



Shaw Environmental, Inc.

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Andover, MA 01810-1141  
978.691.2100  
Fax: 978.691.2101

December 23, 2004  
Project 101960

Mr. Joseph T. Martella, II  
Rhode Island Department of Environmental Management  
Office of Waste Management  
235 Promenade Street  
Providence, RI 02908-5767

**Re: Monthly Status Report-November 2004  
Former Gorham Manufacturing Facility  
333 Adelaide Avenue, Providence, RI  
Site Remediation Case No. 97-030**

Dear Mr. Martella:

Shaw Environmental, Inc. (Shaw) has prepared this monthly status report on behalf of Textron, Inc. (Textron). This status report is for the remediation of tetrachloroethene (PCE) contaminated groundwater at the former Gorham Manufacturing Facility in Providence, Rhode Island (Figure 1).

The Former Gorham Manufacturing facility is located at 333 Adelaide Avenue, Providence, Rhode Island (the Site). The contaminant of concern for groundwater is primarily PCE. As discussed in the Remedial Action Work Plan and subsequent revisions, the PCE source area in the vicinity of the former building W is the area of concern being treated, using an in-situ application of sodium permanganate, to achieve the site-specific remedial goal of 7,700 micrograms per liter (ug/L).

## **FIELD ACTIVITIES**

The following field activities were conducted in November 2004:

### Monitoring Activities

Field parameters were measured in treatment area wells on November 29, 2004. Field measurements included oxidation/reduction potential (ORP), dissolved oxygen (DO), pH, temperature, and specific conductance (SC). Groundwater elevation measurements were also collected. These results are presented in Tables 1 and 2.

Mr. Joseph T. Martella, II  
December 23, 2004  
Page 2 of 3

### Groundwater Sampling

Groundwater samples were collected for volatile organic compound (VOC) analysis (EPA Method 8260) on November 29, 2004 (approximately eight weeks post-injection) from seven wells within the treatment area (MW-112, MW-209D, MW-205, MW 101-S&D, and MW-202S&D). The groundwater collected from well MW-209D was preserved with sodium thiosulfate, in the field, in order to quench the residual permanganate in the sample. Groundwater samples were shipped to STL Westfield, Westfield, MA for analysis.

### **SUMMARY OF ANALYTICAL DATA**

A summary of the analytical data is contained in Table 3. The laboratory analytical reports for soil and groundwater samples collected in March, April, and May 2004 are attached to this report.

### **FUTURE ACTIVITIES**

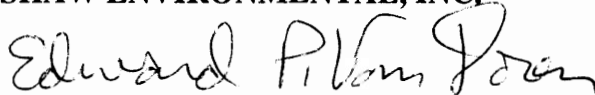
Field parameter measurements will continue to be collected monthly for ORP, DO, temperature, pH, and SC. The final monthly even will occur in December, 2004.

Groundwater samples will be collected from all 21 source area monitoring wells for VOC analysis (EPA Method 8260) approximately 16 weeks post-injection. This event is scheduled for January 2005. The samples collected in January 2005 will constitute the first round of quarterly sampling, and an additional three (3) quarters of groundwater sampling will be conducted. Field parameter measurements will also be conducted during the quarterly groundwater sampling events.

If you have any questions, please contact Ed Van Doren at (978) 691-2130.

Sincerely,

**SHAW ENVIRONMENTAL, INC.**



Edward P. Van Doren, PE, LSP  
Project Manager


### Attachments

cc: Craig Roy, RIDEM OWR  
Greg Simpson, Textron  
Dave McCabe, Textron  
Jamieson Schiff, Textron  
Thomas Dellar, City of Providence  
Karriem Van Leesten, City of Providence  
Amelie Mailloux, Stop & Shop

### CERTIFICATIONS

The following certifications are provided pursuant to Rule 9.19 of the Remediation Regulations:


I, Edward P. Van Doren, as an authorized representative of Shaw Environmental, Inc. and the person responsible for the preparation of this Monthly Status Report dated December 23, 2004, certify that the information contained in this report is complete and accurate to the best of my knowledge.

  
\_\_\_\_\_  
Edward P. Van Doren, PE, LSP  
Project Manager

12/29/04  
Date:

We, Textron, Inc., as the party responsible for submittal of this Monthly Status Report, certify that this report is a complete and accurate representation of the contaminated site and the release, and contains all known facts surrounding the release, to the best of our knowledge.

Certification on behalf of Textron Inc.

  
\_\_\_\_\_  
Gregory L. Simpson  
Project Manager

12-27-04  
Date:



**TABLE 1**  
**Groundwater Field Parameters**  
**November 2004 - Monthly Measurements**

**Former Gorham Manufacturing Facility**  
**Providence, Rhode Island**

<b>WELL ID</b>	<b>DATE</b>	<b>pH Field</b>	<b>Temperature Field (deg.c)</b>	<b>Conductivity Field (ms/cm)</b>	<b>Dissolved Oxygen Field (mg/l)</b>	<b>Oxidation Reduction Potential Field (mv)</b>
MW-101D	11/29/2004	6.94	14.55	0.052	2.34	517.7
MW-101S	11/29/2004	5.68	15.19	0.793	2.25	173.8
MW-112	11/29/2004	5.49	14.17	0.400	2.93	215.2
MW-116D	11/29/2004	5.22	13.74	0.391	0.68	238.1
MW-116S	11/29/2004	5.76	14.15	0.166	3.94	238.5
MW-201D	11/29/2004	6.45	14.13	4.685	0.61	172.7
MW-201S	11/29/2004	6.41	14.01	2.052	2.03	183.3
MW-202D	11/29/2004	6.00	14.29	0.904	0.69	149.6
MW-202S	11/29/2004	5.95	14.25	0.751	0.92	113.7
MW-203D	11/29/2004	5.98	14.23	0.633	0.40	192.3
MW-203S	11/29/2004	6.15	15.20	0.831	0.44	190.6
MW-204D	11/29/2004	6.68	13.92	1.035	0.69	153.3
MW-204S	11/29/2004	6.68	14.17	0.846	0.52	-0.9
MW-205	11/29/2004	6.22	14.63	1.347	0.47	21.3
MW-206D	11/29/2004	6.00	14.07	0.415	0.47	159.3
MW-206S	11/29/2004	6.41	15.14	1.761	1.10	161.2
MW-207D	11/29/2004	6.02	14.09	0.892	0.57	158.9
MW-207S	11/29/2004	5.96	14.47	0.789	0.43	119.3
MW-208D	11/29/2004	5.68	14.28	0.749	0.31	198.1
MW-208S	11/29/2004	5.60	14.85	0.661	0.36	209.2
MW-209D	11/29/2004	Permanganate present				

**Note:**

Well MW-209D was not measured for field parameters due to the presence of permanganate as indicated by a purple color in the groundwater at this location.

**TABLE 2  
WATER TABLE ELEVATION  
(November 2004)**

**Former Gorham Manufacturing Facility  
Providence, Rhode Island**

<b>Location</b>	<b>Date</b>	<b>Reference Elevation (Feet)</b>	<b>Depth to Water (Feet)</b>	<b>Groundwater Elevation (Feet)</b>
MW-101D	11/29/2004	98.91	25.10	73.81
MW-101S	11/29/2004	98.90	25.17	73.73
MW-112	11/29/2004	100.63	26.77	73.86
MW-116D	11/29/2004	98.92	25.07	73.85
MW-116S	11/29/2004	99.40	25.06	74.34
MW-201D	11/29/2004	98.80	24.98	73.82
MW-201S	11/29/2004	98.75	24.92	73.83
MW-202D	11/29/2004	98.17	24.42	73.75
MW-202S	11/29/2004	98.06	24.27	73.79
MW-203D	11/29/2004	98.91	25.07	73.84
MW-203S	11/29/2004	98.92	25.09	73.83
MW-204D	11/29/2004	98.88	25.15	73.73
MW-204S	11/29/2004	98.84	25.09	73.75
MW-205	11/29/2004	99.47	25.63	73.84
MW-206D	11/29/2004	98.71	24.95	73.76
MW-206S	11/29/2004	98.55	24.76	73.79
MW-207D	11/29/2004	98.18	24.44	73.74
MW-207S	11/29/2004	98.28	24.55	73.73
MW-208D	11/29/2004	99.68	24.90	74.78
MW-208S	11/29/2004	99.50	25.73	73.77
MW-209D	11/29/2004	100.47	26.63	73.84

Note:

Groundwater elevations are based on an arbitrary reference datum established for the site.

**Table 3**  
**Groundwater Analytical Results**  
**Positive Hits Only**  
**November 29, 2004**  
Former Gorham Manufacturing Facility  
Providence, Rhode Island

<b>CONSTITUENT (ug/l)</b>	<b>MW-101D 11/29/2004</b>	<b>MW-101S 11/29/2004</b>	<b>MW-112 11/29/2004</b>	<b>MW-202D 11/29/2004</b>	<b>MW-202S 11/29/2004</b>	<b>MW-205 11/29/2004</b>	<b>MW-209D 11/29/2004</b>
Carbon tetrachloride	<1.0	<250	<5.0	<250	<500	7.8	<10
cis-1,2-Dichloroethene	<1.0	190J	<5.0	<250	<500	22	<10
Methyltert-butylether	0.58J	<250	<5.0	<250	<500	<5.0	<10
Tetrachloroethene	17	16000	160	13000	44000	1100	<10
Trichloroethene	<1.0	<250	32	<250	<500	120	<10

Notes:

< = Not detected above the laboratory reporting limit. Value indicated is the reporting limit.

J = Estimated value.

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DEC 16 2004  
SHAW E & I, INC.

SEVERN  
TRENT

STL

**STL Westfield**

53 Southampton Road  
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Tel: 413 572 4000 Fax: 413 572 3707

www.stl-inc.com

Edward Van Doren  
Shaw E&I Inc.  
3 Riverside Dr.  
Andover, MA 01810-1141

12/14/2004

Report Number: 221131

Dear Edward Van Doren,

The analysis of your sample(s) submitted on 11/30/2004 is now complete and the appropriate analytical report is enclosed. The samples were prepared and analyzed according to established methodologies and protocols. All holding times were met for the methods performed on these samples, unless otherwise noted in the report's case narrative.

If you have any questions regarding this report, please contact your Project Manager, Rebecca C. Mason.

For questions, concerns or comments regarding our service, please do not hesitate to contact me directly. Thank you for selecting STL Westfield, and we look forward to working with you on future projects.

Steven C. Hartmann  
Laboratory Director  
STL WESTFIELD

Technical Review: CFR 12/14/04

Total number of pages in this report: 37



## MCP CASE NARRATIVE

**Client: Shaw E&I Inc.**

**Report Number: 221131**

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) as a result of a dilution may not be able to satisfy regulatory monitoring limits in some cases if the "adjusted" RL is greater than the applicable regulatory standards or criterion to which the concentration is being compared. Such increases in the RLs are unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes, which exceed the calibration range.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

The project samples were received on 11/30/04; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.3°C.

S A M P L E I N F O R M A T I O N

Date: 12/14/2004

Job Number.: 221131  
 Customer...: Shaw E&I Inc.  
 Attn.....: Edward Van Doren

Project Number.....: 20002158  
 Customer Project ID....: 101960  
 Project Description....: 101960

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
221131-1	MW-112	Water	11/29/2004	10:30	11/30/2004	18:45
221131-2	MW-209D	Water	11/29/2004	11:30	11/30/2004	18:45
221131-3	MW-205	Water	11/29/2004	10:00	11/30/2004	18:45
221131-4	MW-101S	Water	11/29/2004	09:00	11/30/2004	18:45
221131-5	MW-101D	Water	11/29/2004	09:30	11/30/2004	18:45
221131-6	MW-202S	Water	11/29/2004	07:30	11/30/2004	18:45
221131-7	MW-202D	Water	11/29/2004	08:00	11/30/2004	18:45



**STL**

MADEP MA014  
 RIDOH57  
 CTDPH 0494  
 VT DECWSD  
 NH DES 253903-A

NELAP FL E87912 TOX  
 NELAP NJ MA008 TOX  
 NELAP NY 10843  
 NY DOH 10843



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 Westfield, MA 01085  
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STL Billerica-Service Center  
 148 Rangeway Rd.  
 N. Billerica, MA 01862  
 Tel: (978) 667-1400  
 Fax: (978) 667-7871

LABORATORY TEST RESULTS

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-112  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 10:30  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-1  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
SW846 8260B	Volatile Organics						
	1,1,1,2-Tetrachloroethane	ND	U	5.0	ug/L	12/08/04	blw
	1,1,1-Trichloroethane	ND	U	5.0	ug/L	12/08/04	blw
	1,1,2,2-Tetrachloroethane	ND	U	5.0	ug/L	12/08/04	blw
	1,1,2-Trichloroethane	ND	U	5.0	ug/L	12/08/04	blw
	1,1-Dichloroethane	ND	U	5.0	ug/L	12/08/04	blw
	1,1-Dichloroethene	ND	U	5.0	ug/L	12/08/04	blw
	1,1-Dichloropropene	ND	U	5.0	ug/L	12/08/04	blw
	1,2,3-Trichlorobenzene	ND	U	5.0	ug/L	12/08/04	blw
	1,2,3-Trichloropropane	ND	U	15	ug/L	12/08/04	blw
	1,2,4-Trichlorobenzene	ND	U	5.0	ug/L	12/08/04	blw
	1,2,4-Trimethylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	25	ug/L	12/08/04	blw
	1,2-Dibromoethane (EDB)	ND	U	5.0	ug/L	12/08/04	blw
	1,2-Dichlorobenzene	ND	U	5.0	ug/L	12/08/04	blw
	1,2-Dichloroethane	ND	U	5.0	ug/L	12/08/04	blw
	1,2-Dichloropropane	ND	U	5.0	ug/L	12/08/04	blw
	1,3,5-Trimethylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	1,3-Dichlorobenzene	ND	U	5.0	ug/L	12/08/04	blw
	1,3-Dichloropropane	ND	U	5.0	ug/L	12/08/04	blw
	1,4-Dichlorobenzene	ND	U	5.0	ug/L	12/08/04	blw
	2,2-Dichloropropane	ND	U	5.0	ug/L	12/08/04	blw
	2-Butanone (MEK)	ND	U	50	ug/L	12/08/04	blw
	2-Chlorotoluene	ND	U	5.0	ug/L	12/08/04	blw
	2-Hexanone (MNBK)	ND	U	50	ug/L	12/08/04	blw
	4-Chlorotoluene	ND	U	5.0	ug/L	12/08/04	blw
	4-Methyl-2-pentanone (MIBK)	ND	U	50	ug/L	12/08/04	blw
	Acetone	ND	U	250	ug/L	12/08/04	blw
	Benzene	ND	U	5.0	ug/L	12/08/04	blw
	Bromobenzene	ND	U	5.0	ug/L	12/08/04	blw
	Bromochloromethane	ND	U	5.0	ug/L	12/08/04	blw
	Bromodichloromethane	ND	U	5.0	ug/L	12/08/04	blw
	Bromoform	ND	U	5.0	ug/L	12/08/04	blw
	Bromomethane	ND	U	10	ug/L	12/08/04	blw
	Carbon tetrachloride	ND	U	5.0	ug/L	12/08/04	blw
	Chlorobenzene	ND	U	5.0	ug/L	12/08/04	blw
	Chloroethane	ND	U	10	ug/L	12/08/04	blw
	Chloroform	ND	U	5.0	ug/L	12/08/04	blw
	Chloromethane	ND	U	10	ug/L	12/08/04	blw
	Dibromochloromethane	ND	U	5.0	ug/L	12/08/04	blw
	Dibromomethane	ND	U	5.0	ug/L	12/08/04	blw
	Ethylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	Hexachlorobutadiene	ND	U	3.0	ug/L	12/08/04	blw
	Isopropylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	Methyl-tert-butyl-ether (MTBE)	ND	U	5.0	ug/L	12/08/04	blw
	Methylene chloride	ND	U	10	ug/L	12/08/04	blw
	Naphthalene	ND	U	25	ug/L	12/08/04	blw
	Styrene	ND	U	5.0	ug/L	12/08/04	blw
	Tetrachloroethene	160	U	5.0	ug/L	12/08/04	blw

\* In Description = Dry Wgt.



MADEP MA014  
 RIDOH57  
 CTDPH 0494  
 VT DECWSD  
 NH DES 253903-A

NELAP FL E87912 TOX  
 NELAP NJ MA008 TOX  
 NELAP NY 10843  
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LABORATORY TEST RESULTS

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-112  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 10:30  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-1  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
	Toluene	ND		5.0	ug/L	12/08/04	blw
	Trichloroethene (TCE)	32	U	5.0	ug/L	12/08/04	blw
	Trichlorofluoromethane (Freon 11)	ND	U	5.0	ug/L	12/08/04	blw
	Vinyl chloride	ND	U	5.0	ug/L	12/08/04	blw
	cis-1,2-Dichloroethene	ND	U	5.0	ug/L	12/08/04	blw
	cis-1,3-Dichloropropene	ND	U	2.5	ug/L	12/08/04	blw
	m&p-Xylenes	ND	U	5.0	ug/L	12/08/04	blw
	n-Butylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	n-Propylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	o-Xylene	ND	U	5.0	ug/L	12/08/04	blw
	p-Isopropyltoluene	ND	U	5.0	ug/L	12/08/04	blw
	sec-Butylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	tert-Butylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	trans-1,2-Dichloroethene	ND	U	5.0	ug/L	12/08/04	blw
	trans-1,3-Dichloropropene	ND	U	2.5	ug/L	12/08/04	blw

\* In Description = Dry Wgt.



**STL**

MADEP MA014  
 RIDOH57  
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LABORATORY TEST RESULTS

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-209D  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 11:30  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-2  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
SW846 8260B	Volatile Organics						
	1,1,1,2-Tetrachloroethane	ND	U	10	ug/L	12/10/04	blw
	1,1,1-Trichloroethane	ND	U	10	ug/L	12/10/04	blw
	1,1,2,2-Tetrachloroethane	ND	U	10	ug/L	12/10/04	blw
	1,1,2-Trichloroethane	ND	U	10	ug/L	12/10/04	blw
	1,1-Dichloroethane	ND	U	10	ug/L	12/10/04	blw
	1,1-Dichloroethene	ND	U	10	ug/L	12/10/04	blw
	1,1-Dichloropropene	ND	U	10	ug/L	12/10/04	blw
	1,2,3-Trichlorobenzene	ND	U	10	ug/L	12/10/04	blw
	1,2,3-Trichloropropane	ND	U	30	ug/L	12/10/04	blw
	1,2,4-Trichlorobenzene	ND	U	10	ug/L	12/10/04	blw
	1,2,4-Trimethylbenzene	ND	U	10	ug/L	12/10/04	blw
	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	50	ug/L	12/10/04	blw
	1,2-Dibromoethane (EDB)	ND	U	10	ug/L	12/10/04	blw
	1,2-Dichlorobenzene	ND	U	10	ug/L	12/10/04	blw
	1,2-Dichloroethane	ND	U	10	ug/L	12/10/04	blw
	1,2-Dichloropropane	ND	U	10	ug/L	12/10/04	blw
	1,3,5-Trimethylbenzene	ND	U	10	ug/L	12/10/04	blw
	1,3-Dichlorobenzene	ND	U	10	ug/L	12/10/04	blw
	1,3-Dichloropropane	ND	U	10	ug/L	12/10/04	blw
	1,4-Dichlorobenzene	ND	U	10	ug/L	12/10/04	blw
	2,2-Dichloropropane	ND	U	10	ug/L	12/10/04	blw
	2-Butanone (MEK)	ND	U	100	ug/L	12/10/04	blw
	2-Chlorotoluene	ND	U	10	ug/L	12/10/04	blw
	2-Hexanone (MNBK)	ND	U	100	ug/L	12/10/04	blw
	4-Chlorotoluene	ND	U	10	ug/L	12/10/04	blw
	4-Methyl-2-pentanone (MIBK)	ND	U	100	ug/L	12/10/04	blw
	Acetone	ND	U	500	ug/L	12/10/04	blw
	Benzene	ND	U	10	ug/L	12/10/04	blw
	Bromobenzene	ND	U	10	ug/L	12/10/04	blw
	Bromochloromethane	ND	U	10	ug/L	12/10/04	blw
	Bromodichloromethane	ND	U	10	ug/L	12/10/04	blw
	Bromoform	ND	U	10	ug/L	12/10/04	blw
	Bromomethane	ND	U	20	ug/L	12/10/04	blw
	Carbon tetrachloride	ND	U	10	ug/L	12/10/04	blw
	Chlorobenzene	ND	U	10	ug/L	12/10/04	blw
	Chloroethane	ND	U	20	ug/L	12/10/04	blw
	Chloroform	ND	U	10	ug/L	12/10/04	blw
	Chloromethane	ND	U	20	ug/L	12/10/04	blw
	Dibromochloromethane	ND	U	10	ug/L	12/10/04	blw
	Dibromomethane	ND	U	10	ug/L	12/10/04	blw
	Ethylbenzene	ND	U	10	ug/L	12/10/04	blw
	Hexachlorobutadiene	ND	U	6.0	ug/L	12/10/04	blw
	Isopropylbenzene	ND	U	10	ug/L	12/10/04	blw
	Methyl-tert-butyl-ether (MTBE)	ND	U	10	ug/L	12/10/04	blw
	Methylene chloride	ND	U	20	ug/L	12/10/04	blw
	Naphthalene	ND	U	50	ug/L	12/10/04	blw
	Styrene	ND	U	10	ug/L	12/10/04	blw
	Tetrachloroethene	ND	U	10	ug/L	12/10/04	blw

\* In Description = Dry Wgt.



MADEP MA014  
 RIDOH57  
 CTDPH 0494  
 VT DECWSD  
 NH DES 253903-A

NELAP FL E87912 TOX  
 NELAP NJ MA008 TOX  
 NELAP NY 10843  
 NY DOH 10843



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 Fax: (978) 667-7871

LABORATORY TEST RESULTS

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-209D  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 11:30  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-2  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
	Toluene	ND	U	10	ug/L	12/10/04	blw
	Trichloroethene (TCE)	ND	U	10	ug/L	12/10/04	blw
	Trichlorofluoromethane (Freon 11)	ND	U	10	ug/L	12/10/04	blw
	Vinyl chloride	ND	U	10	ug/L	12/10/04	blw
	cis-1,2-Dichloroethene	ND	U	10	ug/L	12/10/04	blw
	cis-1,3-Dichloropropene	ND	U	5.0	ug/L	12/10/04	blw
	m&p-Xylenes	ND	U	10	ug/L	12/10/04	blw
	n-Butylbenzene	ND	U	10	ug/L	12/10/04	blw
	n-Propylbenzene	ND	U	10	ug/L	12/10/04	blw
	o-Xylene	ND	U	10	ug/L	12/10/04	blw
	p-Isopropyltoluene	ND	U	10	ug/L	12/10/04	blw
	sec-Butylbenzene	ND	U	10	ug/L	12/10/04	blw
	tert-Butylbenzene	ND	U	10	ug/L	12/10/04	blw
	trans-1,2-Dichloroethene	ND	U	10	ug/L	12/10/04	blw
	trans-1,3-Dichloropropene	ND	U	5.0	ug/L	12/10/04	blw

\* In Description = Dry Wgt.



**STL**

MADEP MA014  
 RIDOH57  
 CTDPH 0494  
 VT DECWSD  
 NH DES 253903-A

NELAP FL E87912 TOX  
 NELAP NJ MA008 TOX  
 NELAP NY 10843  
 NY DOH 10843



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LABORATORY TEST RESULTS

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-205  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 10:00  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-3  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
SW846 8260B	Volatile Organics						
	1,1,1,2-Tetrachloroethane	ND	U	5.0	ug/L	12/08/04	blw
	1,1,1-Trichloroethane	ND	U	5.0	ug/L	12/08/04	blw
	1,1,2,2-Tetrachloroethane	ND	U	5.0	ug/L	12/08/04	blw
	1,1,2-Trichloroethane	ND	U	5.0	ug/L	12/08/04	blw
	1,1-Dichloroethane	ND	U	5.0	ug/L	12/08/04	blw
	1,1-Dichloroethene	ND	U	5.0	ug/L	12/08/04	blw
	1,1-Dichloropropene	ND	U	5.0	ug/L	12/08/04	blw
	1,2,3-Trichlorobenzene	ND	U	5.0	ug/L	12/08/04	blw
	1,2,3-Trichloropropane	ND	U	15	ug/L	12/08/04	blw
	1,2,4-Trichlorobenzene	ND	U	5.0	ug/L	12/08/04	blw
	1,2,4-Trimethylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	25	ug/L	12/08/04	blw
	1,2-Dibromoethane (EDB)	ND	U	5.0	ug/L	12/08/04	blw
	1,2-Dichlorobenzene	ND	U	5.0	ug/L	12/08/04	blw
	1,2-Dichloroethane	ND	U	5.0	ug/L	12/08/04	blw
	1,2-Dichloropropane	ND	U	5.0	ug/L	12/08/04	blw
	1,3,5-Trimethylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	1,3-Dichlorobenzene	ND	U	5.0	ug/L	12/08/04	blw
	1,3-Dichloropropane	ND	U	5.0	ug/L	12/08/04	blw
	1,4-Dichlorobenzene	ND	U	5.0	ug/L	12/08/04	blw
	2,2-Dichloropropane	ND	U	5.0	ug/L	12/08/04	blw
	2-Butanone (MEK)	ND	U	50	ug/L	12/08/04	blw
	2-Chlorotoluene	ND	U	5.0	ug/L	12/08/04	blw
	2-Hexanone (MNBK)	ND	U	50	ug/L	12/08/04	blw
	4-Chlorotoluene	ND	U	5.0	ug/L	12/08/04	blw
	4-Methyl-2-pentanone (MIBK)	ND	U	50	ug/L	12/08/04	blw
	Acetone	ND	U	250	ug/L	12/08/04	blw
	Benzene	ND	U	5.0	ug/L	12/08/04	blw
	Bromobenzene	ND	U	5.0	ug/L	12/08/04	blw
	Bromochloromethane	ND	U	5.0	ug/L	12/08/04	blw
	Bromodichloromethane	ND	U	5.0	ug/L	12/08/04	blw
	Bromoform	ND	U	5.0	ug/L	12/08/04	blw
	Bromomethane	ND	U	10	ug/L	12/08/04	blw
	Carbon tetrachloride	7.8	U	5.0	ug/L	12/08/04	blw
	Chlorobenzene	ND	U	5.0	ug/L	12/08/04	blw
	Chloroethane	ND	U	10	ug/L	12/08/04	blw
	Chloroform	ND	U	5.0	ug/L	12/08/04	blw
	Chloromethane	ND	U	10	ug/L	12/08/04	blw
	Dibromochloromethane	ND	U	5.0	ug/L	12/08/04	blw
	Dibromomethane	ND	U	5.0	ug/L	12/08/04	blw
	Ethylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	Hexachlorobutadiene	ND	U	3.0	ug/L	12/08/04	blw
	Isopropylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	Methyl-tert-butyl-ether (MTBE)	ND	U	5.0	ug/L	12/08/04	blw
	Methylene chloride	ND	U	10	ug/L	12/08/04	blw
	Naphthalene	ND	U	25	ug/L	12/08/04	blw
	Styrene	ND	U	5.0	ug/L	12/08/04	blw
	Tetrachloroethene	1100	U	25	ug/L	12/10/04	blw

\* In Description = Dry Wgt.



MADEP MA014  
 RIDOH57  
 CTDPH 0494  
 VT DECWSD  
 NH DES 253903-A

NELAP FL E87912 TOX  
 NELAP NJ MA008 TOX  
 NELAP NY 10843  
 NY DOH 10843



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LABORATORY TEST RESULTS

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-205  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 10:00  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-3  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
	Toluene	ND	U	5.0	ug/L	12/08/04	blw
	Trichloroethene (TCE)	120	U	5.0	ug/L	12/08/04	blw
	Trichlorofluoromethane (Freon 11)	ND	U	5.0	ug/L	12/08/04	blw
	Vinyl chloride	ND	U	5.0	ug/L	12/08/04	blw
	cis-1,2-Dichloroethene	22	U	5.0	ug/L	12/08/04	blw
	cis-1,3-Dichloropropene	ND	U	2.5	ug/L	12/08/04	blw
	m&p-Xylenes	ND	U	5.0	ug/L	12/08/04	blw
	n-Butylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	n-Propylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	o-Xylene	ND	U	5.0	ug/L	12/08/04	blw
	p-Isopropyltoluene	ND	U	5.0	ug/L	12/08/04	blw
	sec-Butylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	tert-Butylbenzene	ND	U	5.0	ug/L	12/08/04	blw
	trans-1,2-Dichloroethene	ND	U	5.0	ug/L	12/08/04	blw
	trans-1,3-Dichloropropene	ND	U	2.5	ug/L	12/08/04	blw

\* In Description = Dry Wgt.



MADEP MA014  
 RIDOH57  
 CTDPH 0494  
 VT DECWSD  
 NH DES 253903-A

NELAP FL E87912 TOX  
 NELAP NJ MA008 TOX  
 NELAP NY 10843  
 NY DOH 10843



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LABORATORY TEST RESULTS

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-101S  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 09:00  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-4  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
SW846 8260B	Volatile Organics						
	1,1,1,2-Tetrachloroethane	ND	U	250	ug/L	12/10/04	blw
	1,1,1-Trichloroethane	ND	U	250	ug/L	12/10/04	blw
	1,1,2,2-Tetrachloroethane	ND	U	250	ug/L	12/10/04	blw
	1,1,2-Trichloroethane	ND	U	250	ug/L	12/10/04	blw
	1,1-Dichloroethane	ND	U	250	ug/L	12/10/04	blw
	1,1-Dichloroethene	ND	U	250	ug/L	12/10/04	blw
	1,1-Dichloropropene	ND	U	250	ug/L	12/10/04	blw
	1,2,3-Trichlorobenzene	ND	U	250	ug/L	12/10/04	blw
	1,2,3-Trichloropropane	ND	U	750	ug/L	12/10/04	blw
	1,2,4-Trichlorobenzene	ND	U	250	ug/L	12/10/04	blw
	1,2,4-Trimethylbenzene	ND	U	250	ug/L	12/10/04	blw
	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	1200	ug/L	12/10/04	blw
	1,2-Dibromoethane (EDB)	ND	U	250	ug/L	12/10/04	blw
	1,2-Dichlorobenzene	ND	U	250	ug/L	12/10/04	blw
	1,2-Dichloroethane	ND	U	250	ug/L	12/10/04	blw
	1,2-Dichloropropane	ND	U	250	ug/L	12/10/04	blw
	1,3,5-Trimethylbenzene	ND	U	250	ug/L	12/10/04	blw
	1,3-Dichlorobenzene	ND	U	250	ug/L	12/10/04	blw
	1,3-Dichloropropane	ND	U	250	ug/L	12/10/04	blw
	1,4-Dichlorobenzene	ND	U	250	ug/L	12/10/04	blw
	2,2-Dichloropropane	ND	U	250	ug/L	12/10/04	blw
	2-Butanone (MEK)	ND	U	2500	ug/L	12/10/04	blw
	2-Chlorotoluene	ND	U	250	ug/L	12/10/04	blw
	2-Hexanone (MNBK)	ND	U	2500	ug/L	12/10/04	blw
	4-Chlorotoluene	ND	U	250	ug/L	12/10/04	blw
	4-Methyl-2-pentanone (MIBK)	ND	U	2500	ug/L	12/10/04	blw
	Acetone	ND	U	12000	ug/L	12/10/04	blw
	Benzene	ND	U	250	ug/L	12/10/04	blw
	Bromobenzene	ND	U	250	ug/L	12/10/04	blw
	Bromochloromethane	ND	U	250	ug/L	12/10/04	blw
	Bromodichloromethane	ND	U	250	ug/L	12/10/04	blw
	Bromoform	ND	U	250	ug/L	12/10/04	blw
	Bromomethane	ND	U	500	ug/L	12/10/04	blw
	Carbon tetrachloride	ND	U	250	ug/L	12/10/04	blw
	Chlorobenzene	ND	U	250	ug/L	12/10/04	blw
	Chloroethane	ND	U	500	ug/L	12/10/04	blw
	Chloroform	ND	U	250	ug/L	12/10/04	blw
	Chloromethane	ND	U	500	ug/L	12/10/04	blw
	Dibromochloromethane	ND	U	250	ug/L	12/10/04	blw
	Dibromomethane	ND	U	250	ug/L	12/10/04	blw
	Ethylbenzene	ND	U	250	ug/L	12/10/04	blw
	Hexachlorobutadiene	ND	U	150	ug/L	12/10/04	blw
	Isopropylbenzene	ND	U	250	ug/L	12/10/04	blw
	Methyl-tert-butyl-ether (MTBE)	ND	U	250	ug/L	12/10/04	blw
	Methylene chloride	ND	U	500	ug/L	12/10/04	blw
	Naphthalene	ND	U	1200	ug/L	12/10/04	blw
	Styrene	ND	U	250	ug/L	12/10/04	blw
	Tetrachloroethene	16000	U	250	ug/L	12/10/04	blw

\* In Description = Dry Wgt.



MADEP MA014  
 RIDOH57  
 CTDPH 0494  
 VT DECWSD  
 NH DES 253903-A

NELAP FL E87912 TOX  
 NELAP NJ MA008 TOX  
 NELAP NY 10843  
 NY DOH 10843



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L A B O R A T O R Y   T E S T   R E S U L T S

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-101S  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 09:00  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-4  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
	Toluene	ND	U	250	ug/L	12/10/04	blw
	Trichloroethene (TCE)	ND	U	250	ug/L	12/10/04	blw
	Trichlorofluoromethane (Freon 11)	ND	U	250	ug/L	12/10/04	blw
	Vinyl chloride	ND	U	250	ug/L	12/10/04	blw
	cis-1,2-Dichloroethene	190	J	250	ug/L	12/10/04	blw
	cis-1,3-Dichloropropene	ND	U	120	ug/L	12/10/04	blw
	m&p-Xylenes	ND	U	250	ug/L	12/10/04	blw
	n-Butylbenzene	ND	U	250	ug/L	12/10/04	blw
	n-Propylbenzene	ND	U	250	ug/L	12/10/04	blw
	o-Xylene	ND	U	250	ug/L	12/10/04	blw
	p-Isopropyltoluene	ND	U	250	ug/L	12/10/04	blw
	sec-Butylbenzene	ND	U	250	ug/L	12/10/04	blw
	tert-Butylbenzene	ND	U	250	ug/L	12/10/04	blw
	trans-1,2-Dichloroethene	ND	U	250	ug/L	12/10/04	blw
	trans-1,3-Dichloropropene	ND	U	120	ug/L	12/10/04	blw

\* In Description = Dry Wgt.



**STL**

MADEP MA014  
 RIDOH57  
 CTDPH 0494  
 VT DECWSD  
 NH DES 253903-A

NELAP FL E87912 TOX  
 NELAP NJ MA008 TOX  
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LABORATORY TEST RESULTS

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-101D  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 09:30  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-5  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
SW846 8260B	Volatile Organics						
	1,1,1,2-Tetrachloroethane	ND	U	1.0	ug/L	12/10/04	blw
	1,1,1-Trichloroethane	ND	U	1.0	ug/L	12/10/04	blw
	1,1,2,2-Tetrachloroethane	ND	U	1.0	ug/L	12/10/04	blw
	1,1,2-Trichloroethane	ND	U	1.0	ug/L	12/10/04	blw
	1,1-Dichloroethane	ND	U	1.0	ug/L	12/10/04	blw
	1,1-Dichloroethene	ND	U	1.0	ug/L	12/10/04	blw
	1,1-Dichloropropene	ND	U	1.0	ug/L	12/10/04	blw
	1,2,3-Trichlorobenzene	ND	U	1.0	ug/L	12/10/04	blw
	1,2,3-Trichloropropane	ND	U	3.0	ug/L	12/10/04	blw
	1,2,4-Trichlorobenzene	ND	U	1.0	ug/L	12/10/04	blw
	1,2,4-Trimethylbenzene	ND	U	1.0	ug/L	12/10/04	blw
	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	5.0	ug/L	12/10/04	blw
	1,2-Dibromoethane (EDB)	ND	U	1.0	ug/L	12/10/04	blw
	1,2-Dichlorobenzene	ND	U	1.0	ug/L	12/10/04	blw
	1,2-Dichloroethane	ND	U	1.0	ug/L	12/10/04	blw
	1,2-Dichloropropane	ND	U	1.0	ug/L	12/10/04	blw
	1,3,5-Trimethylbenzene	ND	U	1.0	ug/L	12/10/04	blw
	1,3-Dichlorobenzene	ND	U	1.0	ug/L	12/10/04	blw
	1,3-Dichloropropane	ND	U	1.0	ug/L	12/10/04	blw
	1,4-Dichlorobenzene	ND	U	1.0	ug/L	12/10/04	blw
	2,2-Dichloropropane	ND	U	1.0	ug/L	12/10/04	blw
	2-Butanone (MEK)	ND	U	10	ug/L	12/10/04	blw
	2-Chlorotoluene	ND	U	1.0	ug/L	12/10/04	blw
	2-Hexanone (MNBK)	ND	U	10	ug/L	12/10/04	blw
	4-Chlorotoluene	ND	U	1.0	ug/L	12/10/04	blw
	4-Methyl-2-pentanone (MIBK)	ND	U	10	ug/L	12/10/04	blw
	Acetone	ND	U	50	ug/L	12/10/04	blw
	Benzene	ND	U	1.0	ug/L	12/10/04	blw
	Bromobenzene	ND	U	1.0	ug/L	12/10/04	blw
	Bromochloromethane	ND	U	1.0	ug/L	12/10/04	blw
	Bromodichloromethane	ND	U	1.0	ug/L	12/10/04	blw
	Bromoform	ND	U	1.0	ug/L	12/10/04	blw
	Bromomethane	ND	U	2.0	ug/L	12/10/04	blw
	Carbon tetrachloride	ND	U	1.0	ug/L	12/10/04	blw
	Chlorobenzene	ND	U	1.0	ug/L	12/10/04	blw
	Chloroethane	ND	U	2.0	ug/L	12/10/04	blw
	Chloroform	ND	U	1.0	ug/L	12/10/04	blw
	Chloromethane	ND	U	2.0	ug/L	12/10/04	blw
	Dibromochloromethane	ND	U	1.0	ug/L	12/10/04	blw
	Dibromomethane	ND	U	1.0	ug/L	12/10/04	blw
	Ethylbenzene	ND	U	1.0	ug/L	12/10/04	blw
	Hexachlorobutadiene	ND	U	0.60	ug/L	12/10/04	blw
	Isopropylbenzene	ND	U	1.0	ug/L	12/10/04	blw
	Methyl-tert-butyl-ether (MTBE)	0.58	J	1.0	ug/L	12/10/04	blw
	Methylene chloride	ND	U	2.0	ug/L	12/10/04	blw
	Naphthalene	ND	U	5.0	ug/L	12/10/04	blw
	Styrene	ND	U	1.0	ug/L	12/10/04	blw
	Tetrachloroethene	17	U	1.0	ug/L	12/10/04	blw

\* In Description = Dry Wgt.



MADEP MA014  
 RIDOH57  
 CTDPH 0494  
 VT DECWSD  
 NH DES 253903-A

NELAP FL E87912 TOX  
 NELAP NJ MA008 TOX  
 NELAP NY 10843  
 NY DOH 10843



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 Tel: (978) 667-1400  
 Fax: (978) 667-7871

LABORATORY TEST RESULTS

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-101D  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 09:30  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-5  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
	Toluene	ND	U	1.0	ug/L	12/10/04	blw
	Trichloroethene (TCE)	ND	U	1.0	ug/L	12/10/04	blw
	Trichlorofluoromethane (Freon 11)	ND	U	1.0	ug/L	12/10/04	blw
	Vinyl chloride	ND	U	1.0	ug/L	12/10/04	blw
	cis-1,2-Dichloroethene	ND	U	1.0	ug/L	12/10/04	blw
	cis-1,3-Dichloropropene	ND	U	0.50	ug/L	12/10/04	blw
	m&p-Xylenes	ND	U	1.0	ug/L	12/10/04	blw
	n-Butylbenzene	ND	U	1.0	ug/L	12/10/04	blw
	n-Propylbenzene	ND	U	1.0	ug/L	12/10/04	blw
	o-Xylene	ND	U	1.0	ug/L	12/10/04	blw
	p-Isopropyltoluene	ND	U	1.0	ug/L	12/10/04	blw
	sec-Butylbenzene	ND	U	1.0	ug/L	12/10/04	blw
	tert-Butylbenzene	ND	U	1.0	ug/L	12/10/04	blw
	trans-1,2-Dichloroethene	ND	U	1.0	ug/L	12/10/04	blw
	trans-1,3-Dichloropropene	ND	U	0.50	ug/L	12/10/04	blw

\* In Description = Dry Wgt.



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 NH DES 253903-A

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LABORATORY TEST RESULTS

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-202S  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 07:30  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-6  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
SW846 8260B	Volatile Organics						
	1,1,1,2-Tetrachloroethane	ND	U	500	ug/L	12/08/04	blw
	1,1,1-Trichloroethane	ND	U	500	ug/L	12/08/04	blw
	1,1,2,2-Tetrachloroethane	ND	U	500	ug/L	12/08/04	blw
	1,1,2-Trichloroethane	ND	U	500	ug/L	12/08/04	blw
	1,1-Dichloroethane	ND	U	500	ug/L	12/08/04	blw
	1,1-Dichloroethene	ND	U	500	ug/L	12/08/04	blw
	1,1-Dichloropropene	ND	U	500	ug/L	12/08/04	blw
	1,2,3-Trichlorobenzene	ND	U	500	ug/L	12/08/04	blw
	1,2,3-Trichloropropane	ND	U	1500	ug/L	12/08/04	blw
	1,2,4-Trichlorobenzene	ND	U	500	ug/L	12/08/04	blw
	1,2,4-Trimethylbenzene	ND	U	500	ug/L	12/08/04	blw
	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	2500	ug/L	12/08/04	blw
	1,2-Dibromoethane (EDB)	ND	U	500	ug/L	12/08/04	blw
	1,2-Dichlorobenzene	ND	U	500	ug/L	12/08/04	blw
	1,2-Dichloroethane	ND	U	500	ug/L	12/08/04	blw
	1,2-Dichloropropane	ND	U	500	ug/L	12/08/04	blw
	1,3,5-Trimethylbenzene	ND	U	500	ug/L	12/08/04	blw
	1,3-Dichlorobenzene	ND	U	500	ug/L	12/08/04	blw
	1,3-Dichloropropane	ND	U	500	ug/L	12/08/04	blw
	1,4-Dichlorobenzene	ND	U	500	ug/L	12/08/04	blw
	2,2-Dichloropropane	ND	U	500	ug/L	12/08/04	blw
	2-Butanone (MEK)	ND	U	5000	ug/L	12/08/04	blw
	2-Chlorotoluene	ND	U	500	ug/L	12/08/04	blw
	2-Hexanone (MNBK)	ND	U	5000	ug/L	12/08/04	blw
	4-Chlorotoluene	ND	U	500	ug/L	12/08/04	blw
	4-Methyl-2-pentanone (MIBK)	ND	U	5000	ug/L	12/08/04	blw
	Acetone	ND	U	25000	ug/L	12/08/04	blw
	Benzene	ND	U	500	ug/L	12/08/04	blw
	Bromobenzene	ND	U	500	ug/L	12/08/04	blw
	Bromochloromethane	ND	U	500	ug/L	12/08/04	blw
	Bromodichloromethane	ND	U	500	ug/L	12/08/04	blw
	Bromoform	ND	U	500	ug/L	12/08/04	blw
	Bromomethane	ND	U	1000	ug/L	12/08/04	blw
	Carbon tetrachloride	ND	U	500	ug/L	12/08/04	blw
	Chlorobenzene	ND	U	500	ug/L	12/08/04	blw
	Chloroethane	ND	U	1000	ug/L	12/08/04	blw
	Chloroform	ND	U	500	ug/L	12/08/04	blw
	Chloromethane	ND	U	1000	ug/L	12/08/04	blw
	Dibromochloromethane	ND	U	500	ug/L	12/08/04	blw
	Dibromomethane	ND	U	500	ug/L	12/08/04	blw
	Ethylbenzene	ND	U	500	ug/L	12/08/04	blw
	Hexachlorobutadiene	ND	U	300	ug/L	12/08/04	blw
	Isopropylbenzene	ND	U	500	ug/L	12/08/04	blw
	Methyl-tert-butyl-ether (MTBE)	ND	U	500	ug/L	12/08/04	blw
	Methylene chloride	ND	U	1000	ug/L	12/08/04	blw
	Naphthalene	ND	U	2500	ug/L	12/08/04	blw
	Styrene	ND	U	500	ug/L	12/08/04	blw
	Tetrachloroethene	44000	U	500	ug/L	12/08/04	blw

\* In Description = Dry Wgt.



MADEP MA014  
 RIDOH57  
 CTDPH 0494  
 VT DECWSD  
 NH DES 253903-A

NELAP FL E87912 TOX  
 NELAP NJ MA008 TOX  
 NELAP NY 10843  
 NY DOH 10843



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LABORATORY TEST RESULTS

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-202S  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 07:30  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-6  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
	Toluene	ND	U	500	ug/L	12/08/04	blw
	Trichloroethene (TCE)	ND	U	500	ug/L	12/08/04	blw
	Trichlorofluoromethane (Freon 11)	ND	U	500	ug/L	12/08/04	blw
	Vinyl chloride	ND	U	500	ug/L	12/08/04	blw
	cis-1,2-Dichloroethene	ND	U	500	ug/L	12/08/04	blw
	cis-1,3-Dichloropropene	ND	U	250	ug/L	12/08/04	blw
	m&p-Xylenes	ND	U	500	ug/L	12/08/04	blw
	n-Butylbenzene	ND	U	500	ug/L	12/08/04	blw
	n-Propylbenzene	ND	U	500	ug/L	12/08/04	blw
	o-Xylene	ND	U	500	ug/L	12/08/04	blw
	p-Isopropyltoluene	ND	U	500	ug/L	12/08/04	blw
	sec-Butylbenzene	ND	U	500	ug/L	12/08/04	blw
	tert-Butylbenzene	ND	U	500	ug/L	12/08/04	blw
	trans-1,2-Dichloroethene	ND	U	500	ug/L	12/08/04	blw
	trans-1,3-Dichloropropene	ND	U	250	ug/L	12/08/04	blw

\* In Description = Dry Wgt.



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LABORATORY TEST RESULTS

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-202D  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 08:00  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-7  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
SW846 8260B	Volatile Organics						
	1,1,1,2-Tetrachloroethane	ND	U	250	ug/L	12/08/04	blw
	1,1,1-Trichloroethane	ND	U	250	ug/L	12/08/04	blw
	1,1,2,2-Tetrachloroethane	ND	U	250	ug/L	12/08/04	blw
	1,1,2-Trichloroethane	ND	U	250	ug/L	12/08/04	blw
	1,1-Dichloroethane	ND	U	250	ug/L	12/08/04	blw
	1,1-Dichloroethene	ND	U	250	ug/L	12/08/04	blw
	1,1-Dichloropropene	ND	U	250	ug/L	12/08/04	blw
	1,2,3-Trichlorobenzene	ND	U	250	ug/L	12/08/04	blw
	1,2,3-Trichloropropane	ND	U	750	ug/L	12/08/04	blw
	1,2,4-Trichlorobenzene	ND	U	250	ug/L	12/08/04	blw
	1,2,4-Trimethylbenzene	ND	U	250	ug/L	12/08/04	blw
	1,2-Dibromo-3-chloropropane (DBCP)	ND	U	1200	ug/L	12/08/04	blw
	1,2-Dibromoethane (EDB)	ND	U	250	ug/L	12/08/04	blw
	1,2-Dichlorobenzene	ND	U	250	ug/L	12/08/04	blw
	1,2-Dichloroethane	ND	U	250	ug/L	12/08/04	blw
	1,2-Dichloropropane	ND	U	250	ug/L	12/08/04	blw
	1,3,5-Trimethylbenzene	ND	U	250	ug/L	12/08/04	blw
	1,3-Dichlorobenzene	ND	U	250	ug/L	12/08/04	blw
	1,3-Dichloropropane	ND	U	250	ug/L	12/08/04	blw
	1,4-Dichlorobenzene	ND	U	250	ug/L	12/08/04	blw
	2,2-Dichloropropane	ND	U	250	ug/L	12/08/04	blw
	2-Butanone (MEK)	ND	U	2500	ug/L	12/08/04	blw
	2-Chlorotoluene	ND	U	250	ug/L	12/08/04	blw
	2-Hexanone (MNBK)	ND	U	2500	ug/L	12/08/04	blw
	4-Chlorotoluene	ND	U	250	ug/L	12/08/04	blw
	4-Methyl-2-pentanone (MIBK)	ND	U	2500	ug/L	12/08/04	blw
	Acetone	ND	U	12000	ug/L	12/08/04	blw
	Benzene	ND	U	250	ug/L	12/08/04	blw
	Bromobenzene	ND	U	250	ug/L	12/08/04	blw
	Bromochloromethane	ND	U	250	ug/L	12/08/04	blw
	Bromodichloromethane	ND	U	250	ug/L	12/08/04	blw
	Bromoform	ND	U	250	ug/L	12/08/04	blw
	Bromomethane	ND	U	500	ug/L	12/08/04	blw
	Carbon tetrachloride	ND	U	250	ug/L	12/08/04	blw
	Chlorobenzene	ND	U	250	ug/L	12/08/04	blw
	Chloroethane	ND	U	500	ug/L	12/08/04	blw
	Chloroform	ND	U	250	ug/L	12/08/04	blw
	Chloromethane	ND	U	500	ug/L	12/08/04	blw
	Dibromochloromethane	ND	U	250	ug/L	12/08/04	blw
	Dibromomethane	ND	U	250	ug/L	12/08/04	blw
	Ethylbenzene	ND	U	250	ug/L	12/08/04	blw
	Hexachlorobutadiene	ND	U	150	ug/L	12/08/04	blw
	Isopropylbenzene	ND	U	250	ug/L	12/08/04	blw
	Methyl-tert-butyl-ether (MTBE)	ND	U	250	ug/L	12/08/04	blw
	Methylene chloride	ND	U	500	ug/L	12/08/04	blw
	Naphthalene	ND	U	1200	ug/L	12/08/04	blw
	Styrene	ND	U	250	ug/L	12/08/04	blw
	Tetrachloroethene	13000	U	250	ug/L	12/08/04	blw

\* In Description = Dry Wgt.



MADEP MA014  
 RIDOH57  
 CTDPH 0494  
 VT DECWSD  
 NH DES 253903-A

NELAP FL E87912 TOX  
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LABORATORY TEST RESULTS

Job Number: 221131

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Customer Sample ID: MW-202D  
 Date Sampled.....: 11/29/2004  
 Time Sampled.....: 08:00  
 Sample Matrix.....: Water

Laboratory Sample ID: 221131-7  
 Date Received.....: 11/30/2004  
 Time Received.....: 18:45

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
	Toluene	ND	U	250	ug/L	12/08/04	blw
	Trichloroethene (TCE)	ND	U	250	ug/L	12/08/04	blw
	Trichlorofluoromethane (Freon 11)	ND	U	250	ug/L	12/08/04	blw
	Vinyl chloride	ND	U	250	ug/L	12/08/04	blw
	cis-1,2-Dichloroethene	ND	U	250	ug/L	12/08/04	blw
	cis-1,3-Dichloropropene	ND	U	120	ug/L	12/08/04	blw
	m&p-Xylenes	ND	U	250	ug/L	12/08/04	blw
	n-Butylbenzene	ND	U	250	ug/L	12/08/04	blw
	n-Propylbenzene	ND	U	250	ug/L	12/08/04	blw
	o-Xylene	ND	U	250	ug/L	12/08/04	blw
	p-Isopropyltoluene	ND	U	250	ug/L	12/08/04	blw
	sec-Butylbenzene	ND	U	250	ug/L	12/08/04	blw
	tert-Butylbenzene	ND	U	250	ug/L	12/08/04	blw
	trans-1,2-Dichloroethene	ND	U	250	ug/L	12/08/04	blw
	trans-1,3-Dichloropropene	ND	U	120	ug/L	12/08/04	blw

\* In Description = Dry Wgt.



**STL**

MADEP MA014  
 RIDOH57  
 CTDPH 0494  
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NELAP FL E87912 TOX  
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Job Number: 221131

LABORATORY CHRONICLE

Date: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Lab ID:	Client ID:	Date Recvd:	Sample Date:	Run#	Batch#	Prep BT	#(S)	Date/Time Analyzed	Dilution
221131-1	MW-112	11/30/2004	11/29/2004	1	37607			12/08/2004 1706	5
METHOD	DESCRIPTION								
SW846 8260B	Volatile Organics								
221131-2	MW-209D	11/30/2004	11/29/2004	1	37717			12/10/2004 1757	10
METHOD	DESCRIPTION								
SW846 8260B	Volatile Organics								
221131-3	MW-205	11/30/2004	11/29/2004	1	37607			12/08/2004 1750	5
METHOD	DESCRIPTION								
SW846 8260B	Volatile Organics								
SW846 8260B	Volatile Organics			1	37717			12/10/2004 1157	25
221131-4	MW-101S	11/30/2004	11/29/2004	1	37717			12/10/2004 1220	250
METHOD	DESCRIPTION								
SW846 8260B	Volatile Organics								
221131-5	MW-101D	11/30/2004	11/29/2004	1	37717			12/10/2004 1241	1
METHOD	DESCRIPTION								
SW846 8260B	Volatile Organics								
221131-6	MW-202S	11/30/2004	11/29/2004	1	37607			12/08/2004 1855	500
METHOD	DESCRIPTION								
SW846 8260B	Volatile Organics								
221131-7	MW-202D	11/30/2004	11/29/2004	1	37607			12/08/2004 1916	250
METHOD	DESCRIPTION								
SW846 8260B	Volatile Organics								



MADEP MA014  
RIDOH57  
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**SURROGATE RECOVERIES REPORT**

Job Number.: 221131

Report Date.: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

Method.....: Volatile Organics  
Batch(s).....: 37607 37717

Method Code...: 8260  
Test Matrix...: Water

Prep Batch.....:  
Equipment Code: VHPMS1

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFLM	TOLD8
LCD			12/08/2004	95.2	100.7	99.8	101.2
LCD			12/10/2004	95.1	98.7	99.0	100.5
LCS			12/08/2004	94.8	100.2	99.7	101.6
LCS			12/10/2004	93.5	100.4	98.1	100.4
MB			12/08/2004	86.9	103.1	93.3	99.3
MB			12/10/2004	87.5	100.8	94.9	99.2
221131- 1		MW-112	12/08/2004	85.9	102.0	92.7	97.0
221131- 2		MW-209D	12/10/2004	88.0	100.3	94.3	99.0
221131- 3		MW-205	12/08/2004	86.3	101.0	95.3	97.2
221131- 3		MW-205	12/10/2004	86.2	101.4	93.0	98.0
221131- 4		MW-101S	12/10/2004	85.5	99.9	93.1	99.0
221131- 5		MW-101D	12/10/2004	86.3	100.5	94.0	92.3
221131- 6		MW-202S	12/08/2004	86.3	102.0	93.2	99.3
221131- 7		MW-202D	12/08/2004	86.2	99.9	93.8	100.1

Test	Test Description	Limits
12DCED	1,2-Dichloroethane-d4 (surr)	70.0 - 130.
BRFLBE	4-Bromofluorobenzene (surr)	70.0 - 130.
DBRFLM	Dibromofluoromethane (surr)	70.0 - 130.
TOLD8	Toluene-d8 (surr)	70.0 - 130.

QUALITY CONTROL RESULTS

Job Number.: 221131

Report Date.: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: SW846 8260B

Method Description.: Volatile Organics

Batch.....: 37607

Analyst...: blw

LCD	Laboratory Control Sample Duplicate	V04EWRK001			12/08/2004	1348
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
Chloromethane	ug/L	19.860	20.600	20.000	2.000	U 99.3 3.7	70.0-130.0 25.0	
Vinyl chloride	ug/L	21.640	22.120	20.000	1.000	U 108.2 2.2	70.0-130.0 25.0	
Bromomethane	ug/L	18.730	19.150	20.000	2.000	U 93.7 2.2	70.0-130.0 25.0	
Chloroethane	ug/L	19.810	20.430	20.000	2.000	U 99.0 3.1	70.0-130.0 25.0	
Trichlorofluoromethane (Freon 11)	ug/L	19.890	20.460	20.000	1.000	U 99.5 2.8	70.0-130.0 25.0	
1,1-Dichloroethene	ug/L	16.370	17.000	20.000	1.000	U 81.8 3.8	70.0-130.0 25.0	
Acetone	ug/L	145.740	145.250	200.000	50.000	U 72.9 0.3	70.0-130.0 25.0	
Methylene chloride	ug/L	18.600	18.940	20.000	2.000	U 93.0 1.8	70.0-130.0 25.0	
trans-1,2-Dichloroethene	ug/L	17.640	18.030	20.000	1.000	U 88.2 2.2	70.0-130.0 25.0	
Methyl-tert-butyl-ether (MTBE)	ug/L	16.870	17.130	20.000	1.000	U 84.3 1.5	70.0-130.0 25.0	
1,1-Dichloroethane	ug/L	17.840	18.370	20.000	1.000	U 89.2 2.9	70.0-130.0 25.0	
2,2-Dichloropropane	ug/L	18.310	19.060	20.000	1.000	U 91.5 4.0	70.0-130.0 25.0	
cis-1,2-Dichloroethene	ug/L	18.240	18.760	20.000	1.000	U 91.2 2.8	70.0-130.0 25.0	
2-Butanone (MEK)	ug/L	176.360	179.580	200.000	10.000	U 88.2 1.8	70.0-130.0 25.0	
Bromochloromethane	ug/L	18.750	19.380	20.000	1.000	U 93.8 3.3	70.0-130.0 25.0	
Chloroform	ug/L	18.590	19.200	20.000	1.000	U 93.0 3.2	70.0-130.0 25.0	
1,1,1-Trichloroethane	ug/L	18.270	18.840	20.000	1.000	U 91.3 3.1	70.0-130.0 25.0	
1,1-Dichloropropene	ug/L	18.370	19.150	20.000	1.000	U 91.8 4.2	70.0-130.0 25.0	
Carbon tetrachloride	ug/L	21.220	21.830	20.000	1.000	U 106.1 2.8	70.0-130.0 25.0	
Benzene	ug/L	18.540	19.100	20.000	1.000	U 92.7 3.0	70.0-130.0 25.0	
1,2-Dichloroethane	ug/L	17.700	18.070	20.000	1.000	U 88.5 2.1	70.0-130.0 25.0	
Trichloroethene (TCE)	ug/L	19.130	19.780	20.000	1.000	U 95.7 3.3	70.0-130.0 25.0	
1,2-Dichloropropane	ug/L	18.540	18.790	20.000	1.000	U 92.7 1.3	70.0-130.0 25.0	
Dibromomethane	ug/L	18.160	18.630	20.000	1.000	U 90.8 2.6	70.0-130.0 25.0	
Bromodichloromethane	ug/L	18.360	18.690	20.000	1.000	U 91.8 1.8	70.0-130.0 25.0	



MADEP MA014  
RIDOH57  
CTDPH 0494  
VT DECWSD  
NH DES 253903-A

NELAP FL E87912 TOX  
NELAP NJ MA008 TOX  
NELAP NY 10843  
NY DOH 10843



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N. Billerica, MA 01862  
Tel: (978) 667-1400  
Fax: (978) 667-7871

QUALITY CONTROL RESULTS

Job Number.: 221131

Report Date.: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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LCD	Laboratory Control Sample Duplicate	V04EWRK001			12/08/2004	1348
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
cis-1,3-Dichloropropene	ug/L	18.680	19.190	20.000	0.500	U 93.4 2.7	70.0-130.0 25.0	
4-Methyl-2-pentanone (MIBK)	ug/L	151.830	151.350	200.000	10.000	U 75.9 0.3	70.0-130.0 25.0	
Toluene	ug/L	18.300	19.050	20.000	1.000	U 91.5 4.0	70.0-130.0 25.0	
trans-1,3-Dichloropropene	ug/L	19.070	18.750	20.000	0.500	U 95.3 1.7	70.0-130.0 25.0	
1,1,2-Trichloroethane	ug/L	18.180	18.500	20.000	1.000	U 90.9 1.7	70.0-130.0 25.0	
Tetrachloroethene	ug/L	19.040	19.960	20.000	1.000	U 95.2 4.7	70.0-130.0 25.0	
1,3-Dichloropropane	ug/L	18.510	18.950	20.000	1.000	U 92.5 2.3	70.0-130.0 25.0	
2-Hexanone (MNBK)	ug/L	150.240	151.090	200.000	10.000	U 75.1 0.6	70.0-130.0 25.0	
Dibromochloromethane	ug/L	19.760	19.860	20.000	1.000	U 98.8 0.5	70.0-130.0 25.0	
1,2-Dibromoethane (EDB)	ug/L	19.120	18.660	20.000	1.000	U 95.6 2.4	70.0-130.0 25.0	
Chlorobenzene	ug/L	19.020	19.660	20.000	1.000	U 95.1 3.3	70.0-130.0 25.0	
1,1,1,2-Tetrachloroethane	ug/L	19.140	19.650	20.000	1.000	U 95.7 2.6	70.0-130.0 25.0	
Ethylbenzene	ug/L	19.230	19.990	20.000	1.000	U 96.2 3.9	70.0-130.0 25.0	
m&p-Xylenes	ug/L	40.190	41.680	40.000	1.000	U 100.5 3.6	70.0-130.0 25.0	
o-Xylene	ug/L	18.740	19.580	20.000	1.000	U 93.7 4.4	70.0-130.0 25.0	
Styrene	ug/L	19.350	19.820	20.000	1.000	U 96.8 2.4	70.0-130.0 25.0	
Bromoform	ug/L	21.550	22.520	20.000	1.000	U 107.8 4.4	70.0-130.0 25.0	
Isopropylbenzene	ug/L	20.600	21.190	20.000	1.000	U 103.0 2.8	70.0-130.0 25.0	
Bromobenzene	ug/L	18.970	19.270	20.000	1.000	U 94.8 1.6	70.0-130.0 25.0	
1,1,2,2-Tetrachloroethane	ug/L	18.710	19.270	20.000	1.000	U 93.5 2.9	70.0-130.0 25.0	
1,2,3-Trichloropropane	ug/L	18.330	18.800	20.000	3.000	U 91.7 2.5	70.0-130.0 25.0	
n-Propylbenzene	ug/L	19.520	20.230	20.000	1.000	U 97.6 3.6	70.0-130.0 25.0	
2-Chlorotoluene	ug/L	18.630	19.220	20.000	1.000	U 93.2 3.1	70.0-130.0 25.0	
1,3,5-Trimethylbenzene	ug/L	19.220	19.880	20.000	1.000	U 96.1 3.4	70.0-130.0 25.0	
4-Chlorotoluene	ug/L	18.880	19.290	20.000	1.000	U 94.4 2.1	70.0-130.0 25.0	
tert-Butylbenzene	ug/L	19.300	19.820	20.000	1.000	U 96.5 2.7	70.0-130.0 25.0	
1,2,4-Trimethylbenzene	ug/L	19.130	19.590	20.000	1.000	U 95.7 2.4	70.0-130.0 25.0	



MADEP MA014  
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NH DES 253903-A

NELAP FL E87912 TOX  
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Job Number.: 221131		QUALITY CONTROL RESULTS			Report Date.: 12/14/2004	
CUSTOMER: Shaw E&I Inc.			PROJECT: 101960		ATTN: Edward Van Doren	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

LCD	Laboratory Control Sample Duplicate	V04EWRK001			12/08/2004	1348
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
sec-Butylbenzene	ug/L	19.320	20.020	20.000	1.000	U 96.6 3.6	70.0-130.0 25.0	
1,3-Dichlorobenzene	ug/L	18.590	19.080	20.000	1.000	U 93.0 2.6	70.0-130.0 25.0	
p-Isopropyltoluene	ug/L	19.910	20.640	20.000	1.000	U 99.5 3.6	70.0-130.0 25.0	
1,4-Dichlorobenzene	ug/L	18.600	19.460	20.000	1.000	U 93.0 4.5	70.0-130.0 25.0	
n-Butylbenzene	ug/L	18.960	20.040	20.000	1.000	U 94.8 5.5	70.0-130.0 25.0	
1,2-Dichlorobenzene	ug/L	18.520	19.420	20.000	1.000	U 92.6 4.7	70.0-130.0 25.0	
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	20.110	19.450	20.000	5.000	U 100.5 3.3	70.0-130.0 25.0	
1,2,4-Trichlorobenzene	ug/L	19.410	20.400	20.000	1.000	U 97.0 5.0	70.0-130.0 25.0	
Hexachlorobutadiene	ug/L	19.500	20.490	20.000	0.600	U 97.5 5.0	70.0-130.0 25.0	
Naphthalene	ug/L	21.050	21.620	20.000	5.000	U 105.2 2.7	70.0-130.0 25.0	
1,2,3-Trichlorobenzene	ug/L	23.110	24.010	20.000	1.000	U 115.5 3.8	70.0-130.0 25.0	

QUALITY CONTROL RESULTS

Job Number.: 221131

Report Date.: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: SW846 8260B

Method Description.: Volatile Organics

Batch.....: 37607

Analyst....: blw

LCS	Laboratory Control Sample	V04EWRK001			12/08/2004	1326
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
Chloromethane	ug/L	20.600		20.000	2.000	U 103.0	70-130	
Vinyl chloride	ug/L	22.120		20.000	1.000	U 110.6	70-130	
Bromomethane	ug/L	19.150		20.000	2.000	U 95.8	70-130	
Chloroethane	ug/L	20.430		20.000	2.000	U 102.2	70-130	
Trichlorofluoromethane (Freon 11)	ug/L	20.460		20.000	1.000	U 102.3	70-130	
1,1-Dichloroethene	ug/L	17.000		20.000	1.000	U 85.0	70-130	
Acetone	ug/L	145.250		200.000	50.000	U 72.6	70-130	
Methylene chloride	ug/L	18.940		20.000	2.000	U 94.7	70-130	
trans-1,2-Dichloroethene	ug/L	18.030		20.000	1.000	U 90.2	70-130	
Methyl-tert-butyl-ether (MTBE)	ug/L	17.130		20.000	1.000	U 85.7	70-130	
1,1-Dichloroethane	ug/L	18.370		20.000	1.000	U 91.8	70-130	
2,2-Dichloropropane	ug/L	19.060		20.000	1.000	U 95.3	70-130	
cis-1,2-Dichloroethene	ug/L	18.760		20.000	1.000	U 93.8	70-130	
2-Butanone (MEK)	ug/L	179.580		200.000	10.000	U 89.8	70-130	
Bromochloromethane	ug/L	19.380		20.000	1.000	U 96.9	70-130	
Chloroform	ug/L	19.200		20.000	1.000	U 96.0	70-130	
1,1,1-Trichloroethane	ug/L	18.840		20.000	1.000	U 94.2	70-130	
1,1-Dichloropropene	ug/L	19.150		20.000	1.000	U 95.8	70-130	
Carbon tetrachloride	ug/L	21.830		20.000	1.000	U 109.2	70-130	
Benzene	ug/L	19.100		20.000	1.000	U 95.5	70-130	
1,2-Dichloroethane	ug/L	18.070		20.000	1.000	U 90.3	70-130	
Trichloroethene (TCE)	ug/L	19.780		20.000	1.000	U 98.9	70-130	
1,2-Dichloropropane	ug/L	18.790		20.000	1.000	U 94.0	70-130	
Dibromomethane	ug/L	18.630		20.000	1.000	U 93.2	70-130	
Bromodichloromethane	ug/L	18.690		20.000	1.000	U 93.5	70-130	
cis-1,3-Dichloropropene	ug/L	19.190		20.000	0.500	U 96.0	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	151.350		200.000	10.000	U 75.7	70-130	
Toluene	ug/L	19.050		20.000	1.000	U 95.2	70-130	
trans-1,3-Dichloropropene	ug/L	18.750		20.000	0.500	U 93.8	70-130	
1,1,2-Trichloroethane	ug/L	18.500		20.000	1.000	U 92.5	70-130	
Tetrachloroethene	ug/L	19.960		20.000	1.000	U 99.8	70-130	
1,3-Dichloropropane	ug/L	18.950		20.000	1.000	U 94.8	70-130	
2-Hexanone (MNBK)	ug/L	151.090		200.000	10.000	U 75.5	70-130	
Dibromochloromethane	ug/L	19.860		20.000	1.000	U 99.3	70-130	
1,2-Dibromoethane (EDB)	ug/L	18.660		20.000	1.000	U 93.3	70-130	
Chlorobenzene	ug/L	19.660		20.000	1.000	U 98.3	70-130	
1,1,1,2-Tetrachloroethane	ug/L	19.650		20.000	1.000	U 98.2	70-130	
Ethylbenzene	ug/L	19.990		20.000	1.000	U 100.0	70-130	
m&p-Xylenes	ug/L	41.680		40.000	1.000	U 104.2	70-130	
o-Xylene	ug/L	19.580		20.000	1.000	U 97.9	70-130	
Styrene	ug/L	19.820		20.000	1.000	U 99.1	70-130	
Bromoform	ug/L	22.520		20.000	1.000	U 112.6	70-130	
Isopropylbenzene	ug/L	21.190		20.000	1.000	U 106.0	70-130	
Bromobenzene	ug/L	19.270		20.000	1.000	U 96.3	70-130	
1,1,2,2-Tetrachloroethane	ug/L	19.270		20.000	1.000	U 96.3	70-130	
1,2,3-Trichloropropane	ug/L	18.800		20.000	3.000	U 94.0	70-130	
n-Propylbenzene	ug/L	20.230		20.000	1.000	U 101.2	70-130	
2-Chlorotoluene	ug/L	19.220		20.000	1.000	U 96.1	70-130	
1,3,5-Trimethylbenzene	ug/L	19.880		20.000	1.000	U 99.4	70-130	
4-Chlorotoluene	ug/L	19.290		20.000	1.000	U 96.5	70-130	



MADEP MA014  
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CTDPH 0494  
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NH DES 253903-A

NELAP FL E87912 TOX  
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QUALITY CONTROL RESULTS

Job Number.: 221131

Report Date.: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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LCS	Laboratory Control Sample	V04EWRK001			12/08/2004	1326
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
tert-Butylbenzene	ug/L	19.820		20.000	1.000	U 99.1	70-130	
1,2,4-Trimethylbenzene	ug/L	19.590		20.000	1.000	U 98.0	70-130	
sec-Butylbenzene	ug/L	20.020		20.000	1.000	U 100.1	70-130	
1,3-Dichlorobenzene	ug/L	19.080		20.000	1.000	U 95.4	70-130	
p-Isopropyltoluene	ug/L	20.640		20.000	1.000	U 103.2	70-130	
1,4-Dichlorobenzene	ug/L	19.460		20.000	1.000	U 97.3	70-130	
n-Butylbenzene	ug/L	20.040		20.000	1.000	U 100.2	70-130	
1,2-Dichlorobenzene	ug/L	19.420		20.000	1.000	U 97.1	70-130	
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	19.450		20.000	5.000	U 97.2	70-130	
1,2,4-Trichlorobenzene	ug/L	20.400		20.000	1.000	U 102.0	70-130	
Hexachlorobutadiene	ug/L	20.490		20.000	0.600	U 102.5	70-130	
Naphthalene	ug/L	21.620		20.000	5.000	U 108.1	70-130	
1,2,3-Trichlorobenzene	ug/L	24.010		20.000	1.000	U 120.0	70-130	

QUALITY CONTROL RESULTS

Job Number.: 221131

Report Date.: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: SW846 8260B

Method Description.: Volatile Organics

Batch.....: 37607

Analyst....: blw

MB	Method Blank				12/08/2004	1431
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
Chloromethane	ug/L	2.000	U					
Vinyl chloride	ug/L	1.000	U					
Bromomethane	ug/L	2.000	U					
Chloroethane	ug/L	2.000	U					
Trichlorofluoromethane (Freon 11)	ug/L	1.000	U					
1,1-Dichloroethene	ug/L	1.000	U					
Acetone	ug/L	50.000	U					
Methylene chloride	ug/L	2.000	U					
trans-1,2-Dichloroethene	ug/L	1.000	U					
Methyl-tert-butyl-ether (MTBE)	ug/L	1.000	U					
1,1-Dichloroethane	ug/L	1.000	U					
2,2-Dichloropropane	ug/L	1.000	U					
cis-1,2-Dichloroethene	ug/L	1.000	U					
2-Butanone (MEK)	ug/L	10.000	U					
Bromochloromethane	ug/L	1.000	U					
Chloroform	ug/L	1.000	U					
1,1,1-Trichloroethane	ug/L	1.000	U					
1,1-Dichloropropene	ug/L	1.000	U					
Carbon tetrachloride	ug/L	1.000	U					
Benzene	ug/L	1.000	U					
1,2-Dichloroethane	ug/L	1.000	U					
Trichloroethene (TCE)	ug/L	1.000	U					
1,2-Dichloropropane	ug/L	1.000	U					
Dibromomethane	ug/L	1.000	U					
Bromodichloromethane	ug/L	1.000	U					
cis-1,3-Dichloropropene	ug/L	0.500	U					
4-Methyl-2-pentanone (MIBK)	ug/L	10.000	U					
Toluene	ug/L	1.000	U					
trans-1,3-Dichloropropene	ug/L	0.500	U					
1,1,2-Trichloroethane	ug/L	1.000	U					
Tetrachloroethene	ug/L	1.000	U					
1,3-Dichloropropane	ug/L	1.000	U					
2-Hexanone (MNBK)	ug/L	10.000	U					
Dibromochloromethane	ug/L	1.000	U					
1,2-Dibromoethane (EDB)	ug/L	1.000	U					
Chlorobenzene	ug/L	1.000	U					
1,1,1,2-Tetrachloroethane	ug/L	1.000	U					
Ethylbenzene	ug/L	1.000	U					
m&p-Xylenes	ug/L	1.000	U					
o-Xylene	ug/L	1.000	U					
Styrene	ug/L	1.000	U					
Bromoform	ug/L	1.000	U					
Isopropylbenzene	ug/L	1.000	U					
Bromobenzene	ug/L	1.000	U					
1,1,2,2-Tetrachloroethane	ug/L	1.000	U					
1,2,3-Trichloropropane	ug/L	3.000	U					
n-Propylbenzene	ug/L	1.000	U					
2-Chlorotoluene	ug/L	1.000	U					
1,3,5-Trimethylbenzene	ug/L	1.000	U					
4-Chlorotoluene	ug/L	1.000	U					



STL

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QUALITY CONTROL RESULTS

Job Number.: 221131

Report Date.: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MB	Method Blank				12/08/2004	1431
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
tert-Butylbenzene	ug/L	1.000	U					
1,2,4-Trimethylbenzene	ug/L	1.000	U					
sec-Butylbenzene	ug/L	1.000	U					
1,3-Dichlorobenzene	ug/L	1.000	U					
p-Isopropyltoluene	ug/L	1.000	U					
1,4-Dichlorobenzene	ug/L	1.000	U					
n-Butylbenzene	ug/L	1.000	U					
1,2-Dichlorobenzene	ug/L	1.000	U					
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	5.000	U					
1,2,4-Trichlorobenzene	ug/L	1.000	U					
Hexachlorobutadiene	ug/L	0.600	U					
Naphthalene	ug/L	5.000	U					
1,2,3-Trichlorobenzene	ug/L	1.000	U					

QUALITY CONTROL RESULTS

Job Number.: 221131

Report Date.: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: SW846 8260B

Method Description.: Volatile Organics

Batch.....: 37717

Analyst...: blw

LCD	Laboratory Control Sample Duplicate	V04EWRK001			12/10/2004	1031
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
Chloromethane	ug/L	22.120	23.210	20.000	2.000	U 110.6 4.8	70.0-130.0 25.0	
Vinyl chloride	ug/L	22.940	24.390	20.000	1.000	U 114.7 6.1	70.0-130.0 25.0	
Bromomethane	ug/L	19.950	20.760	20.000	2.000	U 99.8 4.0	70.0-130.0 25.0	
Chloroethane	ug/L	21.120	22.250	20.000	2.000	U 105.6 5.2	70.0-130.0 25.0	
Trichlorofluoromethane (Freon 11)	ug/L	20.460	21.780	20.000	1.000	U 102.3 6.2	70.0-130.0 25.0	
1,1-Dichloroethene	ug/L	18.160	19.340	20.000	1.000	U 90.8 6.3	70.0-130.0 25.0	
Acetone	ug/L	172.900	184.110	200.000	50.000	U 86.5 6.3	70.0-130.0 25.0	
Methylene chloride	ug/L	17.810	18.700	20.000	2.000	U 89.0 4.9	70.0-130.0 25.0	
trans-1,2-Dichloroethene	ug/L	17.900	18.860	20.000	1.000	U 89.5 5.2	70.0-130.0 25.0	
Methyl-tert-butyl-ether (MTBE)	ug/L	16.770	17.420	20.000	1.000	U 83.8 3.8	70.0-130.0 25.0	
1,1-Dichloroethane	ug/L	18.110	18.920	20.000	1.000	U 90.5 4.4	70.0-130.0 25.0	
2,2-Dichloropropane	ug/L	18.650	19.780	20.000	1.000	U 93.2 5.9	70.0-130.0 25.0	
cis-1,2-Dichloroethene	ug/L	18.270	19.100	20.000	1.000	U 91.3 4.4	70.0-130.0 25.0	
2-Butanone (MEK)	ug/L	207.220	195.670	200.000	10.000	U 103.6 5.7	70.0-130.0 25.0	
Bromochloromethane	ug/L	18.670	19.380	20.000	1.000	U 93.3 3.7	70.0-130.0 25.0	
Chloroform	ug/L	18.610	19.400	20.000	1.000	U 93.0 4.2	70.0-130.0 25.0	
1,1,1-Trichloroethane	ug/L	18.220	19.440	20.000	1.000	U 91.1 6.5	70.0-130.0 25.0	
1,1-Dichloropropene	ug/L	18.490	19.390	20.000	1.000	U 92.5 4.8	70.0-130.0 25.0	
Carbon tetrachloride	ug/L	21.150	22.610	20.000	1.000	U 105.8 6.7	70.0-130.0 25.0	
Benzene	ug/L	18.560	19.430	20.000	1.000	U 92.8 4.6	70.0-130.0 25.0	
1,2-Dichloroethane	ug/L	17.680	18.320	20.000	1.000	U 88.4 3.6	70.0-130.0 25.0	
Trichloroethene (TCE)	ug/L	18.570	19.530	20.000	1.000	U 92.8 5.0	70.0-130.0 25.0	
1,2-Dichloropropane	ug/L	17.930	18.720	20.000	1.000	U 89.7 4.3	70.0-130.0 25.0	
Dibromomethane	ug/L	18.000	18.680	20.000	1.000	U 90.0 3.7	70.0-130.0 25.0	
Bromodichloromethane	ug/L	18.100	18.700	20.000	1.000	U 90.5 3.3	70.0-130.0 25.0	



MADEP MA014  
RIDOH57  
CTDPH 0494  
VT DECWSD  
NH DES 253903-A

NELAP FL E87912 TOX  
NELAP NJ MA008 TOX  
NELAP NY 10843  
NY DOH 10843



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Westfield, MA 01085  
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STL Billerica-Service Center  
148 Rangeway Rd.  
N. Billerica, MA 01862  
Tel: (978) 667-1400  
Fax: (978) 667-7871

QUALITY CONTROL RESULTS

Job Number.: 221131

Report Date.: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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LCD	Laboratory Control Sample Duplicate	V04EWRK001			12/10/2004	1031
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
cis-1,3-Dichloropropene	ug/L	18.170	18.950	20.000	0.500	U 90.8 4.2	70.0-130.0 25.0	
4-Methyl-2-pentanone (MIBK)	ug/L	160.490	165.610	200.000	10.000	U 80.2 3.1	70.0-130.0 25.0	
Toluene	ug/L	18.290	19.150	20.000	1.000	U 91.5 4.6	70.0-130.0 25.0	
trans-1,3-Dichloropropene	ug/L	18.460	18.460	20.000	0.500	U 92.3 0.0	70.0-130.0 25.0	
1,1,2-Trichloroethane	ug/L	18.040	18.660	20.000	1.000	U 90.2 3.4	70.0-130.0 25.0	
Tetrachloroethene	ug/L	18.560	19.450	20.000	1.000	U 92.8 4.7	70.0-130.0 25.0	
1,3-Dichloropropane	ug/L	17.930	18.580	20.000	1.000	U 89.7 3.6	70.0-130.0 25.0	
2-Hexanone (MNBK)	ug/L	159.070	163.000	200.000	10.000	U 79.5 2.4	70.0-130.0 25.0	
Dibromochloromethane	ug/L	19.390	19.920	20.000	1.000	U 97.0 2.7	70.0-130.0 25.0	
1,2-Dibromoethane (EDB)	ug/L	18.540	19.060	20.000	1.000	U 92.7 2.8	70.0-130.0 25.0	
Chlorobenzene	ug/L	18.850	20.020	20.000	1.000	U 94.2 6.0	70.0-130.0 25.0	
1,1,1,2-Tetrachloroethane	ug/L	19.160	20.220	20.000	1.000	U 95.8 5.4	70.0-130.0 25.0	
Ethylbenzene	ug/L	19.100	20.360	20.000	1.000	U 95.5 6.4	70.0-130.0 25.0	
m&p-Xylenes	ug/L	39.680	42.600	40.000	1.000	U 99.2 7.1	70.0-130.0 25.0	
o-Xylene	ug/L	18.930	19.760	20.000	1.000	U 94.7 4.3	70.0-130.0 25.0	
Styrene	ug/L	19.030	20.080	20.000	1.000	U 95.2 5.4	70.0-130.0 25.0	
Bromoform	ug/L	21.820	21.830	20.000	1.000	U 109.1 0.0	70.0-130.0 25.0	
Isopropylbenzene	ug/L	20.460	22.080	20.000	1.000	U 102.3 7.6	70.0-130.0 25.0	
Bromobenzene	ug/L	18.610	19.600	20.000	1.000	U 93.0 5.2	70.0-130.0 25.0	
1,1,2,2-Tetrachloroethane	ug/L	19.300	19.400	20.000	1.000	U 96.5 0.5	70.0-130.0 25.0	
1,2,3-Trichloropropane	ug/L	17.960	19.710	20.000	3.000	U 89.8 9.3	70.0-130.0 25.0	
n-Propylbenzene	ug/L	19.520	21.030	20.000	1.000	U 97.6 7.4	70.0-130.0 25.0	
2-Chlorotoluene	ug/L	18.460	19.810	20.000	1.000	U 92.3 7.1	70.0-130.0 25.0	
1,3,5-Trimethylbenzene	ug/L	18.940	20.470	20.000	1.000	U 94.7 7.8	70.0-130.0 25.0	
4-Chlorotoluene	ug/L	18.670	19.880	20.000	1.000	U 93.3 6.3	70.0-130.0 25.0	
tert-Butylbenzene	ug/L	19.020	20.400	20.000	1.000	U 95.1 7.0	70.0-130.0 25.0	
1,2,4-Trimethylbenzene	ug/L	19.020	20.330	20.000	1.000	U 95.1 6.7	70.0-130.0 25.0	



STL

MADEP MA014  
RIDOH57  
CTDPH 0494  
VT DECWSD  
NH DES 253903-A

NELAP FL E87912 TOX  
NELAP NJ MA008 TOX  
NELAP NY 10843  
NY DOH 10843



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N. Billerica, MA 01862  
Tel: (978) 667-1400  
Fax: (978) 667-7871

Job Number.: 221131		QUALITY CONTROL RESULTS			Report Date.: 12/14/2004	
CUSTOMER: Shaw E&I Inc.		PROJECT: 101960		ATTN: Edward Van Doren		
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

LCD	Laboratory Control Sample Duplicate	V04EWRK001			12/10/2004	1031
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
sec-Butylbenzene	ug/L	19.080	20.720	20.000	1.000	U 95.4 8.2	70.0-130.0 25.0	
1,3-Dichlorobenzene	ug/L	18.420	19.480	20.000	1.000	U 92.1 5.6	70.0-130.0 25.0	
p-Isopropyltoluene	ug/L	19.820	21.360	20.000	1.000	U 99.1 7.5	70.0-130.0 25.0	
1,4-Dichlorobenzene	ug/L	18.680	19.530	20.000	1.000	U 93.4 4.4	70.0-130.0 25.0	
n-Butylbenzene	ug/L	19.340	20.520	20.000	1.000	U 96.7 5.9	70.0-130.0 25.0	
1,2-Dichlorobenzene	ug/L	18.540	19.540	20.000	1.000	U 92.7 5.3	70.0-130.0 25.0	
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	19.440	20.250	20.000	5.000	U 97.2 4.1	70.0-130.0 25.0	
1,2,4-Trichlorobenzene	ug/L	19.630	20.730	20.000	1.000	U 98.2 5.5	70.0-130.0 25.0	
Hexachlorobutadiene	ug/L	19.530	20.560	20.000	0.600	U 97.7 5.1	70.0-130.0 25.0	
Naphthalene	ug/L	21.220	21.740	20.000	5.000	U 106.1 2.4	70.0-130.0 25.0	
1,2,3-Trichlorobenzene	ug/L	23.470	24.020	20.000	1.000	U 117.3 2.3	70.0-130.0 25.0	



MADEP MA014  
RIDOH57  
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VT DECWSD  
NH DES 253903-A

NELAP FL E87912 TOX  
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QUALITY CONTROL RESULTS

Job Number.: 221131

Report Date.: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: SW846 8260B

Method Description.: Volatile Organics

Batch.....: 37717

Analyst....: blw

LCS	Laboratory Control Sample	V04EWRK001			12/10/2004	1009
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
Chloromethane	ug/L	23.210		20.000	2.000	U 116.0	70-130	
Vinyl chloride	ug/L	24.390		20.000	1.000	U 122.0	70-130	
Bromomethane	ug/L	20.760		20.000	2.000	U 103.8	70-130	
Chloroethane	ug/L	22.250		20.000	2.000	U 111.2	70-130	
Trichlorofluoromethane (Freon 11)	ug/L	21.780		20.000	1.000	U 108.9	70-130	
1,1-Dichloroethene	ug/L	19.340		20.000	1.000	U 96.7	70-130	
Acetone	ug/L	184.110		200.000	50.000	U 92.1	70-130	
Methylene chloride	ug/L	18.700		20.000	2.000	U 93.5	70-130	
trans-1,2-Dichloroethene	ug/L	18.860		20.000	1.000	U 94.3	70-130	
Methyl-tert-butyl-ether (MTBE)	ug/L	17.420		20.000	1.000	U 87.1	70-130	
1,1-Dichloroethane	ug/L	18.920		20.000	1.000	U 94.6	70-130	
2,2-Dichloropropane	ug/L	19.780		20.000	1.000	U 98.9	70-130	
cis-1,2-Dichloroethene	ug/L	19.100		20.000	1.000	U 95.5	70-130	
2-Butanone (MEK)	ug/L	195.670		200.000	10.000	U 97.8	70-130	
Bromochloromethane	ug/L	19.380		20.000	1.000	U 96.9	70-130	
Chloroform	ug/L	19.400		20.000	1.000	U 97.0	70-130	
1,1,1-Trichloroethane	ug/L	19.440		20.000	1.000	U 97.2	70-130	
1,1-Dichloropropene	ug/L	19.390		20.000	1.000	U 97.0	70-130	
Carbon tetrachloride	ug/L	22.610		20.000	1.000	U 113.0	70-130	
Benzene	ug/L	19.430		20.000	1.000	U 97.2	70-130	
1,2-Dichloroethane	ug/L	18.320		20.000	1.000	U 91.6	70-130	
Trichloroethene (TCE)	ug/L	19.530		20.000	1.000	U 97.7	70-130	
1,2-Dichloropropane	ug/L	18.720		20.000	1.000	U 93.6	70-130	
Dibromomethane	ug/L	18.680		20.000	1.000	U 93.4	70-130	
Bromodichloromethane	ug/L	18.700		20.000	1.000	U 93.5	70-130	
cis-1,3-Dichloropropene	ug/L	18.950		20.000	0.500	U 94.8	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	165.610		200.000	10.000	U 82.8	70-130	
Toluene	ug/L	19.150		20.000	1.000	U 95.8	70-130	
trans-1,3-Dichloropropene	ug/L	18.460		20.000	0.500	U 92.3	70-130	
1,1,2-Trichloroethane	ug/L	18.660		20.000	1.000	U 93.3	70-130	
Tetrachloroethene	ug/L	19.450		20.000	1.000	U 97.2	70-130	
1,3-Dichloropropane	ug/L	18.580		20.000	1.000	U 92.9	70-130	
2-Hexanone (MNBK)	ug/L	163.000		200.000	10.000	U 81.5	70-130	
Dibromochloromethane	ug/L	19.920		20.000	1.000	U 99.6	70-130	
1,2-Dibromoethane (EDB)	ug/L	19.060		20.000	1.000	U 95.3	70-130	
Chlorobenzene	ug/L	20.020		20.000	1.000	U 100.1	70-130	
1,1,1,2-Tetrachloroethane	ug/L	20.220		20.000	1.000	U 101.1	70-130	
Ethylbenzene	ug/L	20.360		20.000	1.000	U 101.8	70-130	
m&p-Xylenes	ug/L	42.600		40.000	1.000	U 106.5	70-130	
o-Xylene	ug/L	19.760		20.000	1.000	U 98.8	70-130	
Styrene	ug/L	20.080		20.000	1.000	U 100.4	70-130	
Bromoform	ug/L	21.830		20.000	1.000	U 109.2	70-130	
Isopropylbenzene	ug/L	22.080		20.000	1.000	U 110.4	70-130	
Bromobenzene	ug/L	19.600		20.000	1.000	U 98.0	70-130	
1,1,2,2-Tetrachloroethane	ug/L	19.400		20.000	1.000	U 97.0	70-130	
1,2,3-Trichloropropane	ug/L	19.710		20.000	3.000	U 98.5	70-130	
n-Propylbenzene	ug/L	21.030		20.000	1.000	U 105.2	70-130	
2-Chlorotoluene	ug/L	19.810		20.000	1.000	U 99.0	70-130	
1,3,5-Trimethylbenzene	ug/L	20.470		20.000	1.000	U 102.3	70-130	
4-Chlorotoluene	ug/L	19.880		20.000	1.000	U 99.4	70-130	



MADEP MA014  
RIDOH57  
CTDPH 0494  
VT DECWSD  
NH DES 253903-A

NELAP FL E87912 TOX  
NELAP NJ MA008 TOX  
NELAP NY 10843  
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QUALITY CONTROL RESULTS

Job Number.: 221131

Report Date.: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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LCS	Laboratory Control Sample	V04EWRK001			12/10/2004	1009
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
tert-Butylbenzene	ug/L	20.400		20.000	1.000	U 102.0	70-130	
1,2,4-Trimethylbenzene	ug/L	20.330		20.000	1.000	U 101.7	70-130	
sec-Butylbenzene	ug/L	20.720		20.000	1.000	U 103.6	70-130	
1,3-Dichlorobenzene	ug/L	19.480		20.000	1.000	U 97.4	70-130	
p-Isopropyltoluene	ug/L	21.360		20.000	1.000	U 106.8	70-130	
1,4-Dichlorobenzene	ug/L	19.530		20.000	1.000	U 97.7	70-130	
n-Butylbenzene	ug/L	20.520		20.000	1.000	U 102.6	70-130	
1,2-Dichlorobenzene	ug/L	19.540		20.000	1.000	U 97.7	70-130	
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	20.250		20.000	5.000	U 101.2	70-130	
1,2,4-Trichlorobenzene	ug/L	20.730		20.000	1.000	U 103.7	70-130	
Hexachlorobutadiene	ug/L	20.560		20.000	0.600	U 102.8	70-130	
Naphthalene	ug/L	21.740		20.000	5.000	U 108.7	70-130	
1,2,3-Trichlorobenzene	ug/L	24.020		20.000	1.000	U 120.1	70-130	

QUALITY CONTROL RESULTS

Job Number.: 221131

Report Date.: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: SWB46 8260B

Method Description.: Volatile Organics

Batch.....: 37717

Analyst....: blw

MB	Method Blank				12/10/2004	1114
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
Chloromethane	ug/L	2.000	U					
Vinyl chloride	ug/L	1.000	U					
Bromomethane	ug/L	2.000	U					
Chloroethane	ug/L	2.000	U					
Trichlorofluoromethane (Freon 11)	ug/L	1.000	U					
1,1-Dichloroethene	ug/L	1.000	U					
Acetone	ug/L	50.000	U					
Methylene chloride	ug/L	2.000	U					
trans-1,2-Dichloroethene	ug/L	1.000	U					
Methyl-tert-butyl-ether (MTBE)	ug/L	1.000	U					
1,1-Dichloroethane	ug/L	1.000	U					
2,2-Dichloropropane	ug/L	1.000	U					
cis-1,2-Dichloroethene	ug/L	1.000	U					
2-Butanone (MEK)	ug/L	10.000	U					
Bromochloromethane	ug/L	1.000	U					
Chloroform	ug/L	1.000	U					
1,1,1-Trichloroethane	ug/L	1.000	U					
1,1-Dichloropropene	ug/L	1.000	U					
Carbon tetrachloride	ug/L	1.000	U					
Benzene	ug/L	1.000	U					
1,2-Dichloroethane	ug/L	1.000	U					
Trichloroethene (TCE)	ug/L	1.000	U					
1,2-Dichloropropane	ug/L	1.000	U					
Dibromomethane	ug/L	1.000	U					
Bromodichloromethane	ug/L	1.000	U					
cis-1,3-Dichloropropene	ug/L	0.500	U					
4-Methyl-2-pentanone (MIBK)	ug/L	10.000	U					
Toluene	ug/L	1.000	U					
trans-1,3-Dichloropropene	ug/L	0.500	U					
1,1,2-Trichloroethane	ug/L	1.000	U					
Tetrachloroethene	ug/L	1.000	U					
1,3-Dichloropropane	ug/L	1.000	U					
2-Hexanone (MNBK)	ug/L	10.000	U					
Dibromochloromethane	ug/L	1.000	U					
1,2-Dibromoethane (EDB)	ug/L	1.000	U					
Chlorobenzene	ug/L	1.000	U					
1,1,1,2-Tetrachloroethane	ug/L	1.000	U					
Ethylbenzene	ug/L	1.000	U					
m&p-Xylenes	ug/L	1.000	U					
o-Xylene	ug/L	1.000	U					
Styrene	ug/L	1.000	U					
Bromoform	ug/L	1.000	U					
Isopropylbenzene	ug/L	1.000	U					
Bromobenzene	ug/L	1.000	U					
1,1,2,2-Tetrachloroethane	ug/L	1.000	U					
1,2,3-Trichloropropane	ug/L	3.000	U					
n-Propylbenzene	ug/L	1.000	U					
2-Chlorotoluene	ug/L	1.000	U					
1,3,5-Trimethylbenzene	ug/L	1.000	U					
4-Chlorotoluene	ug/L	1.000	U					



MADEP MA014  
RIDOH57  
CTDPH 0494  
VT DECWSD  
NH DES 253903-A

NELAP FL E87912 TOX  
NELAP NJ MA008 TOX  
NELAP NY 10843  
NY DOH 10843



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QUALITY CONTROL RESULTS

Job Number.: 221131

Report Date.: 12/14/2004

CUSTOMER: Shaw E&I Inc.

PROJECT: 101960

ATTN: Edward Van Doren

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MB	Method Blank				12/10/2004	1114
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
tert-Butylbenzene	ug/L	1.000	U					
1,2,4-Trimethylbenzene	ug/L	1.000	U					
sec-Butylbenzene	ug/L	1.000	U					
1,3-Dichlorobenzene	ug/L	1.000	U					
p-Isopropyltoluene	ug/L	1.000	U					
1,4-Dichlorobenzene	ug/L	1.000	U					
n-Butylbenzene	ug/L	1.000	U					
1,2-Dichlorobenzene	ug/L	1.000	U					
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	5.000	U					
1,2,4-Trichlorobenzene	ug/L	1.000	U					
Hexachlorobutadiene	ug/L	0.600	U					
Naphthalene	ug/L	5.000	U					
1,2,3-Trichlorobenzene	ug/L	1.000	U					



MADEP MA014  
RIDOH57  
CTDPH 0494  
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QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 12/14/2004

STL WESTFIELD is part of Severn Trent Laboratories, Inc. Visit us at [www.stl-inc.com](http://www.stl-inc.com).

LABORATORY CERTIFICATIONS:

MADEP MA014, NY NELAC 10843, NJ NELAC MA008 (TOX), FL NELAC E87912 (TOX), CT DPH 0494, NY DOH 10843, NH DES 253901-A, VT DECWSD, RI DOH 57.

LOCATION:

STL Westfield: 53 Southampton Rd, Westfield, MA 01085. Phone: (413) 572-4000 Fax: (413) 572-3707

STL Service Center: 148 Rangeway Rd. N. Billerica, MA 01862. Phone: (978) 667-1400 Fax: (978) 667-7871

DATA REPORTING QUALIFIERS AND TERMINOLOGY:

A number of data qualifiers are widely used within the environmental testing industry and may be utilized in our data reports. The majority of the qualifiers have evolved from the EPA Contract Laboratory Program (CLP).

REPORT COMMENTS:

All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

Soil, sediment and sludge sample results are reported on a "dry weight" basis.

Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert.ID# 10843.

According to 40CFR Part 136.3, pH, Total Residual Chlorine and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field analyses, they were not analyzed immediately, but as soon as possible on laboratory receipt.

Analytical result(s) reported as "ND", indicates that the analyte was analyzed for but "Not Detected."

Analytical result(s) reported as "TNTC" indicates that the microbiological test was "Too Numerous To Count."

GLOSSARY OF QUALIFIERS:

Inorganic Qualifiers (Q-column):

U Indicates that the analyte was analyzed for but not detected.

E Indicates an estimated value due to the presence of interference. When applied to GFAA analysis, indicates the one-point method of addition recovered between 40-85 percent.

B Indicates an estimated result value. The result was measured between the reporting limit and the method detection limit (MDL).

H Indicates the compound/element was found in both the sample and its associated laboratory blank. Indicates possible/probable blank contamination.

Organic Qualifiers (Q-column):

U Indicates that the compound was analyzed for but not detected.

J Indicates an estimated result value. This qualifier is used when mass spectral data indicated the presence of a compound that meets the identification criteria and the result is less than the specified quantitation limit, but greater than the method detection limit (MDL).

B Indicates that the compound was found in both the sample and its associated laboratory blank. Indicates possible/probable blank contamination and warns the data user to exercise caution when applying the results to this compound.

D Indicates all compounds identified in an analysis at a secondary dilution factor.

E Indicates that the compound in an analysis has exceeded the instrument linear calibration range.

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 12/14/2004

GLOSSARY OF TERMS:

Surrogates (Surrogate Standards): An organic compound, which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but are not normally found in environmental samples. For semi-volatiles and pesticides/Arochlors, surrogate compounds are added to every blank, sample, matrix spike, matrix spiked duplicate, matrix spike blank (LCS), and standard. These compounds are used to evaluate analytical efficiency by measuring recovery. Poor surrogate recovery may indicate a problem with the sample composition.

Internal Standard: An organic compound, which is similar to the target analyte(s) in chemical composition and behavior in the analytical process. For GC/MS semi-volatiles and volatiles, internal standards are added to every blank, sample, matrix spike, matrix spike duplicate, matrix spike blank (LCS), and standard. Internal standard responses outside of established limits will adversely affect the quantitation and final concentration of target compounds.

Matrix Spike (MS): An aliquot of a sample (water or soil) fortified (spiked) with known quantities of specific compounds (target analytes) and subjected to the entire analytical procedure in order to indicate the appropriateness of the method for matrix interference by measuring recovery. The spiking occurs prior to sample preparation and analysis. Poor spike recovery may indicate a problem with the sample composition.

Laboratory Control Sample (LCS): An aliquot of analyte-free reagent water or sand fortified (spiked) with known quantities of specific compounds (target analytes) and subjected to the entire analytical procedure in order to indicate the appropriateness of the method efficiency.

Blank: An artificial sample of analyte-free water or solvent, designed to monitor the introduction of contaminants into the analytical process.

Method Detection Limit (MDL): The minimum concentration of an analyte or compound that can be measured and reported with 99% confidence that the result concentration is greater than zero.

Petroleum Hydrocarbon Comments:

The following comments are specific to Diesel Range Organics (DRO), by GC/FID:

Results for DRO are based on chromatographable portions of the petroleum product. The Carbon Range refers to the approximate chromatographic region covered by the specified petroleum product in straight-chain carbon units between C9-C36.

Quantitation is based on the average response factors for a series of hydrocarbons standards. The sample result from the DRO fraction is independent of the target compound assignment.

Samples yielding chromatographic patterns that do not agree with any of the method targets are reported as "unmatched".

Job Number.: 221131 Location.: 57345 Check List Number.: 1 Description.:  
 Customer Job ID..... Job Check List Date.: Date of the Report...: 11/30/2004  
 Project Number.: 20002158 Project Description.: 101960 Project Manager.....: bcm  
 Customer.....: Shaw E&I Inc. Contact.: Edward Van Doren

Questions ? (Y/N) Comments

Chain-of-Custody Present?..... Y  
 ...If "yes", completed properly?..... Y  
 Custody seal on shipping container?..... N  
 ...If "yes", custody seal intact?.....  
 Custody seals on sample containers?..... N  
 ...If "yes", custody seal intact?.....  
 Samples iced?..... Y  
 Temperature of cooler acceptable? (4 deg C +/- 2). Y  
 ...Temperature at receipt\_\_\_\_\_ 3.3C  
 Samples received intact (good condition)?..... Y  
 Volatile samples acceptable? (no headspace)..... Y  
 Is a Trip Blank required?..... Y  
 Was a Trip Blank provided?..... N  
 Correct containers used?..... Y  
 Adequate sample volume provided?..... Y  
 Samples preserved correctly?..... Y  
 Samples received within holding-time?..... Y  
 Agreement between COC and sample labels?..... Y  
 Comments..... Pick up by STL  
 If samples were shipped was there an air bill #?..  
 Sample Custodian Signature/Date..... MJB 11/30/04 