)Pyrene	ND	ug/L	0.05		1	07/17/08
Naphthalene	ND	ug/L	0.22		1	07/17/08
Pentachlorophenol	ND	ug/L	1.10		1	07/17/08
Phenanthrene	ND	ug/L	0.22		1	07/17/08
Pyrene	ND	ug/L	0.22		1	07/17/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*43 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*60 %*		*30-130*
Surrogate: Nitrobenzene-d5	*76 %*		*30-130*
Surrogate: p-Terphenyl-d14	*75 %*		*30-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-402
Date Sampled: 07/16/08 09:50
Percent Solids: N/A
Initial Volume: 910
Final Volume: 1
Extraction Method: 3520C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-03
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 07/22/08

8270C Semi-Volatile Phenolic Compounds

Analyte	Results	Units	MRL	MDL	Limit	DF	Analyzed
2,3,4,6-Tetrachlorophenol	ND	ug/L	54.9	8.8		1	07/23/08
2,4,5-Trichlorophenol	ND	ug/L	11.0	3.6		1	07/23/08
2,4,6-Trichlorophenol	ND	ug/L	11.0	3.6		1	07/23/08
2,4-Dichlorophenol	ND	ug/L	11.0	3.6		1	07/23/08
2,4-Dimethylphenol	ND	ug/L	54.9	4.4		1	07/23/08
2,4-Dinitrophenol	ND	ug/L	54.9	17.6		1	07/23/08
2-Chlorophenol	ND	ug/L	11.0	3.6		1	07/23/08
2-Methylphenol	ND	ug/L	11.0	3.6		1	07/23/08
2-Nitrophenol	ND	ug/L	11.0	3.6		1	07/23/08
3+4-Methylphenol	ND	ug/L	22.0	7.1		1	07/23/08
4,6-Dinitro-2-Methylphenol	ND	ug/L	54.9	17.6		1	07/23/08
4-Chloro-3-Methylphenol	ND	ug/L	11.0	3.6		1	07/23/08
4-Nitrophenol	ND	ug/L	54.9	7.1		1	07/23/08
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.6	2.2		1	07/23/08
Butylbenzylphthalate	ND	ug/L	11.0	3.6		1	07/23/08
Diethylphthalate	ND	ug/L	11.0	3.6		1	07/23/08
Dimethylphthalate	ND	ug/L	11.0	3.3		1	07/23/08
Di-n-butylphthalate	ND	ug/L	11.0	3.6		1	07/23/08
Di-n-octylphthalate	ND	ug/L	11.0	3.6		1	07/23/08
Pentachlorophenol	ND	ug/L	54.9	17.6		1	07/23/08
Phenol	ND	ug/L	11.0	3.6		1	07/23/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*54 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*72 %*		*15-110*
Surrogate: 2-Chlorophenol-d4	*56 %*		*15-110*
Surrogate: 2-Fluorobiphenyl	*57 %*		*30-130*
Surrogate: 2-Fluorophenol	*50 %*		*15-110*
Surrogate: Nitrobenzene-d5	*58 %*		*30-130*
Surrogate: Phenol-d6	*53 %*		*15-110*
Surrogate: p-Terphenyl-d14	*37 %*		*30-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-402
Date Sampled: 07/16/08 09:50
Percent Solids: N/A

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-03
Sample Matrix: Ground Water

Classical Chemistry

Analyte	Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed
Hexavalent Chromium	ND	ug/L	50	7196A		1	SVD	07/16/08 18:45
Total Cyanide (LL)	ND	mg/L	0.0050	4500 CN CE		1	NMT	07/21/08
Total Petroleum Hydrocarbon	ND	mg/L	5	1664A		1	CAA	07/21/08
Total Residual Chlorine	ND	mg/L	0.06	4500Cl G		1	EEM	07/16/08 17:05
Total Suspended Solids	**51**	mg/L	5	2540D		1	NMT	07/16/08

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-402
Date Sampled: 07/16/08 09:50
Percent Solids: N/A
Initial Volume: 35
Final Volume: 2
Extraction Method: 504/8011

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-03
Sample Matrix: Ground Water
Analyst: EEB
Prepared: 07/22/08

8011 1,2-Dibromoethane / 1,2-Dibromo-3-chloropropane

Analyte	Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V
1,2-Dibromoethane	ND	ug/L	0.015	8011		1	EEB	07/24/08	35	2

	%Recovery	Qualifier	Limits
Surrogate: Pentachloroethane	*93 %*		*30-150*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-402
Date Sampled: 07/16/08 09:50
Percent Solids: N/A
Initial Volume: 1000
Final Volume: 1
Extraction Method: 3520C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-03RE1
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 07/17/08

8270C Semi-Volatile Phenolic Compounds

Analyte	Results	Units	MRL	MDL	Limit	DF	Analyzed
1,4-Dioxane	ND	ug/L	2.5	0.8		1	07/19/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*42 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*81 %*		*15-110*
Surrogate: 2-Chlorophenol-d4	*43 %*		*15-110*
Surrogate: 2-Fluorobiphenyl	*70 %*		*30-130*
Surrogate: 2-Fluorophenol	*37 %*		*15-110*
Surrogate: Nitrobenzene-d5	*70 %*		*30-130*
Surrogate: Phenol-d6	*41 %*		*15-110*
Surrogate: p-Terphenyl-d14	*51 %*		*30-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-404
Date Sampled: 07/16/08 12:35
Percent Solids: N/A
Initial Volume: 950
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-04
Sample Matrix: Ground Water
Analyst: SEP
Prepared: 07/17/08

608 Polychlorinated Biphenyls (PCB)

Analyte	Results	Units	MRL	MDL	Limit	DF	Analyzed
Aroclor 1016	ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1221	ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1232	ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1242	ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1248	ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1254	ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1260	ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1262	ND	ug/L	0.11	0.03		1	07/18/08
Aroclor 1268	ND	ug/L	0.11	0.03		1	07/18/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: Decachlorobiphenyl	*95 %*		*30-150*
Surrogate: Decachlorobiphenyl [2C]	*97 %*		*30-150*
Surrogate: Tetrachloro-m-xylene	*82 %*		*30-150*
Surrogate: Tetrachloro-m-xylene [2C]	*83 %*		*30-150*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-404
Date Sampled: 07/16/08 12:35
Percent Solids: N/A

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-04
Sample Matrix: Ground Water

3005A/6000/7000 Dissolved Metals

Analyte		Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V
Antimony		ND	ug/L	2.5	7041		1	SVD	07/19/08	100	50
Arsenic		**3.3**	ug/L	2.5	7060A		1	SVD	07/18/08	100	50
Cadmium		ND	ug/L	2.5	6010B		1	SVD	07/17/08	100	50
Copper		ND	ug/L	10	6010B		1	SVD	07/17/08	100	50
Iron	B	**40900**	ug/L	50	6010B		1	SVD	07/17/08	100	50
Lead		ND	ug/L	2.5	7421		1	SVD	07/18/08	100	50
Mercury		ND	ug/L	0.50	7470A		1	JP	07/18/08	20	40
Nickel		ND	ug/L	25	6010B		1	SVD	07/17/08	100	50
Selenium		ND	ug/L	5.0	7740		1	SVD	07/18/08	100	50
Silver		ND	ug/L	5	6010B		1	SVD	07/17/08	100	50
Zinc		ND	ug/L	25	6010B		1	SVD	07/17/08	100	50

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-404
Date Sampled: 07/16/08 12:35
Percent Solids: N/A

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-04
Sample Matrix: Ground Water

3005A/6000/7000 Total Metals

Analyte	Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V
Antimony	ND	ug/L	2.5	7041		1	SVD	07/19/08	100	50
Arsenic	**3.8**	ug/L	2.5	7060A		1	SVD	07/18/08	100	50
Cadmium	ND	ug/L	2.5	6010B		1	SVD	07/17/08	100	50
Chromium	ND	ug/L	10	6010B		1	SVD	07/17/08	100	50
Chromium III	ND	ug/L	60	calc		1	SVD	07/17/08	1	1
Copper	ND	ug/L	10	6010B		1	SVD	07/17/08	100	50
Iron	**42900**	ug/L	50	6010B		1	SVD	07/17/08	100	50
Lead	ND	ug/L	2.5	7421		1	SVD	07/18/08	100	50
Mercury	ND	ug/L	0.50	7470A		1	JP	07/18/08	20	40
Nickel	ND	ug/L	25	6010B		1	SVD	07/17/08	100	50
Selenium	ND	ug/L	5.0	7740		1	SVD	07/18/08	100	50
Silver	ND	ug/L	5	6010B		1	SVD	07/17/08	100	50
Zinc	**80**	ug/L	25	6010B		1	SVD	07/17/08	100	50

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-404
Date Sampled: 07/16/08 12:35
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 5030B

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-04
Sample Matrix: Ground Water
Analyst: MD

8260B Volatile Oxygenate Compounds

Analyte	Results	Units	MRL	MDL	Limit	DF	Analyzed
Tertiary-butyl Alcohol	**40.6**	ug/L	25.0	10.0		1	07/21/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichloroethane-d4	*104 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*115 %*		*70-130*
Surrogate: Dibromofluoromethane	*101 %*		*70-130*
Surrogate: Toluene-d8	*100 %*		*70-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-404
Date Sampled: 07/16/08 12:35
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 5030B

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-04
Sample Matrix: Ground Water
Analyst: RES

8260B Volatile Organic Compounds

Analyte		Results	Units	MRL	MDL	Limit	DF	Analyzed
1,1,1-Trichloroethane		ND	ug/L	100	20.0		100	07/18/08
1,1,2-Trichloroethane		ND	ug/L	100	20.0		100	07/18/08
1,1-Dichloroethane		ND	ug/L	100	20.0		100	07/18/08
1,1-Dichloroethene		ND	ug/L	100	30.0		100	07/18/08
1,2-Dibromoethane		ND	ug/L	100	20.0		100	07/18/08
1,2-Dichlorobenzene		ND	ug/L	100	20.0		100	07/18/08
1,2-Dichloroethane		ND	ug/L	100	20.0		100	07/18/08
1,3-Dichlorobenzene		ND	ug/L	100	20.0		100	07/18/08
1,4-Dichlorobenzene		ND	ug/L	100	10.0		100	07/18/08
1,4-Dioxane - Screen		ND	ug/L	50000	5000		100	07/18/08
Acetone		ND	ug/L	2500	500		100	07/18/08
Benzene	J	**12.0**	ug/L	100	10.0		100	07/18/08
Carbon Tetrachloride		ND	ug/L	100	20.0		100	07/18/08
cis-1,2-Dichloroethene		ND	ug/L	100	20.0		100	07/18/08
Ethylbenzene		ND	ug/L	100	20.0		100	07/18/08
Methyl tert-Butyl Ether		ND	ug/L	100	30.0		100	07/18/08
Methylene Chloride		ND	ug/L	400	50.0		100	07/18/08
Naphthalene		ND	ug/L	100	30.0		100	07/18/08
Tertiary-amyl methyl ether		ND	ug/L	100	20.0		100	07/18/08
Tetrachloroethene		ND	ug/L	100	20.0		100	07/18/08
Toluene		**2460**	ug/L	100	10.0		100	07/18/08
Trichloroethene		ND	ug/L	100	20.0		100	07/18/08
Vinyl Chloride		ND	ug/L	100	10.0		100	07/18/08
Xylene O		ND	ug/L	100	20.0		100	07/18/08
Xylene P,M	J	**30.0**	ug/L	200	30.0		100	07/18/08
Xylenes (Total)		ND	ug/L	300			100	07/18/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*109 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*85 %*		*70-130*
Surrogate: Dibromofluoromethane	*104 %*		*70-130*
Surrogate: Toluene-d8	*103 %*		*70-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-404
Date Sampled: 07/16/08 12:35
Percent Solids: N/A
Initial Volume: 920
Final Volume: 0.25
Extraction Method: 3510C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-04
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 07/17/08

8270C(SIM) Polynuclear Aromatic Hydrocarbons

Analyte	Results	Units	MRL	Limit	DF	Analyzed
2-Methylnaphthalene	ND	ug/L	0.22		1	07/17/08
Acenaphthene	ND	ug/L	0.22		1	07/17/08
Acenaphthylene	ND	ug/L	0.22		1	07/17/08
Anthracene	ND	ug/L	0.22		1	07/17/08
Benzo(a)anthracene	ND	ug/L	0.05		1	07/17/08
Benzo(a)pyrene	ND	ug/L	0.05		1	07/17/08
Benzo(b)fluoranthene	ND	ug/L	0.05		1	07/17/08
Benzo(g,h,i)perylene	ND	ug/L	0.22		1	07/17/08
Benzo(k)fluoranthene	ND	ug/L	0.05		1	07/17/08
Chrysene	ND	ug/L	0.05		1	07/17/08
Dibenzo(a,h)Anthracene	ND	ug/L	0.05		1	07/17/08
Fluoranthene	ND	ug/L	0.22		1	07/17/08
Fluorene	ND	ug/L	0.22		1	07/17/08
Indeno(1,2,3-cd)Pyrene	ND	ug/L	0.05		1	07/17/08
Naphthalene	ND	ug/L	0.22		1	07/17/08
Pentachlorophenol	ND	ug/L	1.09		1	07/17/08
Phenanthrene	ND	ug/L	0.22		1	07/17/08
Pyrene	ND	ug/L	0.22		1	07/17/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*53 %*		*30-130*
Surrogate: 2-Fluorobiphenyl	*76 %*		*30-130*
Surrogate: Nitrobenzene-d5	*96 %*		*30-130*
Surrogate: p-Terphenyl-d14	*78 %*		*30-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-404
Date Sampled: 07/16/08 12:35
Percent Solids: N/A
Initial Volume: 950
Final Volume: 1
Extraction Method: 3520C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-04
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 07/22/08

8270C Semi-Volatile Phenolic Compounds

Analyte		Results	Units	MRL	MDL	Limit	DF	Analyzed
2,3,4,6-Tetrachlorophenol		ND	ug/L	52.6	8.4		1	07/23/08
2,4,5-Trichlorophenol		ND	ug/L	10.5	3.5		1	07/23/08
2,4,6-Trichlorophenol		ND	ug/L	10.5	3.5		1	07/23/08
2,4-Dichlorophenol		ND	ug/L	10.5	3.5		1	07/23/08
2,4-Dimethylphenol		ND	ug/L	52.6	4.2		1	07/23/08
2,4-Dinitrophenol		ND	ug/L	52.6	16.8		1	07/23/08
2-Chlorophenol		ND	ug/L	10.5	3.5		1	07/23/08
2-Methylphenol		**17.1**	ug/L	10.5	3.5		1	07/23/08
2-Nitrophenol		ND	ug/L	10.5	3.5		1	07/23/08
3+4-Methylphenol	J	**16.0**	ug/L	21.1	6.8		1	07/23/08
4,6-Dinitro-2-Methylphenol		ND	ug/L	52.6	16.8		1	07/23/08
4-Chloro-3-Methylphenol		ND	ug/L	10.5	3.5		1	07/23/08
4-Nitrophenol		ND	ug/L	52.6	6.8		1	07/23/08
bis(2-Ethylhexyl)phthalate		ND	ug/L	6.3	2.1		1	07/23/08
Butylbenzylphthalate		ND	ug/L	10.5	3.5		1	07/23/08
Diethylphthalate		ND	ug/L	10.5	3.5		1	07/23/08
Dimethylphthalate		ND	ug/L	10.5	3.2		1	07/23/08
Di-n-butylphthalate		**18.5**	ug/L	10.5	3.5		1	07/23/08
Di-n-octylphthalate		ND	ug/L	10.5	3.5		1	07/23/08
Pentachlorophenol		ND	ug/L	52.6	16.8		1	07/23/08
Phenol		ND	ug/L	10.5	3.5		1	07/23/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichlorobenzene-d4	*59 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*83 %*		*15-110*
Surrogate: 2-Chlorophenol-d4	*56 %*		*15-110*
Surrogate: 2-Fluorobiphenyl	*66 %*		*30-130*
Surrogate: 2-Fluorophenol	*46 %*		*15-110*
Surrogate: Nitrobenzene-d5	*65 %*		*30-130*
Surrogate: Phenol-d6	*61 %*		*15-110*
Surrogate: p-Terphenyl-d14	*73 %*		*30-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-404
Date Sampled: 07/16/08 12:35
Percent Solids: N/A

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-04
Sample Matrix: Ground Water

Classical Chemistry

Analyte	Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed
Hexavalent Chromium	ND	ug/L	50	7196A		1	SVD	07/16/08 18:45
Total Cyanide (LL)	ND	mg/L	0.0050	4500 CN CE		1	NMT	07/21/08
Total Petroleum Hydrocarbon	ND	mg/L	5	1664A		1	CAA	07/21/08
Total Residual Chlorine	ND	mg/L	0.06	4500Cl G		1	EEM	07/16/08 17:05
Total Suspended Solids	**163**	mg/L	5	2540D		1	NMT	07/16/08

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-404
Date Sampled: 07/16/08 12:35
Percent Solids: N/A
Initial Volume: 35
Final Volume: 2
Extraction Method: 504/8011

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-04
Sample Matrix: Ground Water
Analyst: EEB
Prepared: 07/22/08

8011 1,2-Dibromoethane / 1,2-Dibromo-3-chloropropane

Analyte	Results	Units	MRL	Method	Limit	DF	Analyst	Analyzed	I/V	F/V
1,2-Dibromoethane	ND	ug/L	0.015	8011		1	EEB	07/24/08	35	2

	%Recovery	Qualifier	Limits
Surrogate: Pentachloroethane	*95 %*		*30-150*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: MW-404
Date Sampled: 07/16/08 12:35
Percent Solids: N/A
Initial Volume: 1000
Final Volume: 1
Extraction Method: 3520C

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-04RE1
Sample Matrix: Ground Water
Analyst: VSC
Prepared: 07/17/08

8270C Semi-Volatile Phenolic Compounds

Analyte	Results	Units	MRL	MDL	Limit	DF	Analyzed
1,4-Dioxane	ND	ug/L	2.5	0.8		1	07/19/08

	%Recovery	Qualifier	Limits
Surrogate: 1,2-Dichlorobenzene-d4	*42 %*		*30-130*
Surrogate: 2,4,6-Tribromophenol	*74 %*		*15-110*
Surrogate: 2-Chlorophenol-d4	*42 %*		*15-110*
Surrogate: 2-Fluorobiphenyl	*67 %*		*30-130*
Surrogate: 2-Fluorophenol	*37 %*		*15-110*
Surrogate: Nitrobenzene-d5	*65 %*		*30-130*
Surrogate: Phenol-d6	*41 %*		*15-110*
Surrogate: p-Terphenyl-d14	*41 %*		*30-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP
Client Sample ID: Trip Blank
Date Sampled: 07/16/08 00:00
Percent Solids: N/A
Initial Volume: 10
Final Volume: 10
Extraction Method: 5030B

ESS Laboratory Work Order: 0807252
ESS Laboratory Sample ID: 0807252-05
Sample Matrix: Aqueous
Analyst: MD

8260B Volatile Organic Compounds

Analyte	Results	Units	MRL	MDL	Limit	DF	Analyzed
1,1,1-Trichloroethane	ND	ug/L	1.0	0.2		1	07/21/08
1,1,2-Trichloroethane	ND	ug/L	1.0	0.2		1	07/21/08
1,1-Dichloroethane	ND	ug/L	1.0	0.2		1	07/21/08
1,1-Dichloroethene	ND	ug/L	1.0	0.3		1	07/21/08
1,2-Dibromoethane	ND	ug/L	1.0	0.2		1	07/21/08
1,2-Dichlorobenzene	ND	ug/L	1.0	0.2		1	07/21/08
1,2-Dichloroethane	ND	ug/L	1.0	0.2		1	07/21/08
1,3-Dichlorobenzene	ND	ug/L	1.0	0.2		1	07/21/08
1,4-Dichlorobenzene	ND	ug/L	1.0	0.1		1	07/21/08
1,4-Dioxane - Screen	ND	ug/L	500	50.0		1	07/21/08
Acetone	ND	ug/L	25.0	5.0		1	07/21/08
Benzene	ND	ug/L	1.0	0.1		1	07/21/08
Carbon Tetrachloride	ND	ug/L	1.0	0.2		1	07/21/08
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.2		1	07/21/08
Ethylbenzene	ND	ug/L	1.0	0.2		1	07/21/08
Methyl tert-Butyl Ether	ND	ug/L	1.0	0.3		1	07/21/08
Methylene Chloride	ND	ug/L	4.0	0.5		1	07/21/08
Naphthalene	ND	ug/L	1.0	0.3		1	07/21/08
Tertiary-amyl methyl ether	ND	ug/L	1.0	0.2		1	07/21/08
Tetrachloroethene	ND	ug/L	1.0	0.2		1	07/21/08
Toluene	ND	ug/L	1.0	0.1		1	07/21/08
Trichloroethene	ND	ug/L	1.0	0.2		1	07/21/08
Vinyl Chloride	ND	ug/L	1.0	0.1		1	07/21/08
Xylene O	ND	ug/L	1.0	0.2		1	07/21/08
Xylene P,M	ND	ug/L	2.0	0.3		1	07/21/08

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1,2-Dichloroethane-d4	*115 %*		*70-130*
Surrogate: 4-Bromofluorobenzene	*98 %*		*70-130*
Surrogate: Dibromofluoromethane	*111 %*		*70-130*
Surrogate: Toluene-d8	*109 %*		*70-130*

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
608 Polychlorinated Biphenyls (PCB)										
Batch BG81722 - 3510C										
Blank										
Aroclor 1016	ND	0.10	ug/L							
Aroclor 1221	ND	0.10	ug/L							
Aroclor 1232	ND	0.10	ug/L							
Aroclor 1242	ND	0.10	ug/L							
Aroclor 1248	ND	0.10	ug/L							
Aroclor 1254	ND	0.10	ug/L							
Aroclor 1260	ND	0.10	ug/L							
Aroclor 1262	ND	0.10	ug/L							
Aroclor 1268	ND	0.10	ug/L							
Surrogate: Decachlorobiphenyl	*0.0449*		ug/L	*0.05000*		*90*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0430*		ug/L	*0.05000*		*86*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0355*		ug/L	*0.05000*		*71*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0378*		ug/L	*0.05000*		*76*	*30-150*			
LCS										
Aroclor 1016	0.77	0.10	ug/L	1.000		77	40-140			
Aroclor 1260	0.87	0.10	ug/L	1.000		87	40-140			
Surrogate: Decachlorobiphenyl	*0.0535*		ug/L	*0.05000*		*107*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0474*		ug/L	*0.05000*		*95*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0308*		ug/L	*0.05000*		*62*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0327*		ug/L	*0.05000*		*65*	*30-150*			
LCS Dup										
Aroclor 1016	0.99	0.10	ug/L	1.000		99	40-140	25	50	
Aroclor 1260	0.97	0.10	ug/L	1.000		97	40-140	11	50	
Surrogate: Decachlorobiphenyl	*0.0511*		ug/L	*0.05000*		*102*	*30-150*			
Surrogate: Decachlorobiphenyl [2C]	*0.0507*		ug/L	*0.05000*		*101*	*30-150*			
Surrogate: Tetrachloro-m-xylene	*0.0435*		ug/L	*0.05000*		*87*	*30-150*			
Surrogate: Tetrachloro-m-xylene [2C]	*0.0443*		ug/L	*0.05000*		*89*	*30-150*			
3005A/6000/7000 Dissolved Metals										
Batch BG81702 - 3005A										
Blank										
Antimony	ND	2.5	ug/L							
Arsenic	ND	2.5	ug/L							
Cadmium	ND	2.5	ug/L							
Copper	ND	10	ug/L							
Iron	182	50	ug/L							
Lead	ND	2.5	ug/L							
Nickel	ND	25	ug/L							
Selenium	ND	5.0	ug/L							
Silver	ND	5	ug/L							
Zinc	ND	25	ug/L							

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
3005A/6000/7000 Dissolved Metals										
Batch BG81702 - 3005A										
LCS										
Cadmium	121	2.5	ug/L	125.0		97	80-120			
Copper	251	10	ug/L	250.0		101	80-120			
Iron	1250	50	ug/L	1250		100	80-120			
Nickel	253	25	ug/L	250.0		101	80-120			
Silver	127	5	ug/L	125.0		101	80-120			
Zinc	250	25	ug/L	250.0		100	80-120			
LCS										
Antimony	10.1	2.5	ug/L	10.00		101	80-120			
Arsenic	9.6	2.5	ug/L	10.00		96	80-120			
Lead	9.9	2.5	ug/L	10.00		99	80-120			
Selenium	18.2	5.0	ug/L	20.00		91	80-120			
LCS Dup										
Cadmium	125	2.5	ug/L	125.0		100	80-120	3	20	
Copper	259	10	ug/L	250.0		103	80-120	3	20	
Iron	1300	50	ug/L	1250		104	80-120	4	20	
Nickel	263	25	ug/L	250.0		105	80-120	4	20	
Silver	132	5	ug/L	125.0		106	80-120	4	20	
Zinc	262	25	ug/L	250.0		105	80-120	5	20	
LCS Dup										
Antimony	10.2	2.5	ug/L	10.00		102	80-120	0.3	20	
Arsenic	9.5	2.5	ug/L	10.00		95	80-120	0.6	20	
Lead	10.6	2.5	ug/L	10.00		106	80-120	7	20	
Selenium	18.7	5.0	ug/L	20.00		94	80-120	3	20	
Batch BG81708 - 245.1/7470A										
Blank										
Mercury	ND	0.50	ug/L							
LCS										
Mercury	5.87	0.50	ug/L	6.000		98	80-120			
LCS Dup										
Mercury	5.74	0.50	ug/L	6.000		96	80-120	2	20	
Duplicate **Source: 0807252-04**										
Mercury	ND	0.50	ug/L		ND				20	
Matrix Spike **Source: 0807252-04**										
Mercury	6.08	0.50	ug/L	6.000	ND	101	75-125			
Matrix Spike Dup **Source: 0807252-04**										
Mercury	6.17	0.50	ug/L	6.000	ND	103	75-125	1	20	
3005A/6000/7000 Total Metals										
Batch BG81702 - 3005A										
Blank										
Antimony	ND	2.5	ug/L							
Arsenic	ND	2.5	ug/L							

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
3005A/6000/7000 Total Metals										
Batch BG81702 - 3005A										
Cadmium	ND	2.5	ug/L							
Chromium	ND	10	ug/L							
Copper	ND	10	ug/L							
Iron	ND	50	ug/L							
Lead	ND	2.5	ug/L							
Nickel	ND	25	ug/L							
Selenium	ND	5.0	ug/L							
Silver	ND	5	ug/L							
Zinc	ND	25	ug/L							
LCS										
Cadmium	121	2.5	ug/L	125.0		97	80-120			
Chromium	248	10	ug/L	250.0		99	80-120			
Copper	251	10	ug/L	250.0		101	80-120			
Iron	1250	50	ug/L	1250		100	80-120			
Nickel	253	25	ug/L	250.0		101	80-120			
Silver	127	5	ug/L	125.0		101	80-120			
Zinc	250	25	ug/L	250.0		100	80-120			
LCS										
Antimony	10.1	2.5	ug/L	10.00		101	80-120			
Arsenic	9.6	2.5	ug/L	10.00		96	80-120			
Lead	9.9	2.5	ug/L	10.00		99	80-120			
Selenium	18.2	5.0	ug/L	20.00		91	80-120			
LCS Dup										
Cadmium	125	2.5	ug/L	125.0		100	80-120	3	20	
Chromium	258	10	ug/L	250.0		103	80-120	4	20	
Copper	259	10	ug/L	250.0		103	80-120	3	20	
Iron	1300	50	ug/L	1250		104	80-120	4	20	
Nickel	263	25	ug/L	250.0		105	80-120	4	20	
Silver	132	5	ug/L	125.0		106	80-120	4	20	
Zinc	262	25	ug/L	250.0		105	80-120	5	20	
LCS Dup										
Antimony	10.2	2.5	ug/L	10.00		102	80-120	0.3	20	
Arsenic	9.5	2.5	ug/L	10.00		95	80-120	0.6	20	
Lead	10.6	2.5	ug/L	10.00		106	80-120	7	20	
Selenium	18.7	5.0	ug/L	20.00		94	80-120	3	20	
Duplicate **Source: 0807252-04**										
Antimony	ND	2.5	ug/L		ND				20	
Arsenic	3.9	2.5	ug/L		3.8			3	20	
Cadmium	ND	2.5	ug/L		ND				20	
Copper	ND	10	ug/L		ND				20	
Iron	43400	50	ug/L		42900			1	20	
Lead	ND	2.5	ug/L		ND				20	
Nickel	ND	25	ug/L		ND				20	
Selenium	0.6	5.0	ug/L		ND				20	
Silver	ND	5	ug/L		ND				20	

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
3005A/6000/7000 Total Metals										
Batch BG81702 - 3005A										
Zinc	81.3	25	ug/L		79.8			2	20	
Matrix Spike **Source: 0807252-04**										
Cadmium	123	2.5	ug/L	125.0	ND	98	75-125			
Copper	252	10	ug/L	250.0	ND	101	75-125			
Iron	45200	50	ug/L	1250	42900	191	75-125			M+
Nickel	259	25	ug/L	250.0	ND	103	75-125			
Silver	125	5	ug/L	125.0	ND	100	75-125			
Zinc	335	25	ug/L	250.0	79.8	102	75-125			
Matrix Spike **Source: 0807252-04**										
Antimony	10.1	2.5	ug/L	10.00	ND	101	75-125			
Arsenic	14.5	2.5	ug/L	10.00	3.8	108	75-125			
Lead	10.9	2.5	ug/L	10.00	ND	109	75-125			
Selenium	18.2	5.0	ug/L	20.00	ND	91	75-125			
Batch BG81708 - 245.1/7470A										
Blank										
Mercury	ND	0.50	ug/L							
LCS										
Mercury	5.87	0.50	ug/L	6.000		98	80-120			
LCS Dup										
Mercury	5.74	0.50	ug/L	6.000		96	80-120	2	20	
8260B Volatile Oxygenate Compounds										
Batch BG82116 - 5030B										
Blank										
Tertiary-butyl Alcohol	ND	25.0	ug/L							
Surrogate: 1,2-Dichloroethane-d4	*28.0*		ug/L	*25.00*		*112*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*24.9*		ug/L	*25.00*		*100*	*70-130*			
Surrogate: Dibromofluoromethane	*26.6*		ug/L	*25.00*		*107*	*70-130*			
Surrogate: Toluene-d8	*26.8*		ug/L	*25.00*		*107*	*70-130*			
LCS										
Tertiary-butyl Alcohol	144		ug/L	125.0		116	70-130			
Surrogate: 1,2-Dichloroethane-d4	*26.6*		ug/L	*25.00*		*106*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*24.4*		ug/L	*25.00*		*98*	*70-130*			
Surrogate: Dibromofluoromethane	*25.5*		ug/L	*25.00*		*102*	*70-130*			
Surrogate: Toluene-d8	*27.9*		ug/L	*25.00*		*112*	*70-130*			
LCS Dup										
Tertiary-butyl Alcohol	139		ug/L	125.0		111	70-130	4	20	
Surrogate: 1,2-Dichloroethane-d4	*26.3*		ug/L	*25.00*		*105*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*23.2*		ug/L	*25.00*		*93*	*70-130*			
Surrogate: Dibromofluoromethane	*25.7*		ug/L	*25.00*		*103*	*70-130*			
Surrogate: Toluene-d8	*27.4*		ug/L	*25.00*		*110*	*70-130*			
8260B Volatile Organic Compounds										

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch BG81812 - 5030B										
Blank										
1,1,1-Trichloroethane	ND	1.0	ug/L							
1,1,2-Trichloroethane	ND	1.0	ug/L							
1,1-Dichloroethane	ND	1.0	ug/L							
1,1-Dichloroethene	ND	1.0	ug/L							
1,2-Dibromoethane	ND	1.0	ug/L							
1,2-Dichlorobenzene	ND	1.0	ug/L							
1,2-Dichloroethane	ND	1.0	ug/L							
1,3-Dichlorobenzene	ND	1.0	ug/L							
1,4-Dichlorobenzene	ND	1.0	ug/L							
1,4-Dioxane - Screen	ND	500	ug/L							
Acetone	ND	25.0	ug/L							
Benzene	ND	1.0	ug/L							
Carbon Tetrachloride	ND	1.0	ug/L							
cis-1,2-Dichloroethene	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
Methyl tert-Butyl Ether	ND	1.0	ug/L							
Methylene Chloride	ND	4.0	ug/L							
Naphthalene	ND	1.0	ug/L							
Tertiary-amyl methyl ether	ND	1.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
Trichloroethene	ND	1.0	ug/L							
Vinyl Chloride	ND	1.0	ug/L							
Xylene O	ND	1.0	ug/L							
Xylene P,M	ND	2.0	ug/L							
Surrogate: 1,2-Dichloroethane-d4	*26.5*		ug/L	*25.00*		*106*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*21.4*		ug/L	*25.00*		*86*	*70-130*			
Surrogate: Dibromofluoromethane	*25.3*		ug/L	*25.00*		*101*	*70-130*			
Surrogate: Toluene-d8	*26.2*		ug/L	*25.00*		*105*	*70-130*			
LCS										
1,1,1-Trichloroethane	9.9		ug/L	10.00		99	70-130			
1,1,2-Trichloroethane	9.8		ug/L	10.00		98	70-130			
1,1-Dichloroethane	9.9		ug/L	10.00		99	70-130			
1,1-Dichloroethene	10.3		ug/L	10.00		103	70-130			
1,2-Dibromoethane	9.4		ug/L	10.00		94	70-130			
1,2-Dichlorobenzene	9.7		ug/L	10.00		97	70-130			
1,2-Dichloroethane	10.2		ug/L	10.00		102	70-130			
1,3-Dichlorobenzene	9.8		ug/L	10.00		98	70-130			
1,4-Dichlorobenzene	9.6		ug/L	10.00		96	70-130			
1,4-Dioxane - Screen	334		ug/L	200.0		167	0-332			
Acetone	66.5		ug/L	50.00		133	70-130			B+
Benzene	9.3		ug/L	10.00		93	70-130			
Carbon Tetrachloride	10.0		ug/L	10.00		100	70-130			
cis-1,2-Dichloroethene	10.4		ug/L	10.00		104	70-130			
Ethylbenzene	9.2		ug/L	10.00		92	70-130			

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
				8260B Volatile Organic Compounds						
Batch BG81812 - 5030B										
Methyl tert-Butyl Ether	9.6		ug/L	10.00		96	70-130			
Methylene Chloride	10.8		ug/L	10.00		108	70-130			
Naphthalene	10.5		ug/L	10.00		105	70-130			
Tertiary-amyl methyl ether	9.4		ug/L	10.00		94	70-130			
Tetrachloroethene	9.4		ug/L	10.00		94	70-130			
Toluene	9.7		ug/L	10.00		97	70-130			
Trichloroethene	9.3		ug/L	10.00		93	70-130			
Vinyl Chloride	12.5		ug/L	10.00		125	70-130			
Xylene O	9.2		ug/L	10.00		92	70-130			
Xylene P,M	18.5		ug/L	20.00		92	70-130			
Surrogate: 1,2-Dichloroethane-d4	*26.0*		ug/L	*25.00*		*104*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*24.1*		ug/L	*25.00*		*96*	*70-130*			
Surrogate: Dibromofluoromethane	*24.8*		ug/L	*25.00*		*99*	*70-130*			
Surrogate: Toluene-d8	*25.2*		ug/L	*25.00*		*101*	*70-130*			
LCS Dup										
1,1,1-Trichloroethane	10.1		ug/L	10.00		101	70-130	1	20	
1,1,2-Trichloroethane	10.1		ug/L	10.00		101	70-130	3	20	
1,1-Dichloroethane	9.7		ug/L	10.00		97	70-130	2	20	
1,1-Dichloroethene	10.3		ug/L	10.00		103	70-130	0.3	20	
1,2-Dibromoethane	9.9		ug/L	10.00		99	70-130	5	20	
1,2-Dichlorobenzene	10.1		ug/L	10.00		101	70-130	4	20	
1,2-Dichloroethane	10.4		ug/L	10.00		104	70-130	2	20	
1,3-Dichlorobenzene	9.8		ug/L	10.00		98	70-130	0.3	20	
1,4-Dichlorobenzene	9.5		ug/L	10.00		95	70-130	0.3	20	
1,4-Dioxane - Screen	268		ug/L	200.0		134	0-332	22	200	
Acetone	70.0		ug/L	50.00		140	70-130	5	20	B+
Benzene	9.1		ug/L	10.00		91	70-130	2	20	
Carbon Tetrachloride	9.9		ug/L	10.00		99	70-130	1	20	
cis-1,2-Dichloroethene	10.6		ug/L	10.00		106	70-130	1	20	
Ethylbenzene	9.1		ug/L	10.00		91	70-130	0.7	20	
Methyl tert-Butyl Ether	10.1		ug/L	10.00		101	70-130	5	20	
Methylene Chloride	10.7		ug/L	10.00		107	70-130	0.7	20	
Naphthalene	10.3		ug/L	10.00		103	70-130	1	20	
Tertiary-amyl methyl ether	9.8		ug/L	10.00		98	70-130	4	20	
Tetrachloroethene	9.5		ug/L	10.00		95	70-130	1	20	
Toluene	9.5		ug/L	10.00		95	70-130	2	20	
Trichloroethene	9.4		ug/L	10.00		94	70-130	1	20	
Vinyl Chloride	11.9		ug/L	10.00		119	70-130	5	20	
Xylene O	9.4		ug/L	10.00		94	70-130	1	20	
Xylene P,M	18.5		ug/L	20.00		92	70-130	0.05	20	
Surrogate: 1,2-Dichloroethane-d4	*26.3*		ug/L	*25.00*		*105*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*24.7*		ug/L	*25.00*		*99*	*70-130*			
Surrogate: Dibromofluoromethane	*25.6*		ug/L	*25.00*		*102*	*70-130*			
Surrogate: Toluene-d8	*25.9*		ug/L	*25.00*		*104*	*70-130*			
Batch BG82215 - 5030B										

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch BG82215 - 5030B										
Blank										
1,1,1-Trichloroethane	ND	1.0	ug/L							
1,1,2-Trichloroethane	ND	1.0	ug/L							
1,1-Dichloroethane	ND	1.0	ug/L							
1,1-Dichloroethene	ND	1.0	ug/L							
1,2-Dibromoethane	ND	1.0	ug/L							
1,2-Dichlorobenzene	ND	1.0	ug/L							
1,2-Dichloroethane	ND	1.0	ug/L							
1,3-Dichlorobenzene	ND	1.0	ug/L							
1,4-Dichlorobenzene	ND	1.0	ug/L							
1,4-Dioxane - Screen	ND	500	ug/L							
Acetone	ND	25.0	ug/L							
Benzene	ND	1.0	ug/L							
Carbon Tetrachloride	ND	1.0	ug/L							
cis-1,2-Dichloroethene	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
Methyl tert-Butyl Ether	ND	1.0	ug/L							
Methylene Chloride	ND	4.0	ug/L							
Naphthalene	ND	1.0	ug/L							
Tertiary-amyl methyl ether	ND	1.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
Trichloroethene	ND	1.0	ug/L							
Vinyl Chloride	ND	1.0	ug/L							
Xylene O	ND	1.0	ug/L							
Xylene P,M	ND	2.0	ug/L							
Surrogate: 1,2-Dichloroethane-d4	*26.9*		ug/L	*25.00*		*108*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*21.6*		ug/L	*25.00*		*86*	*70-130*			
Surrogate: Dibromofluoromethane	*26.0*		ug/L	*25.00*		*104*	*70-130*			
Surrogate: Toluene-d8	*25.6*		ug/L	*25.00*		*102*	*70-130*			
LCS										
1,1,1-Trichloroethane	10.0		ug/L	10.00		100	70-130			
1,1,2-Trichloroethane	9.6		ug/L	10.00		96	70-130			
1,1-Dichloroethane	9.4		ug/L	10.00		94	70-130			
1,1-Dichloroethene	10.7		ug/L	10.00		107	70-130			
1,2-Dibromoethane	9.4		ug/L	10.00		94	70-130			
1,2-Dichlorobenzene	9.6		ug/L	10.00		96	70-130			
1,2-Dichloroethane	9.8		ug/L	10.00		98	70-130			
1,3-Dichlorobenzene	9.6		ug/L	10.00		96	70-130			
1,4-Dichlorobenzene	9.3		ug/L	10.00		93	70-130			
1,4-Dioxane - Screen	436		ug/L	200.0		218	0-332			
Acetone	60.7		ug/L	50.00		121	70-130			
Benzene	8.9		ug/L	10.00		89	70-130			
Carbon Tetrachloride	10.0		ug/L	10.00		100	70-130			
cis-1,2-Dichloroethene	10.4		ug/L	10.00		104	70-130			
Ethylbenzene	8.6		ug/L	10.00		86	70-130			

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8260B Volatile Organic Compounds										
Batch BG82215 - 5030B										
Methyl tert-Butyl Ether	8.9		ug/L	10.00		89	70-130			
Methylene Chloride	10.6		ug/L	10.00		106	70-130			
Naphthalene	9.3		ug/L	10.00		93	70-130			
Tertiary-amyl methyl ether	8.7		ug/L	10.00		87	70-130			
Tetrachloroethene	9.2		ug/L	10.00		92	70-130			
Toluene	9.3		ug/L	10.00		93	70-130			
Trichloroethene	9.0		ug/L	10.00		90	70-130			
Vinyl Chloride	11.9		ug/L	10.00		119	70-130			
Xylene O	9.2		ug/L	10.00		92	70-130			
Xylene P,M	18.2		ug/L	20.00		91	70-130			
Surrogate: 1,2-Dichloroethane-d4	*24.9*		ug/L	*25.00*		*99*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*24.1*		ug/L	*25.00*		*97*	*70-130*			
Surrogate: Dibromofluoromethane	*25.4*		ug/L	*25.00*		*102*	*70-130*			
Surrogate: Toluene-d8	*26.0*		ug/L	*25.00*		*104*	*70-130*			
LCS Dup										
1,1,1-Trichloroethane	9.7		ug/L	10.00		97	70-130	3	20	
1,1,2-Trichloroethane	9.6		ug/L	10.00		96	70-130	0.4	20	
1,1-Dichloroethane	9.4		ug/L	10.00		94	70-130	1	20	
1,1-Dichloroethene	10.2		ug/L	10.00		102	70-130	4	20	
1,2-Dibromoethane	9.5		ug/L	10.00		95	70-130	0.8	20	
1,2-Dichlorobenzene	9.6		ug/L	10.00		96	70-130	0.3	20	
1,2-Dichloroethane	9.9		ug/L	10.00		99	70-130	0.6	20	
1,3-Dichlorobenzene	9.8		ug/L	10.00		98	70-130	2	20	
1,4-Dichlorobenzene	9.4		ug/L	10.00		94	70-130	1	20	
1,4-Dioxane - Screen	276		ug/L	200.0		138	0-332	45	200	
Acetone	59.0		ug/L	50.00		118	70-130	3	20	
Benzene	9.1		ug/L	10.00		91	70-130	2	20	
Carbon Tetrachloride	9.8		ug/L	10.00		98	70-130	2	20	
cis-1,2-Dichloroethene	10.1		ug/L	10.00		101	70-130	3	20	
Ethylbenzene	8.7		ug/L	10.00		87	70-130	0.2	20	
Methyl tert-Butyl Ether	9.0		ug/L	10.00		90	70-130	1	20	
Methylene Chloride	10.5		ug/L	10.00		105	70-130	0.8	20	
Naphthalene	9.3		ug/L	10.00		93	70-130	0.9	20	
Tertiary-amyl methyl ether	8.8		ug/L	10.00		88	70-130	1	20	
Tetrachloroethene	9.3		ug/L	10.00		93	70-130	2	20	
Toluene	9.4		ug/L	10.00		94	70-130	1	20	
Trichloroethene	9.2		ug/L	10.00		92	70-130	2	20	
Vinyl Chloride	11.6		ug/L	10.00		116	70-130	2	20	
Xylene O	8.8		ug/L	10.00		88	70-130	4	20	
Xylene P,M	18.0		ug/L	20.00		90	70-130	1	20	
Surrogate: 1,2-Dichloroethane-d4	*25.8*		ug/L	*25.00*		*103*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*24.1*		ug/L	*25.00*		*96*	*70-130*			
Surrogate: Dibromofluoromethane	*25.0*		ug/L	*25.00*		*100*	*70-130*			
Surrogate: Toluene-d8	*25.6*		ug/L	*25.00*		*102*	*70-130*			
8270C(SIM) Polynuclear Aromatic Hydrocarbons										

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C(SIM) Polynuclear Aromatic Hydrocarbons										
Batch BG81714 - 3510C										
Blank										
2-Methylnaphthalene	ND	0.20	ug/L							
Acenaphthene	ND	0.20	ug/L							
Acenaphthylene	ND	0.20	ug/L							
Anthracene	ND	0.20	ug/L							
Benzo(a)anthracene	ND	0.05	ug/L							
Benzo(a)pyrene	ND	0.05	ug/L							
Benzo(b)fluoranthene	ND	0.05	ug/L							
Benzo(g,h,i)perylene	ND	0.20	ug/L							
Benzo(k)fluoranthene	ND	0.05	ug/L							
Chrysene	ND	0.05	ug/L							
Dibenzo(a,h)Anthracene	ND	0.05	ug/L							
Fluoranthene	ND	0.20	ug/L							
Fluorene	ND	0.20	ug/L							
Indeno(1,2,3-cd)Pyrene	ND	0.05	ug/L							
Naphthalene	ND	0.20	ug/L							
Pentachlorophenol	ND	1.00	ug/L							
Phenanthrene	ND	0.20	ug/L							
Pyrene	ND	0.20	ug/L							
Surrogate: 1,2-Dichlorobenzene-d4	*0.490*		ug/L	*0.6250*		*78*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*0.585*		ug/L	*0.6250*		*94*	*30-130*			
Surrogate: Nitrobenzene-d5	*0.688*		ug/L	*0.6250*		*110*	*30-130*			
Surrogate: p-Terphenyl-d14	*0.525*		ug/L	*0.6250*		*84*	*30-130*			
LCS										
2-Methylnaphthalene	0.435	0.20	ug/L	0.5000		87	40-140			
Acenaphthene	0.405	0.20	ug/L	0.5000		81	40-140			
Acenaphthylene	0.370	0.20	ug/L	0.5000		74	40-140			
Anthracene	0.438	0.20	ug/L	0.5000		88	40-140			
Benzo(a)anthracene	0.425	0.05	ug/L	0.5000		85	40-140			
Benzo(a)pyrene	0.392	0.05	ug/L	0.5000		78	40-140			
Benzo(b)fluoranthene	0.432	0.05	ug/L	0.5000		86	40-140			
Benzo(g,h,i)perylene	0.285	0.20	ug/L	0.5000		57	40-140			
Benzo(k)fluoranthene	0.372	0.05	ug/L	0.5000		74	40-140			
Chrysene	0.430	0.05	ug/L	0.5000		86	40-140			
Dibenzo(a,h)Anthracene	0.282	0.05	ug/L	0.5000		56	40-140			
Fluoranthene	0.402	0.20	ug/L	0.5000		80	40-140			
Fluorene	0.430	0.20	ug/L	0.5000		86	40-140			
Indeno(1,2,3-cd)Pyrene	0.308	0.05	ug/L	0.5000		62	40-140			
Naphthalene	0.442	0.20	ug/L	0.5000		88	40-140			
Pentachlorophenol	2.19	1.00	ug/L	2.500		88	30-130			
Phenanthrene	0.445	0.20	ug/L	0.5000		89	40-140			
Pyrene	0.470	0.20	ug/L	0.5000		94	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	*0.432*		ug/L	*0.6250*		*69*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*0.545*		ug/L	*0.6250*		*87*	*30-130*			
Surrogate: Nitrobenzene-d5	*0.628*		ug/L	*0.6250*		*100*	*30-130*			
Surrogate: p-Terphenyl-d14	*0.440*		ug/L	*0.6250*		*70*	*30-130*			

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C(SIM) Polynuclear Aromatic Hydrocarbons										
Batch BG81714 - 3510C										
LCS Dup										
2-Methylnaphthalene	0.360	0.20	ug/L	0.5000		72	40-140	19	20	
Acenaphthene	0.362	0.20	ug/L	0.5000		72	40-140	11	20	
Acenaphthylene	0.330	0.20	ug/L	0.5000		66	40-140	11	20	
Anthracene	0.415	0.20	ug/L	0.5000		83	40-140	5	20	
Benzo(a)anthracene	0.418	0.05	ug/L	0.5000		84	40-140	2	20	
Benzo(a)pyrene	0.388	0.05	ug/L	0.5000		78	40-140	1	20	
Benzo(b)fluoranthene	0.440	0.05	ug/L	0.5000		88	40-140	2	20	
Benzo(g,h,i)perylene	0.280	0.20	ug/L	0.5000		56	40-140	2	20	
Benzo(k)fluoranthene	0.358	0.05	ug/L	0.5000		72	40-140	4	20	
Chrysene	0.422	0.05	ug/L	0.5000		84	40-140	2	20	
Dibenzo(a,h)Anthracene	0.272	0.05	ug/L	0.5000		54	40-140	4	20	
Fluoranthene	0.395	0.20	ug/L	0.5000		79	40-140	2	20	
Fluorene	0.392	0.20	ug/L	0.5000		78	40-140	9	20	
Indeno(1,2,3-cd)Pyrene	0.300	0.05	ug/L	0.5000		60	40-140	2	20	
Naphthalene	0.365	0.20	ug/L	0.5000		73	40-140	19	20	
Pentachlorophenol	2.11	1.00	ug/L	2.500		84	30-130	4	20	
Phenanthrene	0.425	0.20	ug/L	0.5000		85	40-140	5	20	
Pyrene	0.468	0.20	ug/L	0.5000		94	40-140	0.5	20	
Surrogate: 1,2-Dichlorobenzene-d4	*0.358*		ug/L	*0.6250*		*57*	*30-130*			
Surrogate: 2-Fluorobiphenyl	*0.478*		ug/L	*0.6250*		*76*	*30-130*			
Surrogate: Nitrobenzene-d5	*0.530*		ug/L	*0.6250*		*85*	*30-130*			
Surrogate: p-Terphenyl-d14	*0.432*		ug/L	*0.6250*		*69*	*30-130*			
8270C Semi-Volatile Phenolic Compounds										
Batch BG81709 - 3520C										
Blank										
1,4-Dioxane	ND	2.5	ug/L							
Surrogate: 1,2-Dichlorobenzene-d4	*64.7*		ug/L	*100.0*		*65*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*116*		ug/L	*150.0*		*77*	*15-110*			
Surrogate: 2-Chlorophenol-d4	*98.3*		ug/L	*150.0*		*66*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*68.9*		ug/L	*100.0*		*69*	*30-130*			
Surrogate: 2-Fluorophenol	*87.6*		ug/L	*150.0*		*58*	*15-110*			
Surrogate: Nitrobenzene-d5	*71.7*		ug/L	*100.0*		*72*	*30-130*			
Surrogate: Phenol-d6	*101*		ug/L	*150.0*		*68*	*15-110*			
Surrogate: p-Terphenyl-d14	*70.4*		ug/L	*100.0*		*70*	*30-130*			
LCS										
1,4-Dioxane	61.4	2.5	ug/L	93.57		66	40-140			
Surrogate: 1,2-Dichlorobenzene-d4	*63.9*		ug/L	*100.0*		*64*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*131*		ug/L	*150.0*		*88*	*15-110*			
Surrogate: 2-Chlorophenol-d4	*95.7*		ug/L	*150.0*		*64*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*74.3*		ug/L	*100.0*		*74*	*30-130*			
Surrogate: 2-Fluorophenol	*78.8*		ug/L	*150.0*		*53*	*15-110*			
Surrogate: Nitrobenzene-d5	*68.8*		ug/L	*100.0*		*69*	*30-130*			

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Phenolic Compounds										
Batch BG81709 - 3520C										
Surrogate: Phenol-d6	*99.4*		ug/L	*150.0*		*66*	*15-110*			
Surrogate: p-Terphenyl-d14	*75.1*		ug/L	*100.0*		*75*	*30-130*			
LCS Dup										
1,4-Dioxane	61.0	2.5	ug/L	93.57		65	40-140	0.6	20	
Surrogate: 1,2-Dichlorobenzene-d4	*65.0*		ug/L	*100.0*		*65*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*99.8*		ug/L	*150.0*		*67*	*15-110*			
Surrogate: 2-Chlorophenol-d4	*73.6*		ug/L	*150.0*		*49*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*73.5*		ug/L	*100.0*		*74*	*30-130*			
Surrogate: 2-Fluorophenol	*59.0*		ug/L	*150.0*		*39*	*15-110*			
Surrogate: Nitrobenzene-d5	*70.6*		ug/L	*100.0*		*71*	*30-130*			
Surrogate: Phenol-d6	*76.8*		ug/L	*150.0*		*51*	*15-110*			
Surrogate: p-Terphenyl-d14	*72.0*		ug/L	*100.0*		*72*	*30-130*			
Batch BG82229 - 3520C										
Blank										
2,3,4,6-Tetrachlorophenol	ND	50.0	ug/L							
2,4,5-Trichlorophenol	ND	10.0	ug/L							
2,4,6-Trichlorophenol	ND	10.0	ug/L							
2,4-Dichlorophenol	ND	10.0	ug/L							
2,4-Dimethylphenol	ND	50.0	ug/L							
2,4-Dinitrophenol	ND	50.0	ug/L							
2-Chlorophenol	ND	10.0	ug/L							
2-Methylphenol	ND	10.0	ug/L							
2-Nitrophenol	ND	10.0	ug/L							
3+4-Methylphenol	ND	20.0	ug/L							
4,6-Dinitro-2-Methylphenol	ND	50.0	ug/L							
4-Chloro-3-Methylphenol	ND	10.0	ug/L							
4-Nitrophenol	ND	50.0	ug/L							
bis(2-Ethylhexyl)phthalate	2.3	6.0	ug/L							J
Butylbenzylphthalate	ND	10.0	ug/L							
Diethylphthalate	ND	10.0	ug/L							
Dimethylphthalate	ND	10.0	ug/L							
Di-n-butylphthalate	ND	10.0	ug/L							
Di-n-octylphthalate	ND	10.0	ug/L							
Pentachlorophenol	ND	50.0	ug/L							
Phenol	ND	10.0	ug/L							
Surrogate: 1,2-Dichlorobenzene-d4	*67.2*		ug/L	*100.0*		*67*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*125*		ug/L	*150.0*		*83*	*15-110*			
Surrogate: 2-Chlorophenol-d4	*105*		ug/L	*150.0*		*70*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*70.3*		ug/L	*100.0*		*70*	*30-130*			
Surrogate: 2-Fluorophenol	*94.9*		ug/L	*150.0*		*63*	*15-110*			
Surrogate: Nitrobenzene-d5	*72.4*		ug/L	*100.0*		*72*	*30-130*			
Surrogate: Phenol-d6	*108*		ug/L	*150.0*		*72*	*15-110*			
Surrogate: p-Terphenyl-d14	*75.9*		ug/L	*100.0*		*76*	*30-130*			

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Phenolic Compounds										
Batch BG82229 - 3520C										
LCS										
2,3,4,6-Tetrachlorophenol	82.9	50.0	ug/L	100.0		83	40-140			
2,4,5-Trichlorophenol	74.9	10.0	ug/L	100.0		75	30-130			
2,4,6-Trichlorophenol	72.2	10.0	ug/L	100.0		72	30-130			
2,4-Dichlorophenol	72.6	10.0	ug/L	100.0		73	30-130			
2,4-Dimethylphenol	65.9	50.0	ug/L	100.0		66	30-130			
2,4-Dinitrophenol	53.2	50.0	ug/L	100.0		53	30-130			
2-Chlorophenol	59.0	10.0	ug/L	100.0		59	30-130			
2-Methylphenol	62.8	10.0	ug/L	100.0		63	30-130			
2-Nitrophenol	66.1	10.0	ug/L	100.0		66	30-130			
3+4-Methylphenol	118	20.0	ug/L	200.0		59	30-130			
4,6-Dinitro-2-Methylphenol	81.8	50.0	ug/L	100.0		82	30-130			
4-Chloro-3-Methylphenol	75.7	10.0	ug/L	100.0		76	30-130			
4-Nitrophenol	75.6	50.0	ug/L	100.0		76	30-130			
bis(2-Ethylhexyl)phthalate	77.2	6.0	ug/L	100.0		77	40-140			
Butylbenzylphthalate	73.2	10.0	ug/L	100.0		73	40-140			
Diethylphthalate	74.6	10.0	ug/L	100.0		75	40-140			
Dimethylphthalate	74.1	10.0	ug/L	100.0		74	40-140			
Di-n-butylphthalate	72.5	10.0	ug/L	100.0		72	40-140			
Di-n-octylphthalate	77.1	10.0	ug/L	100.0		77	40-140			
Pentachlorophenol	77.8	50.0	ug/L	100.0		78	30-130			
Phenol	66.2	10.0	ug/L	100.0		66	30-130			
Surrogate: 1,2-Dichlorobenzene-d4	*57.2*		ug/L	*100.0*		*57*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*130*		ug/L	*150.0*		*87*	*15-110*			
Surrogate: 2-Chlorophenol-d4	*90.4*		ug/L	*150.0*		*60*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*69.0*		ug/L	*100.0*		*69*	*30-130*			
Surrogate: 2-Fluorophenol	*85.8*		ug/L	*150.0*		*57*	*15-110*			
Surrogate: Nitrobenzene-d5	*67.2*		ug/L	*100.0*		*67*	*30-130*			
Surrogate: Phenol-d6	*90.1*		ug/L	*150.0*		*60*	*15-110*			
Surrogate: p-Terphenyl-d14	*71.8*		ug/L	*100.0*		*72*	*30-130*			
LCS Dup										
2,3,4,6-Tetrachlorophenol	84.5	50.0	ug/L	100.0		85	40-140	2	20	
2,4,5-Trichlorophenol	78.5	10.0	ug/L	100.0		79	30-130	5	20	
2,4,6-Trichlorophenol	76.0	10.0	ug/L	100.0		76	30-130	5	20	
2,4-Dichlorophenol	76.8	10.0	ug/L	100.0		77	30-130	6	20	
2,4-Dimethylphenol	69.4	50.0	ug/L	100.0		69	30-130	5	20	
2,4-Dinitrophenol	38.6	50.0	ug/L	100.0		39	30-130	32	20	D+, J
2-Chlorophenol	65.6	10.0	ug/L	100.0		66	30-130	11	20	
2-Methylphenol	69.8	10.0	ug/L	100.0		70	30-130	11	20	
2-Nitrophenol	71.9	10.0	ug/L	100.0		72	30-130	8	20	
3+4-Methylphenol	127	20.0	ug/L	200.0		63	30-130	8	20	
4,6-Dinitro-2-Methylphenol	86.9	50.0	ug/L	100.0		87	30-130	6	20	
4-Chloro-3-Methylphenol	79.0	10.0	ug/L	100.0		79	30-130	4	20	
4-Nitrophenol	85.6	50.0	ug/L	100.0		86	30-130	12	20	
bis(2-Ethylhexyl)phthalate	83.6	6.0	ug/L	100.0		84	40-140	8	20	

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8270C Semi-Volatile Phenolic Compounds										
Batch BG82229 - 3520C										
Butylbenzylphthalate	78.7	10.0	ug/L	100.0		79	40-140	7	20	
Diethylphthalate	79.5	10.0	ug/L	100.0		80	40-140	6	20	
Dimethylphthalate	78.5	10.0	ug/L	100.0		79	40-140	6	20	
Di-n-butylphthalate	79.0	10.0	ug/L	100.0		79	40-140	9	20	
Di-n-octylphthalate	81.0	10.0	ug/L	100.0		81	40-140	5	20	
Pentachlorophenol	80.1	50.0	ug/L	100.0		80	30-130	3	20	
Phenol	72.7	10.0	ug/L	100.0		73	30-130	9	20	
Surrogate: 1,2-Dichlorobenzene-d4	*61.8*		ug/L	*100.0*		*62*	*30-130*			
Surrogate: 2,4,6-Tribromophenol	*139*		ug/L	*150.0*		*92*	*15-110*			
Surrogate: 2-Chlorophenol-d4	*99.9*		ug/L	*150.0*		*67*	*15-110*			
Surrogate: 2-Fluorobiphenyl	*70.1*		ug/L	*100.0*		*70*	*30-130*			
Surrogate: 2-Fluorophenol	*90.1*		ug/L	*150.0*		*60*	*15-110*			
Surrogate: Nitrobenzene-d5	*69.3*		ug/L	*100.0*		*69*	*30-130*			
Surrogate: Phenol-d6	*101*		ug/L	*150.0*		*67*	*15-110*			
Surrogate: p-Terphenyl-d14	*77.8*		ug/L	*100.0*		*78*	*30-130*			
Classical Chemistry										
Batch BG81606 - General Preparation										
Blank										
Total Suspended Solids	ND	5	mg/L							
LCS										
Total Suspended Solids	46		mg/L	50.30		91	80-120			
Batch BG81621 - Metals No Prep										
Blank										
Hexavalent Chromium	ND	50	ug/L							
LCS										
Hexavalent Chromium	499	50	ug/L	499.8		100	90-110			
LCS Dup										
Hexavalent Chromium	499	50	ug/L	499.8		100	90-110	0	20	
Duplicate **Source: 0807252-04**										
Hexavalent Chromium	ND	50	ug/L		ND				20	
Matrix Spike **Source: 0807252-04**										
Hexavalent Chromium	435	50	ug/L	499.8	ND	87	85-115			
Batch BG81626 - General Preparation										
Blank										
Total Residual Chlorine	ND	0.06	mg/L							
LCS										
Total Residual Chlorine	0.41		mg/L	0.3999		103	80-120			
Duplicate **Source: 0807252-04**										
Total Residual Chlorine	ND	0.06	mg/L		ND				20	
Matrix Spike **Source: 0807252-04**										
Total Residual Chlorine	0.01		mg/L	0.3999	0.01	0	75-125			M-

ESS Laboratory

Division of Thielsch Engineering, Inc.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Classical Chemistry										
Batch BG82109 - TCN Prep										
Blank										
Total Cyanide (LL)	ND	0.0050	mg/L							
LCS										
Total Cyanide (LL)	0.0198	0.0050	mg/L	0.02006		99	90-110			
LCS										
Total Cyanide (LL)	0.147	0.0050	mg/L	0.1504		98	90-110			
LCS Dup										
Total Cyanide (LL)	0.149	0.0050	mg/L	0.1504		99	90-110	1	20	
Batch BG82127 - General Preparation										
Blank										
Total Petroleum Hydrocarbon	ND	5	mg/L							
LCS										
Total Petroleum Hydrocarbon	18	5	mg/L	20.00		88	66-114			
8011 1,2-Dibromoethane / 1,2-Dibromo-3-chloropropane										
Batch BG82225 - 504/8011										
Blank										
1,2-Dibromoethane	ND	0.015	ug/L							
Surrogate: Pentachloroethane	*0.187*		ug/L	*0.2000*		*93*	*30-150*			
LCS										
1,2-Dibromoethane	0.209	0.015	ug/L	0.2000		105	60-140			
Surrogate: Pentachloroethane	*0.190*		ug/L	*0.2000*		*95*	*30-150*			
LCS Dup										
1,2-Dibromoethane	0.205	0.015	ug/L	0.2000		102	60-140	2	20	
Surrogate: Pentachloroethane	*0.182*		ug/L	*0.2000*		*91*	*30-150*			

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
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Notes and Definitions

U	Analyte included in the analysis, but not detected
Q	Calibration required quadratic regression.
M+	Matrix Spike recovery is above upper control limit.
M-	Matrix Spike recovery is below lower control limit.
J	Reported between MDL and MRL; Estimated value.
D+	Relative percent difference for duplicate is outside of criteria.
D	Diluted.
C-	Continuing Calibration recovery is below lower control limit.
B+	Blank Spike recovery is above upper control limit.
B	Present in Method Blank.
ND	Analyte NOT DETECTED above the detection limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.

CERTIFICATE OF ANALYSIS

Client Name: ENSR International
Client Project ID: Compo-RGP

ESS Laboratory Work Order: 0807252

ESS LABORATORY CERTIFICATIONS

U.S. Army Corps of Engineers
Soil and Water

Navy Installation Restoration QA Program
Soil and Water

Rhode Island: A-179

Connecticut: PH-0750

Maine: RI002

Massachusetts: M-RI002

New Hampshire (NELAP accredited): 242405
Potable Water
Non Potable Water

New York (NELAP accredited): 11313
Potable Water
Non Potable Water
Solid and Hazardous Waste

United States Department of Agriculture
Soil Permit: S-54210

New Jersey (NELAP accredited): RI002
Potable Water
Non Potable Water
Soil and Hazardous Waste

Maryland: 301
Potable Water

ESS Laboratory

Division of Thielsch Engineering, Inc.
185 Frances Avenue, Cranston, RI 02910-2211
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

Page 1 of 1

Turn Time X Standard Other ____
If faster than 5 days, prior approval by laboratory is required # ____
State where samples were collected from: MA RI CT NH NJ NY ME Other ____
Is this project for any of the following: MA-MCP Navy USACE Other ____

Reporting Limits

ESS LAB PROJECT ID: 0807252

Electronic Deliverable X Yes ___ No
Format: Excel__ Access__ PDF X Other EQUIS 4 File

Co. Name	Project #	Project Name (20 Char. or less)
ENSR	01817-013	Compo-RGP

Contact Person	Address
Marybeth Hayes	2 Technology Park Drive

City	State	Zip	PO#
Westford	MA	01886	2064876

Telephone #	Fax #	Email Address
978-589-3000	978-589-3100	mhayes@ensr.aecom.com

Write Required Analysis

ESS LAB Sample#	Date	Collection Time	COMP	GRAB	MATRIX	Sample Identification (20 Char. or less)	Pres Code	Number of Containers	Type of Containers	TSS (2540D)	TRC (4500GIG)	TPH (1664A)	CN (4500CN CE)	VOC's (8260)	8270 w/PAH's by SIM	PCB's (8082)	Metals (6010/7000)	HexChrom (7196)	EDB (8011)
1	7/16/08	0945		X	GW	PZ-04	9,2,5,4	15	P,G V	X	X	X	X	X	X	X	X	X	X
2	↓	1220		X	GW	V-213	9,2,5,4	15	P,G,V	X	X	X	X	X	X	X	X	X	X
3	↓	0950		X	GW	MW-402	9,2,5,4	15	P,G,V	X	X	X	X	X	X	X	X	X	X
4	↓	1235		X	GW	MW-404	9,2,5,4	15	P,G,V	X	X	X	X	X	X	X	X	X	X
5	—	—			DI	Trip Blank	2	2	V	X	X	X	X	X	X	X	X	X	X

Container Type: P-Poly G-Glass S-Sterile V-VOA | Matrix: S-Soil SD-Solid D-Sludge WW-Waste Water GW-Ground Water SW-Surface Water DW-Drinking Water O-Oil W-Wipes F-Filters

Cooler Present ✓ Yes ___ No
Seals Intact ___ Yes ___ No NA: ✓
Cooler Temp: 4.8°C

Internal Use Only
[ ] Pickup
[ ] Technicians ____

Preservation Code: 1- NP, 2- HCl, 3- H_2SO_4, 4- HNO_3, 5- NaOH, 6- MeOH, 7- Asorbic Acid, 8- ZnAct, 9- none

Sampled by: Peter Pelletier & Colin Callahan Total and Dissolved metals

Comments: analyze for 1,4 Dioxane as part of SVOC analysis JEP 7/16/0

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
Peter Pelletier	7/16/08 1508	Ralph Lewis	7/16/08 15:08	Ralph Lewis	7/16/08 16:05	J Dauer	7/16/08 1605
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

*By circling MA-MCP, client acknowledges samples were collected in accordance with MADEP CAM VII A

Please fax all changes to Chain of Custody in writing.

1 (White) Lab Copy 2 (Yellow) Client Receipt

10/26/04 A