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FINAL
SEMI-ANNUAL (JANUARY THROUGH JUNE 2010) SITE MAINTENANCE AND MONITORING REPORT

Former Textron, Inc.
Wheatfield, New York Facility

July 2010

Submitted to:

Textron, Inc.
40 Westminster Street
Providence, RI 02903-6028

Prepared by:

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1.0 Introduction

Shaw Environmental, Inc. (Shaw) has prepared this report to discuss the results of on-going remedial and groundwater gauging activities at Textron's former Wheatfield, New York facility.

1.1 Background

The results of the March and April 2010 quarterly groundwater gauging and system maintenance events conducted at the former Textron, Inc., (Textron) facility located in Wheatfield, New York are presented in this report. Additionally, this report also includes a summary of the on-going operation of the Off-Site Groundwater Extraction System (Off-Site System) and On-Site Groundwater Extraction and Treatment System (On-Site System) for the period of January through June 2010.

The field procedures and hydraulic measurements for the monitoring events were conducted in accordance with the October 1998 revision of the Groundwater Monitoring Plan (GMP) prepared by Golder Associates, Inc. and approved by the New York State Department of Environmental Conservation (NYSDEC).

The summary of the operational results of the Off-Site and On-Site system during this semi-annual period is presented in accordance with Textron's NYSDEC Title 6 New York Code of Rules and Regulations (6NYCRR) Part 373 Post-Closure Permit, effective September 24, 1998 (Permit No. 9-2940-00001/00079). Module III of this permit was amended in a letter from the NYSDEC dated September 9, 2002. This amendment details the approved reduction in reporting requirements from the previous quarterly system performance reports (plus an annual summary report) to two semi-annual system performance reports and submittal of an annual summary report. The NYSDEC initiated another modification to this permit on April 9, 2004. This modification deleted former 'Part II General Conditions' requirements and all references to it and further amended the permit requiring compliance with 6NYCRR 750-2, entitled 'Operating in Accordance with a SPDES Permit'. The summary of system operations within this report for both the On-Site and Off-Site System is for the period of January 1, 2010 through June 30, 2010.

2.0 Field Sampling Activities

2.1 General

Shaw personnel performed field activities in accordance with the procedures detailed in the GMP. Quarterly groundwater monitoring was performed on March 9, 2010 and April 23, 2010 for the monitoring wells listed in **Table 1**. The well locations are shown on **Figure 1**. The following sections provide details of the field activities and procedures associated with the monitoring and gauging program.

2.2 Hydraulic Monitoring

Groundwater elevations were measured at each monitoring well using an electronic oil/water level meter, capable of measuring to an accuracy of 0.01 feet, to determine the depth to water and total well depth (depth to the bottom) to calculate the height of the water column. Non-aqueous phase liquid (NAPL) was not detected in any of the wells gauged. Groundwater elevations for the extraction wells were recorded from the electronic water level indicators (i.e. pressure tranducers) located inside the well vaults. The summary of the water level measurements obtained during March and April 2010 sampling events is presented in **Table 1**. The groundwater level elevations from the Zone 1 wells are shown on **Figures 2** and **3** for the March 2010 event and **Figures 4** and **5** for the April 2010 event.

2.3 Monitoring Well Sampling

No monitoring wells were scheduled for sampling during this reporting period. Wells are scheduled for sampling in October in accordance with the approved GMP.

2.4 Extraction Well Sampling

No extraction wells were scheduled for sampling during this reporting period. Wells are scheduled for sampling in October pursuant to the approved GMP.

3.0 Laboratory Analytical Methods and Results

No groundwater samples were collected for laboratory analysis during this reporting period.

4.0 Summary of Off-Site and On-Site Extraction System Operations

4.1 Review of Off-Site and On-Site System Operations

4.1.1 Off-Site System

There were no reported operational changes made to the Off-Site System during the First Quarter (January through March 2010). EW-6 remains inactive as approved by the NYSDEC. During this monitoring period, the average daily pumping rate for the Off-Site extraction system was calculated at 62,646 gallons per day (gpd). Approximately 5,638,163 gallons of groundwater was extracted from the subsurface and discharged to the Niagara County Sewer District (NCSD) Publicly Owned Treatment Works (POTW) for treatment by the Off-Site System between January 1 and March 31, 2010.

There were no reported operational changes made to the Off-Site System during the Second Quarter (April through June 2010). The average daily pumping rate for the Off-Site extraction system was calculated at 61,481 gpd. Approximately 5,594,799 gallons of groundwater was extracted from the subsurface and discharged to the NCSD POTW for treatment by the Off-Site system.

The flow rates and totals discussed above are based on the telemetry information sent from the system and are reported semi-annually to the Niagara County Sewer District.

4.1.2 On-Site System

There were no operational changes made to the On-Site System during this reporting period as the thermal oxidizer, scrubber, air stripper ST-2, carbon units, and extraction well DW-9 remain inactive as approved by NYSDEC.

A total of 738,610 gallons of groundwater was extracted from the subsurface and treated by the On-Site System between January and June 2010. Averaged daily flow rates varied from a low of 0 gpd (recorded during January 2010) to a high of 6,506 gpd (recorded during June 2010).

These pumping and flow rates are based upon the monthly effluent totalizer readings and are reported monthly to the NYSDEC in the Discharge Monitoring Reports (DMR).

4.2 Discharge Monitoring

4.2.1 Off-Site System

As specified by Textron's Niagara County Sewer District No. 1 (NCSD) Industrial Discharge Permit (No. 10-07 effective January 31, 2010), the extracted groundwater from the Off-Site System is required to be monitored for flow on a daily basis and sampled and analyzed for VOCs on a semi-annual basis. Results of the sewer discharge monitoring conducted on April 19-20, 2010 indicate that Textron was in compliance with the NCSD permit. A copy of the letter report submitted to the NCSD is included as **Appendix A**.

4.2.2 On-Site System

As required by Textron's National Pollutant Discharge Elimination System (NPDES) Permit No. NY0000469, the extracted and treated groundwater discharged to the Walmore Road storm sewer is monitored for VOCs on a monthly basis. All of the monthly discharge monitoring results indicate that Textron was in compliance with the NPDES permit during this operational period. This information is documented in the Discharge Monitoring Report (DMR) provided to the NYSDEC.

According to the effluent totalizer, approximately 738,610 gallons of water was treated by the On-Site System during reporting period.

4.3 Evaluation

4.3.1 Chemical Data for Off-Site and On-Site Systems

No groundwater samples were collected for laboratory analysis during this reporting period.

4.3.2 Hydraulic Response for Off-Site and On-Site Systems

Off-Site System

Groundwater elevation contour maps of the Zone 1 bedrock aquifer in the vicinity of the On-Site and Off-Site System for the March and April 2010 Hydraulic Monitoring Events are presented on **Figures 2** and **4**, respectively. These maps indicate a consistent and significant overlap of the cone-of-depression (and the contaminant plume) in the off-site area. Groundwater flow direction has remained relatively consistent within the cone-of-depression. The flow direction is toward

the four operating extraction wells (EW-2 through EW-5) of the Off-Site system indicating that the remedial system is controlling groundwater migration in this area.

On-Site System

The hydraulic response of the On-Site System has met all of the following design expectations:

- Establishing a zone of groundwater capture over the DNAPL plume;
- Maintaining an upward gradient between the Zone 3 and Zone 1 aquifers;
- Maintaining a downward gradient between the overburden and the Zone 1 aquifer; and
- Establishing a groundwater capture zone along the southern property boundary of the Textron facility, between extraction wells EW-7, EW-13 and EW-8.

Data from the March 2010 hydraulic monitoring event (**Table 1**) indicates that the desired downward gradient between the overburden and Zone 1 is present in seven of the eight of the On-Site well pairs measured (well pairs 87-01, 87-04, 87-10, 87-13, 87-14, 87-15 and 87-18); well pair 87-17 did not demonstrate the desired downward gradient. Additionally, the data obtained during the April event indicates that the desired downward gradient between the overburden and Zone 1 is again present in seven of the eight of the On-Site well pairs measured (well pairs 87-01, 87-04, 87-10, 87-13, 87-14, 87-15 and 87-18); well pair 87-17 did not demonstrate the desired downward gradient. The data presented in **Table 1** also indicates that an upward gradient between Zone 3 and Zone 1 is present in all of the well pairs measured (87-02, 87-04, 87-05, 87-13, 87-14, and 87-15) during both the March and April 2010 monitoring events. **Tables 2A** and **2B** present a summary of vertical hydraulic gradients between Zones 1 and 3 from the March and April 2010 hydraulic monitoring data, respectively. The data indicate that gradients range from 0.19 feet to 0.48 feet (upward). Maintenance of this 'upward gradient' shows effective containment of the plume within Zone 1.

4.4 Routine Operational Corrective Measures

The On-Site System experienced a continuation of the December 2009 recordable downtime event during this semi-annual monitoring period. The system did not process any water during January. The effluent contact switch was replaced on February 4, 2010; a different type of switch was installed in an effort to alleviate the recurring issues with the previous unit. The new contact switch required a minor rewiring of the On-Site System.

On February 15, 2010, the feed pump failed causing the On-Site System to cease operating. The feed pump was changed on February 24, 2010 and the system was restarted without incident.

Op-Tech Environmental Services cleaned the air stripper tower on March 29 and 30, 2010; the system was manually shut down for a total of approximately 6 hours during this work.

Shaw personnel were onsite June 8 through June 10, 2010 performing various operation and maintenance tasks in order to increase on-site system efficiency. Below is summary of tasks performed:

- A float switch at the influent point inside the Surge Tank was lowered approximately 8 inches. The new level is further from the emergency shutdown high volume alarm; the lowering of the float will begin the discharge process sooner and allow more process water to pass through the treatment system.
- Water had accumulated in the EW-13 vault and partially submerged the electrical junction box causing a power surge problem. The water was pumped out of the vault using submersible pumps and discharged back into the system. The motor within the junction box was replaced. EW-13 was fully operational at the time of departure on June 10th.
- All bag filter housing units were cleaned to remove the buildup of iron flakes and viscous debris and bag filters changed.
- A burned out Transfer Pump indicator bulb on the control panel was replaced.

Inspections of the On-Site treatment facility were conducted by Shaw personnel between January 1, 2010 and February 5, 2010; it was decided to reduce the frequency of these inspections to bi-weekly starting on February 9, 2010 and continuing on this schedule until further notice. During these inspections, meters were read, routine operations and maintenance (O&M) activities were performed, equipment was re-set or adjusted as necessary and any other activity required to maintain system functions was completed. The only change made to the system was the calibration of the effluent totalizers for both the on-site, and off-site systems according to the instrument specifications on October 28, 2009

Six 55-gallon drums of Redux-525^{TM} have been utilized during this monitoring period to reduce the inorganic deposition and biofouling of the treatment system.

As requested in the May 7, 2010 letter from the NYSDEC, repairs and rehabilitation of the monitoring well network were performed during Shaw's June site visit. A summary of these activities is listed below:

- Monitoring well 89-03(1) – damage has comprised the integrity of the monitoring well; recommend abandonment and re-installation of this location;
- Monitoring well 87-23(0) – concrete apron and steel riser casing were replaced; the new casing elevation was re-surveyed on July 15, 2010 and redeveloped on July 27, 2010;
- Monitoring well 89-05(1) – successfully redeveloped, approximately 50 gallons of water and silt were removed and a "hard bottom" was achieved at this location; and
- Monitoring well 93-02(1) – redeveloped on July 22, 2010, approximately 30 gallons (~10 well volumes) of water and black silt was removed. The water level in this location subsequently rose approximately 5 feet immediately following the redevelopment.

5.0 Summary

5.1 Hydraulic Monitoring Data

As discussed in **Section 2.2**, water level measurements were obtained on March 9, 2010 from all of the monitoring wells and extraction wells as required for the First Quarter hydraulic monitoring event. Second Quarter water level measurements were obtained on April 23, 2010. **Table 2** provides a summary of the water level measurements obtained for all the hydraulic monitoring events. A review of this data indicates that the groundwater recovery systems (both On-Site and Off-Site) continue to exhibit control over the migration of impacted groundwater.

5.2 Laboratory Data

No groundwater samples were collected for laboratory analysis during this reporting period.

5.3 Off-Site and On-Site System Performance

The Off-Site System has maintained control of the dissolved phase plume. The gradient and size of the capture zone is consistent with the conditions observed during previous quarterly monitoring events. The performance of the Off-Site System is acceptable based upon comparison with historic operational data.

The hydraulic response of the On-Site System has met the following design expectations:

- Establishing a zone of groundwater capture over the DNAPL plume;
- Maintaining an upward gradient between the Zone 3 and Zone 1 aquifers;
- Maintaining a downward gradient between the overburden and the Zone 1 aquifer; and
- Establishing a groundwater capture zone along the southern property boundary of the Textron facility, between extraction wells EW-7, EW-13 and EW-8.

6.0 References

Golder Associates, Inc., October 1998 "Groundwater Monitoring Plan, Former Textron, Inc., Wheatfield, New York Facility, October 1998 Revision".

Shaw Environmental, Inc., August 2009, "Final Semi-Annual (March and April 2009) Site Maintenance and Monitoring Report".

Shaw Environmental, Inc., April 2010, "Final Semi-Annual (July through December 2009) Site Maintenance and Monitoring Report".

Shaw Environmental, Inc., April 2010, "Final 2009 Annual Summary and Site Maintenance and Monitoring Report".

TABLES

TABLE 1
Summary of Hydraulic Monitoring Data
March and April 2010
Former Textron, Inc.
Wheatfield, New York

Well Name	Top of Riser Elevation (Ft. MSL)	March 9, 2010		April 23, 2010	
		Water Level (Ft. BTOR)	Water Level Elevation (Ft. MSL)	Water Level (Ft. BTOR)	Water Level Elevation (Ft. MSL)
87-01(0)	588.10	13.39	574.71	13.60	574.50
87-01(1)	587.99	14.91	573.08	16.31	571.68
87-02(1)	589.21	14.69	574.52	15.73	573.48
87-02(3)	588.63	11.41	577.22	11.77	576.86
87-04(0)	589.32	6.74	582.58	10.70	578.62
87-04(1)	589.08	12.62	576.46	13.30	575.78
87-04(3)	589.49	11.00	578.49	11.35	578.14
87-05(1)	589.37	12.46	576.91	13.35	576.02
87-05(3)	589.46	10.55	578.91	11.00	578.46
87-06(1)	588.27	11.86	576.41	12.54	575.73
87-08(1)	589.48	11.80	577.68	12.71	576.77
87-10(0)	587.30	11.79	575.51	12.13	575.17
87-10(1)	587.52	13.68	573.84	14.95	572.57
87-12(1)	583.84	13.69	570.15	15.81	568.03
87-13(0)	589.77	8.77	581.00	9.36	580.41
87-13(1)	590.06	13.53	576.53	13.87	576.19
87-13(3)	589.91	10.95	578.96	11.40	578.51
87-14(0)	589.56	7.66	581.90	10.51	579.05
87-14(1)	589.06	11.98	577.08	12.83	576.23
87-14(3)	590.35	10.57	579.78	11.18	579.17
87-15(0)	590.70	11.96	578.74	11.68	579.02
87-15(1)	590.27	11.64	578.63	12.36	577.91
87-15(3)	589.87	9.89	579.98	10.57	579.30
87-16(3B)	590.51	10.92	579.59	11.50	579.01
87-17(0)	589.50	11.21	578.29	11.39	578.11
87-17(1)	589.62	10.20	579.42	10.92	578.70
87-18(0)	585.95	11.70	574.25	12.15	573.80
87-18(1)	586.02	16.40	569.62	18.48	567.54
87-19(0)	581.57	5.29	576.28	9.64	571.93
87-19(1)	581.47	11.74	569.73	15.25	566.22
87-20(0)	578.77	4.68	574.09	7.22	571.55
87-20(1)	579.01	8.90	570.11	11.00	568.01
87-21(1)	577.33	7.43	569.90	9.60	567.73
87-22(1)	583.97	14.20	569.77	16.28	567.69
87-23(0)	587.27	4.12	583.15	NG	NA
87-23(1)	587.13	12.97	574.16	14.30	572.83

NOTES:

BTOR =	Below top of riser (or measuring point).
MSL =	Mean sea level.
(**)	Water level elevation measured from top of vault grate.
DRY =	No measurable quantity in well at time of measurement.
NG =	Not gauged.
NA =	Data not available.

TABLE 1
Summary of Hydraulic Monitoring Data
March and April 2010
Former Textron, Inc.
Wheatfield, New York

Well Name	Top of Riser Elevation (Ft. MSL)	March 9, 2010		April 23, 2010	
		Water Level (Ft. BTOR)	Water Level Elevation (Ft. MSL)	Water Level (Ft. BTOR)	Water Level Elevation (Ft. MSL)
89-03(1)	581.01	3.17	577.84	NG	NA
89-04(1)	NA	4.10	NA	5.93	NA
89-05(1A)	577.56	14.83	562.73	16.44	561.12
89-05(1B)	577.77	8.19	569.58	10.41	567.36
89-06(1)	575.93	9.32	566.61	10.44	565.49
89-07(1A)	577.66	11.16	566.50	12.29	565.37
89-07(1B)	577.48	10.27	567.21	11.51	565.97
89-12(1)	586.60	13.12	573.48	14.43	572.17
89-13(0)	588.18	9.63	578.55	10.31	577.87
89-14(0)	587.45	7.93	579.52	9.29	578.16
89-14(1)	587.59	10.81	576.78	11.68	575.91
89-15(1)	588.76	14.00	574.76	15.16	573.60
89-16(1)	576.76	7.03	569.73	9.29	567.47
89-17(1)	577.59	6.11	571.48	7.40	570.19
89-18(1)	576.75	11.74	565.01	13.39	563.36
93-02(1)	579.05	15.70	563.35	17.45	561.60
93-03(1)	572.30	11.40	560.90	12.95	559.35
94-02(1)	574.50	7.86	566.64	9.09	565.41
96-01(1)	585.18	14.51	570.67	16.59	568.59
96-02(1)	584.82	14.64	570.18	16.71	568.11
B-8(0)	590.26	8.35	581.91	8.50	581.76
B-12(0)	589.48	6.88	582.60	10.99	578.49
B-13(1)	588.41	12.27	576.14	12.90	575.51
B-14(1)	589.54	13.44	576.10	14.24	575.30
89-SW(2)	577.54	7.68	569.86	9.86	567.68
EW-2	568.15	6.47	561.68	8.62	559.53
EW-3	569.56	15.25	554.31	16.96	552.60
EW-4	570.07	22.57	547.50	22.68	547.39
EW-5	569.47	25.64	543.83	27.04	542.43
EW-6	568.17	9.95	558.22	12.05	556.12
EW-7 (**)	580.96	11.10	569.86	13.45	567.51
EW-8 (**)	578.44	7.62	570.82	9.27	569.17
DW-9 (**)	581.30	3.70	577.60	5.04	576.26
DW-10 (**)	583.95	7.32	576.63	7.97	575.98
DW-11 (**)	583.05	5.98	577.07	6.99	576.06
DW-12 (**)	580.48	4.75	575.73	6.38	574.10
EW-13	579.84	12.51	567.33	14.76	565.08

NOTES:

BTOR =	Below top of riser (or measuring point).
MSL =	Mean sea level.
(**)	Water level elevation measured from top of vault grate.
DRY =	No measurable quantity in well at time of measurement.
NG =	Not gauged.
NA =	Data not available.

TABLE 2A

Summary of Vertical Hydraulic Gradients
March 2010 Quarterly Hydraulic Monitoring Event
Former Textron, Inc.
Wheatfield, New York

Well Name	Top of Riser Elevation (ft MSL)	Water Level (ft BTOR)	Date Measured	Water Level Elevation (ft MSL)	Head Difference Zone 3 - Zone 1 (dH) (ft)	Thickness Zone 2 (dL) (ft)	Verticle Gradient (dH/dL)
87-02(1)	589.21	14.69	March 9, 2010	574.52	2.70	7.00	0.39
87-02(3)	588.63	11.41		577.22			
87-04(1)	589.08	12.62	March 9, 2010	576.46	2.03	7.00	0.29
87-04(3)	589.49	11.00		578.49			
87-05(1)	589.37	12.46	March 9, 2010	576.91	2.00	7.00	0.29
87-05(3)	589.46	10.55		578.91			
87-13(1)	590.06	13.53	March 9, 2010	576.53	2.43	7.00	0.35
87-13(3)	589.91	10.95		578.96			
87-14(1)	589.06	11.98	March 9, 2010	577.08	2.70	7.00	0.39
87-14(3)	590.35	10.57		579.78			
87-15(1)	590.27	11.64	March 9, 2010	578.63	1.35	7.00	0.19
87-15(3)	589.87	9.89		579.98			

NOTE: Positive vertical gradients are upwards from Zone 3 to Zone 1

TABLE 2B
Summary of Vertical Hydraulic Gradients
April 2010 Quarterly Hydraulic Monitoring Event
Former Textron, Inc.
Wheatfield, New York

Well Name	Top of Riser Elevation (ft MSL)	Water Level (ft BTOR)	Date Measured	Water Level Elevation (ft MSL)	Head Difference Zone 3 - Zone 1 (dH) (ft)	Thickness Zone 2 (dL) (ft)	Verticle Gradient (dH/dL)
87-02(1)	589.21	15.73	April 23, 2010	573.48	3.38	7.00	0.48
87-02(3)	588.63	11.77		576.86			
87-04(1)	589.08	13.30	April 23, 2010	575.78	2.36	7.00	0.34
87-04(3)	589.49	11.35		578.14			
87-05(1)	589.37	13.35	April 23, 2010	576.02	2.44	7.00	0.35
87-05(3)	589.46	11.00		578.46			
87-13(1)	590.06	13.87	April 23, 2010	576.19	2.32	7.00	0.33
87-13(3)	589.91	11.40		578.51			
87-14(1)	589.06	12.83	April 23, 2010	576.23	2.94	7.00	0.42
87-14(3)	590.35	11.18		579.17			
87-15(1)	590.27	12.36	April 23, 2010	577.91	1.39	7.00	0.20
87-15(3)	589.87	10.57		579.30			

NOTE: Positive vertical gradients are upwards from Zone 3 to Zone 1

FIGURES

DRAWING NUMBER	135428D1s
APPROVED BY	
CHECKED BY	
DRAWN BY	S. SHKOLNIK 06-25-09
OFFICE	ALBANY, NY

68,000 m E

69,000 m E

70,000 m E

74,000 m N

73,000 m N

WALMORE ROAD

NEUTRALIZATION POND

FORMER TEXTRON INC.
(WHEATFIELD PLANT)

STATE RTE. 62
(NIAGARA FALLS BLVD.)

NIAGARA ROAD

OLD FALLS BLVD.

NIAGARA FALLS BLVD.

CAYUGA DR. EXT.

BERGHOLTZ CREEK

SAWYER CREEK

DRAINAGE DITCH

RAILROAD

CONRAIL

SY ROAD

JAGOW ROAD

87-15(1)
DW-9
89-14(1)
87-13(1)
87-08(1)
87-14(1)
87-17(1)
DW-10
87-04(1)
87-05(1)
89-15(1)
B-13(1)
B-14(1)
87-06(1)
87-23(1)
DW-11
87-10(1)
87-02(1)
DW-12
89-12(1)
87-01(1)
89-16(1)
87-22(1)
EW-13
EW-7
EW-8
89-04(1)
87-18(1)
96-01(1)
96-02(1)
87-12(1)
87-20(1)
87-19(1)
87-21(1)
89-03(1)
EW-2
93-02(1)
EW-3
89-17(1)
EW-4
89-05(1A)
EW-5
94-02(1)
EW-6
93-03(1)
89-18(1)
89-06(1)
89-07(1A)

LEGEND

- EXTRACTION WELL OR DNAPL WELL
- MONITORING WELL OR PIEZOMETER

NOTES

1.) GRID SYSTEM SHOWN IS 1000-METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 17, 1927 NORTH AMERICAN DATUM.

2.) REFERENCE: U.S. GEOLOGICAL SURVEY, TONAWANDA WEST NEW YORK 7.5' QUADRANGLE, DATED 1980.

3.) WELL LOCATIONS SHOWN ARE APPROXIMATE.

REFERENCE:

BASE MAP SOURCE: GOLDER ASSOCIATES
BUFFALO, NY

SCALE
0 300 600 900 FEET

Shaw Environmental, Inc.

TEXTRON
NIAGARA FALLS, NEW YORK

FIGURE 1
GROUNDWATER MONITORING PLAN SAMPLE LOCATIONS
2221 NIAGARA FALLS BOULEVARD
NIAGARA FALLS, NEW YORK

DRAWING NUMBER 135428D7s

APPROVED BY

CHECKED BY

DRAWN BY S. SHKOLNIK 04/13/10

OFFICE ALBANY, NY

68,000 m E

69,000 m E

70,000 m E

74,000 m N

73,000 m N

WALMORE ROAD

FOR EXPANDED VIEW OF ON-SITE AREA, INCLUDING ON-SITE DNAPL PLUME AND ON-SITE FLOW ARROWS, SEE FIGURE 3.

APPROXIMATE LIMIT OF DISSOLVED PHASE PLUME (1 ppb TVO OCTOBER 2009 SAMPLING EVENT – SEE NOTE 7.)

FORMER TEXTRON INC. (WHEATFIELD PLANT)

CLOSED NEUTRALIZATION POND

STATE RTE. 62 (NIAGARA FALLS BLVD.)

NIAGARA ROAD

OLD FALLS BLVD.

NIAGARA FALLS BLVD.

CAYUGA DR. EXT.

BERGHOLTZ CREEK

SAWYER CREEK

DRAINAGE DITCH

RAILROAD

CONRAIL

SY ROAD

JAGOW ROAD

87-08(1) (577.68)
87-14(1) (577.08)
89-14(1) (576.78)
87-15(1) (578.63)
DW-9 (577.60)
87-13(1) (576.53)
87-17(1) (579.42)
DW-10 (576.63)
87-04(1) (576.46)
89-15(1) (574.76)
B-14(1) (576.10)
87-05(1) (576.91)
87-06(1) (576.41)
87-23(1) (574.16)
B-13(1) (576.14)
DW-11 (577.07)
87-02(1) (574.52)
87-10(1) (573.84)
DW-12 (575.73)
89-12(1) (573.48)
87-01(1) (573.08)
87-22(1) (569.77)
96-01(1) (570.67)
EW-7 (569.86)
EW-13 (567.33)
EW-8 (570.82)
87-12(1) (570.15)
87-18(1) (569.62)
96-02(1) (570.18)
89-16(1) (569.73)
89-04(1) (NA)
87-19(1) (569.73)
87-20(1) (570.11)
87-21(1) (569.90)
89-03(1) (577.84)
93-02(1) (563.35)
(561.68) EW-2
EW-3 (554.31)
89-17(1) (571.48)
EW-4 (547.50)
89-05(1A) (562.73)
94-02(1) (566.64)
EW-5 (543.83)
93-03(1) (560.90)
EW-6 (558.22)
89-18(1) (565.01)
89-06(1) (566.61)
89-07(1A) (566.50)

574 575 576 577 578 579 570 571 572 573 559 560 561 562 563 564 565 566 567 568 569

LEGEND

- EXTRACTION WELL OR DNAPL WELL
- MONITORING WELL OR PIEZOMETER
- (569.73) WATER LEVEL ELEVATIONS AT MONITORING OR EXTRACTION WELL IN FEET MEAN SEA LEVEL.
- 576 POTENTIOMETRIC ELEVATION CONTOUR IN FEET MEAN SEA LEVEL (DASHED WHERE INFERRED)
- DIRECTION OF GROUNDWATER FLOW IN ZONE 1
- NA DATA NOT AVAILABLE

NOTES

1.) GRID SYSTEM SHOWN IS 1000-METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 17, 1927 NORTH AMERICAN DATUM.

2.) REFERENCE: U.S. GEOLOGICAL SURVEY, TONAWANDA WEST NEW YORK 7.5' QUADRANGLE, DATED 1980.

3.) WELL LOCATIONS SHOWN ARE APPROXIMATE.

4.) WATER LEVEL MEASUREMENTS OBTAINED ON MARCH 9, 2010

5.) ONLY WELL LOCATIONS WITH AN ELEVATION LISTED ARE USED IN MAP CONTOURING.

6.) CONTOURS BETWEEN KNOWN POINTS HAVE BEEN INTERPOLATED.

7.) TOTAL VOLATILE ORGANIC (TVO) DETECTIONS/MINUS CARBON DISULFIDE.

8.) MONITORING WELLS 89-03(1), 89-05(1A) AND 93-02(1) NOT USED FOR CONTOURING.

REFERENCE:

BASE MAP SOURCE: GOLDER ASSOCIATES BUFFALO, NY

SCALE 0 300 600 900 FEET

Shaw Environmental, Inc.

TEXTRON NIAGARA FALLS, NEW YORK

FIGURE 2
GROUNDWATER ELEVATION CONTOUR MAP ZONE 1 BEDROCK – MARCH 2010
2221 NIAGARA FALLS BOULEVARD
NIAGARA FALLS, NEW YORK

Xref: .
Image: .
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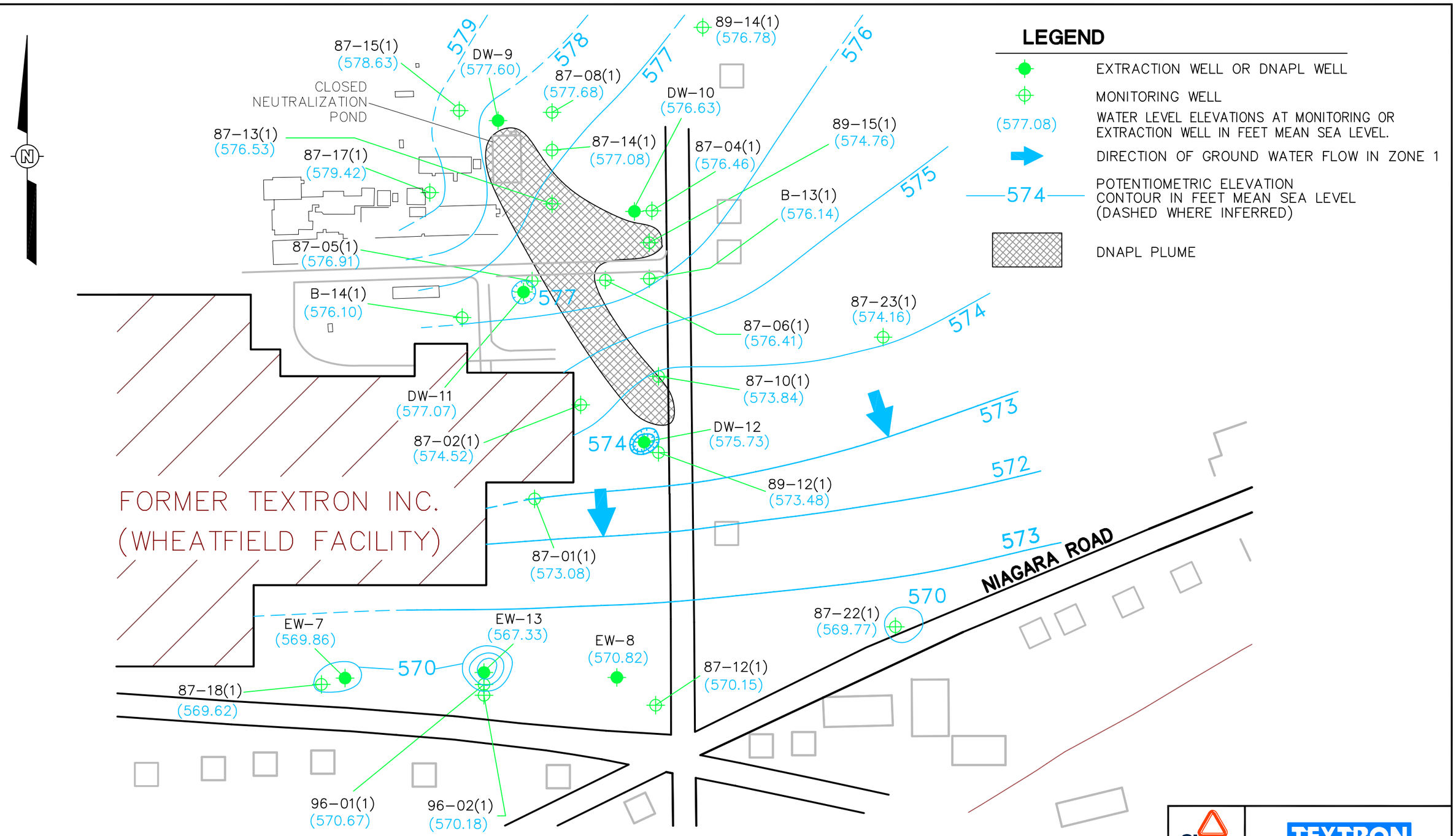
Plotted by: Samuil.Shkolnik



REFERENCE:

BASE MAP SOURCE: GOLDER ASSOCIATES
BUFFALO, NY

SCALE
0 200 400 FEET

Shaw Environmental, Inc.

TEXTRON
NIAGARA FALLS, NEW YORK

FIGURE 3
ON–SITE GROUNDWATER ELEVATION CONTOUR MAP, ZONE 1 BEDROCK MARCH 2010
2221 NIAGARA FALLS BOULEVARD
NIAGARA FALLS, NEW YORK

DRAWING NUMBER	135428B7s
APPROVED BY	
CHECKED BY	
DRAWN BY	S. SHKOLNIK 04-15-10
OFFICE	ALBANY, NY

L:\project\135428\SEMI-ANNUAL\135428B7s.dwg
Plot Date/Time: 04/15/10 11:49am Xref: .
Plotted by: Samuil.Shkolnik Image: .

DRAWING NUMBER 135428D8s

	APPROVED BY	CHECKED BY	DRAWN BY
OFFICE ALBANY, NY			S. SHKOLNIK 05/10/10

FOR EXPANDED VIEW OF ON-SITE AREA, INCLUDING ON-SITE DNAPL PLUME AND ON-SITE FLOW ARROWS, SEE FIGURE 5.

APPROXIMATE LIMIT OF DISSOLVED PHASE PLUME (1 ppb TVO OCTOBER 2009 SAMPLING EVENT – SEE NOTE 7.)

68,000 m E | 69,000 m E | 70,000 m E

74,000 m N | 73,000 m N

WALMORE ROAD

FORMER TEXTRON INC. (WHEATFIELD PLANT)

CLOSED NEUTRALIZATION POND

STATE RTE. 62 (NIAGARA FALLS BLVD.)

NIAGARA ROAD

OLD FALLS BLVD.

NIAGARA FALLS BLVD.

CAYUGA DR. EXT.

BERGHOLTZ CREEK

SAWYER CREEK

DRAINAGE DITCH

RAILROAD

CONRAIL

SY ROAD

JAGOW ROAD

87-08(1) (576.77)
87-14(1) (576.23)
89-14(1) (575.91)
87-15(1) (577.91)
DW-9 (576.26)
87-13(1) (576.19)
87-17(1) (578.70)
87-04(1) (575.78)
DW-10 (575.98)
89-15(1) (573.60)
B-14(1) (575.30)
87-05(1) (576.02)
87-06(1) (575.73)
B-13(1) (575.51)
87-23(1) (572.83)
DW-11 (576.06)
87-02(1) (573.48)
87-10(1) (572.57)
DW-12 (574.10)
89-12(1) (572.17)
87-01(1) (571.68)
96-01(1) (568.59)
87-22(1) (567.69)
EW-7 (567.51)
EW-13 (565.08)
EW-8 (569.17)
87-12(1) (568.03)
87-18(1) (567.54)
96-02(1) (568.11)
89-16(1) (567.47)
89-04(1) (NA)
87-20(1) (568.01)
87-19(1) (566.22)
87-21(1) (567.73)
89-03(1) (NA)
93-02(1) (561.60)
EW-2 (559.53)
(552.60)
EW-3
EW-4 (547.39)
89-05(1A) (561.12)
94-02(1) (565.41)
93-03(1) (559.35)
EW-5 (542.43)
EW-6 (556.12)
89-17(1) (570.19)
89-18(1) (563.36)
89-06(1) (565.49)
89-07(1A) (565.37)

574 573 572 571 570 569 568 567 566 565 564 563 562 561 560 577 576 575

LEGEND

- EXTRACTION WELL OR DNAPL WELL
- MONITORING WELL OR PIEZOMETER
- (575.91) WATER LEVEL ELEVATIONS AT MONITORING OR EXTRACTION WELL IN FEET MEAN SEA LEVEL.
- 576 POTENTIOMETRIC ELEVATION CONTOUR IN FEET MEAN SEA LEVEL (DASHED WHERE INFERRED)
- DIRECTION OF GROUNDWATER FLOW IN ZONE 1
- NA DATA NOT AVAILABLE

NOTES

1.) GRID SYSTEM SHOWN IS 1000-METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 17, 1927 NORTH AMERICAN DATUM.

2.) REFERENCE: U.S. GEOLOGICAL SURVEY, TONAWANDA WEST NEW YORK 7.5' QUADRANGLE, DATED 1980.

3.) WELL LOCATIONS SHOWN ARE APPROXIMATE.

4.) WATER LEVEL MEASUREMENTS OBTAINED ON APRIL 23, 2010

5.) ONLY WELL LOCATIONS WITH AN ELEVATION LISTED ARE USED IN MAP CONTOURING.

6.) CONTOURS BETWEEN KNOWN POINTS HAVE BEEN INTERPOLATED.

7.) TOTAL VOLATILE ORGANIC (TVO) DETECTIONS/MINUS CARBON DISULFIDE.

8.) MONITORING WELLS 89-03(1), 89-05(1A) AND 93-02(1) NOT USED FOR CONTOURING.

SCALE
0 300 600 900 FEET

REFERENCE:

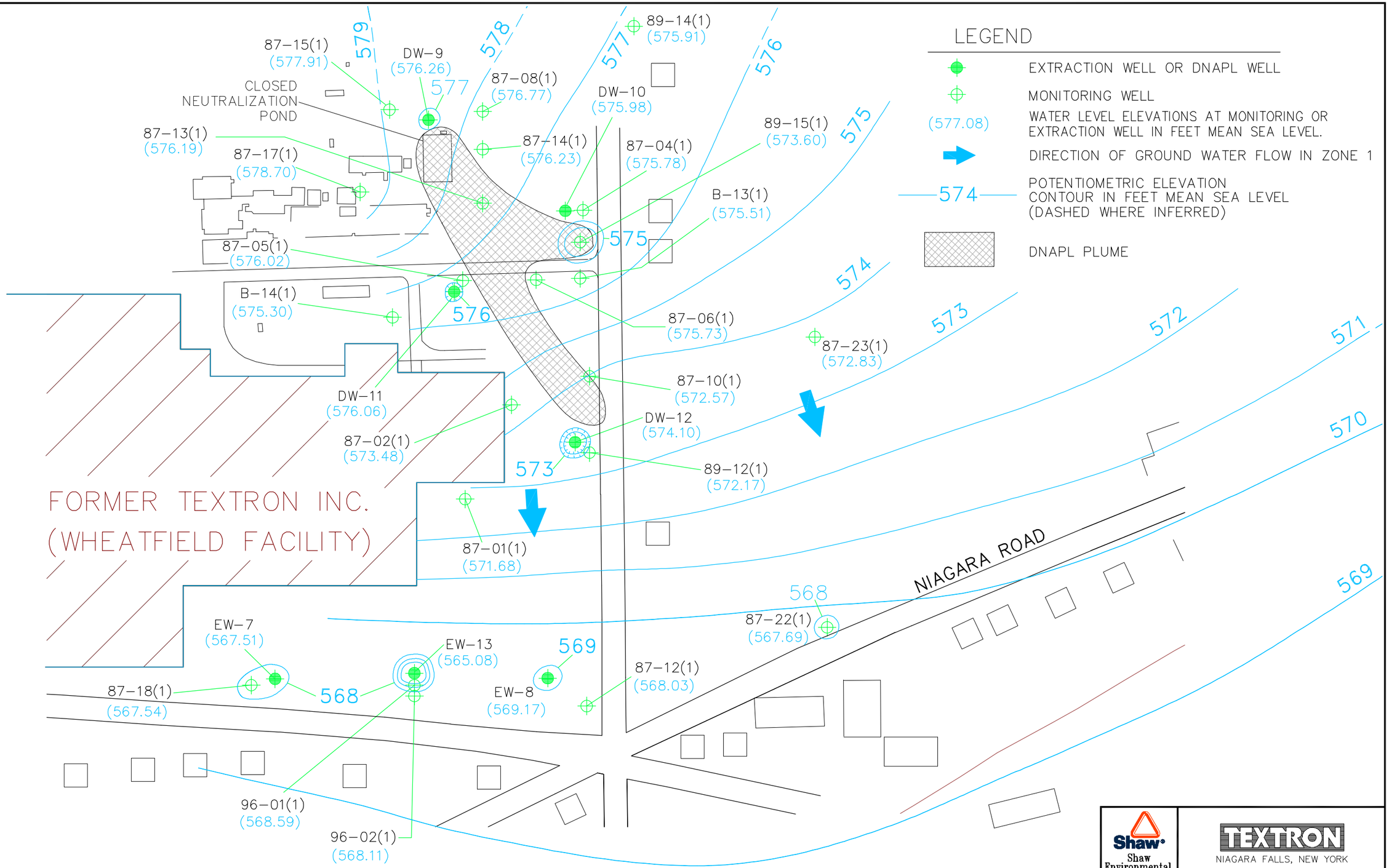
BASE MAP SOURCE: GOLDER ASSOCIATES BUFFALO, NY

Shaw Environmental, Inc.

TEXTRON
NIAGARA FALLS, NEW YORK

FIGURE 4
GROUNDWATER ELEVATION CONTOUR MAP ZONE 1 BEDROCK – APRIL 2010
2221 NIAGARA FALLS BOULEVARD
NIAGARA FALLS, NEW YORK

File: G:\Shaw Offices - CAD Files\Latham, NY\135428\135428D8s.dwg
Plot Date/Time: May 25, 2010 - 1:42pm
Plotted By: william.snyder



REFERENCE:

BASE MAP SOURCE: GOLDER ASSOCIATES
BUFFALO, NY

SCALE
0 200 400 FEET

Shaw Environmental, Inc.

TEXTRON
NIAGARA FALLS, NEW YORK

FIGURE 5
ON-SITE GROUNDWATER ELEVATION CONTOUR MAP, ZONE 1 BEDROCK APRIL 2010
2221 NIAGARA FALLS BOULEVARD
NIAGARA FALLS, NEW YORK

DRAWING NUMBER 135428B8s
APPROVED BY
CHECKED BY
DRAWN BY B. Snyder 05/25/10
OFFICE Pittsburgh, PA

File: O:\Shaw Offices - CAD Files\Latham, NY\135428\135428B8s.dwg
Plot Date/Time: May 25, 2010 - 1:45pm
Plotted By: william.snyder
Xref:
Image: ou-shaw.jpg

APPENDIX A
NIAGARA COUNTY SEWER DISTRICT
SEMI-ANNUAL REPORT

May 5, 2010

Mr. Dan Kummer
Niagara County Sewer District #1
7346 Liberty Drive

Niagara Falls, New York 14304-3762

Subject: **Niagara County Sewer District Discharge Monitoring**
Semi-Annual Analytical Results
Permit Number: 10-07
Textron Off-Site Groundwater Extraction System
Textron, Inc., Wheatfield, New York
Sample Date: April 19 – 20, 2010

Dear Mr. Kummer:

Enclosed for your review is the most recent semi-annual discharge monitoring analytical results from Textron, Inc.'s Off-Site Groundwater Extraction System located in Wheatfield, New York. The Off-Site Groundwater Extraction System was brought on-line in March 1993 and discharges to the Niagara County Sewer District (NCSD) sanitary sewer. Shaw Environmental, Inc. (Shaw) on behalf of Textron, Inc. (Textron) collected four grab samples in accordance with the NCSD Permit Number 10-07, between April 19th and 20th, 2010. The field sampling sheets are included as **Appendix A**. The samples were kept on ice and delivered to TestAmerica, Inc. in Amherst, New York. All sampling activities were conducted in accordance with the requirements stated in NCSD Permit Number 10-07.

Approximately 11,111.173 gallons of groundwater was extracted by the Off-Site system and discharged to the NCSD sanitary sewer between November 1, 2009 and April 30, 2010. The discharge flow volumes for the months of November, December, January, February, March and April are detailed on **Tables 1**, **2**, **3**, **4**, **5** and **6**, respectively.

Table 7 contains a summary of the semi-annual discharge monitoring analytical data and an estimate of the discharge loading in comparison to the permitted maximum daily discharge loading limits. As illustrated in **Table 7**, the estimate daily discharge loading during the monitoring period did not exceed the permitted limits. The analytical results for the April 2010 sampling event are provided in **Appendix B**.

13 BRITISH AMERICAN BLVD, LATHAM, NY12110-1405
518.783.1996 • FAX 518.783.8397

Please do not hesitate to contact me at should you have any questions regarding this project.

Sincerely,

Cecelia Campbell
Scientist 4
Shaw Environmental, Inc.

Please Reply To: Cecelia Campbell
Phone: 412.858.3977
E-Mail Address: cecelia.campbell@shawgrp.com

Attachments: Tables
Appendix A – Field Sampling Sheets
Appendix B – Analytical Report

Cc: Greg Simpson – Textron
Shaw – File

TABLES

Table 1
Niagara County Sewer Discharge Monitoring
Off-Site Groundwater Extraction System
Textron, Inc.
Wheatfield, New York
Permit Number: 07-07
November 1 - November 30, 2009
Daily Flow Rates

Date/Time	Total Flow Reading	Total Daily Flow (gal)
11/1/09 7:10 AM	44,664,498	58,917
11/2/09 7:10 AM	44,723,589	59,091
11/3/09 7:10 AM	44,782,362	58,773
11/4/09 7:10 AM	44,840,820	58,458
11/5/09 7:10 AM	44,899,045	58,225
11/6/09 7:10 AM	44,957,202	58,157
11/7/09 7:10 AM	45,015,209	58,007
11/8/09 7:10 AM	45,073,108	57,899
11/9/09 7:10 AM	45,130,854	57,746
11/10/09 7:10 AM	45,188,370	57,516
11/11/09 7:10 AM	45,245,581	57,211
11/12/09 7:10 AM	45,302,795	57,214
11/13/09 7:10 AM	45,360,014	57,081
11/14/09 7:10 AM	45,417,111	57,081
11/15/09 7:10 AM	45,474,038	57,081
11/16/09 7:10 AM	45,530,818	56,780
11/17/09 7:10 AM	45,587,672	56,854
11/18/09 7:10 AM	45,644,486	56,814
11/19/09 7:10 AM	45,701,175	56,689
11/20/09 7:10 AM	45,758,985	57,810
11/21/09 7:10 AM	45,818,596	59,611
11/22/09 7:10 AM	45,878,882	60,286
11/23/09 7:10 AM	45,939,079	60,197
11/24/09 7:10 AM	45,999,154	60,075
11/25/09 7:10 AM	46,059,081	59,927
11/26/09 7:10 AM	46,118,990	59,909
11/27/09 7:10 AM	46,178,988	59,998
11/28/09 7:10 AM	46,239,176	60,188
11/29/09 7:10 AM	46,299,608	**60,432**
11/30/09 7:10 AM	46,360,011	60,403

Maximum Daily Flow for November (gallons/day): 60,432
Average Daily Flow for November (gallons/day): 54,945

Table 2
Niagara County Sewer Discharge Monitoring
Off-Site Groundwater Extraction System
Textron, Inc.
Wheatfield, New York
Permit Number: 07-07
December 1 - December 31, 2009
Daily Flow Rates

Date/Time	Total Flow Reading	Total Daily Flow (gal)
12/1/09 7:10 AM	46,421,544	61,533
12/2/09 7:10 AM	46,483,418	61,874
12/3/09 7:10 AM	46,545,931	62,513
12/4/09 7:10 AM	46,610,135	64,204
12/5/09 7:10 AM	46,673,361	63,226
12/6/09 7:10 AM	46,735,828	62,467
12/7/09 7:10 AM	46,797,468	61,640
12/8/09 7:10 AM	46,858,598	61,130
12/9/09 7:10 AM	46,919,323	60,725
12/10/09 7:10 AM	46,982,251	62,928
12/11/09 7:10 AM	47,046,487	**64,236**
12/12/09 7:10 AM	47,109,891	63,404
12/13/09 7:10 AM	47,172,568	62,677
12/14/09 7:10 AM	47,234,965	62,397
12/15/09 7:10 AM	47,296,987	62,022
12/16/09 7:10 AM	47,358,618	61,631
12/17/09 7:10 AM	47,420,103	61,485
12/18/09 7:10 AM	47,481,500	61,397
12/19/09 7:10 AM	47,542,747	61,247
12/20/09 7:10 AM	47,604,024	61,277
12/21/09 7:10 AM	47,665,403	61,379
12/22/09 7:10 AM	47,726,595	61,192
12/23/09 7:10 AM	47,787,521	60,926
12/24/09 7:10 AM	47,848,117	60,438
12/25/09 7:10 AM	47,908,397	60,438
12/26/09 7:10 AM	47,968,999	60,602
12/27/09 7:10 AM	48,032,271	63,272
12/28/09 7:10 AM	48,096,432	64,161
12/29/09 7:10 AM	48,160,075	63,643
12/30/09 7:10 AM	--	62,755
12/31/09 7:10 AM	48,285,584	62,755

Maximum Daily Flow for December (gallons/day): 64,236
Average Daily Flow for December (gallons/day): 62,115

-- - Data not available for date indicated, therefore dail flow data is an average.

Table 3
Niagara County Sewer Discharge Monitoring
Off-Site Groundwater Extraction System
Textron, Inc.
Wheatfield, New York
January 1 - Janaury 31, 2010
Daily Flow Rates

Date/Time	Total Flow Reading	Total Daily Flow (gal)
1/1/10 7:10 AM	48,347,816	62,232
1/2/10 7:10 AM	48,409,810	61,994
1/3/10 7:10 AM	48,471,725	61,915
1/4/10 7:10 AM	48,533,575	61,850
1/5/10 7:10 AM	48,595,242	61,667
1/6/10 7:10 AM	48,656,906	61,664
1/7/10 7:10 AM	48,718,573	61,667
1/8/10 7:10 AM	48,780,207	61,634
1/9/10 7:10 AM	48,841,765	61,558
1/10/10 7:10 AM	48,903,255	61,490
1/11/10 7:10 AM	48,964,504	61,249
1/12/10 7:10 AM	49,025,515	61,011
1/13/10 7:10 AM	49,086,452	60,937
1/14/10 7:10 AM	49,147,440	60,988
1/15/10 7:10 AM	49,208,564	61,124
1/16/10 7:10 AM	49,270,046	61,482
1/17/10 7:10 AM	49,332,017	61,971
1/18/10 7:10 AM	49,394,497	62,480
1/19/10 7:10 AM	49,457,329	62,832
1/20/10 7:10 AM	49,520,193	62,864
1/21/10 7:10 AM	49,583,042	62,849
1/22/10 7:10 AM	49,645,761	62,719
1/23/10 7:10 AM	49,708,301	62,540
1/24/10 7:10 AM	49,770,515	62,214
1/25/10 7:10 AM	49,833,456	62,941
1/26/10 7:10 AM	49,901,432	**67,976**
1/27/10 7:10 AM	49,968,711	67,279
1/28/10 7:10 AM	50,033,117	64,406
1/29/10 7:10 AM	50,097,293	64,176
1/30/10 7:10 AM	50,162,923	65,630
1/31/10 7:10 AM	50,225,560	62,637

Maximum Daily Flow for January (gallons/day): 67,976
Average Daily Flow for January (gallons/day): 62,580

Table 4
Niagara County Sewer Discharge Monitoring
Off-Site Groundwater Extraction System
Textron, Inc.
Wheatfield, New York
February 1 - February 28, 2010
Daily Flow Rates

Date/Time	Total Flow Reading	Total Daily Flow (gal)
2/1/10 7:10 AM	50,288,255	62,695
2/2/10 7:10 AM	50,350,806	62,551
2/3/10 7:10 AM	50,413,198	62,392
2/4/10 7:10 AM	50,475,699	62,501
2/5/10 7:10 AM	50,537,623	61,924
2/6/10 7:10 AM	50,599,011	61,388
2/7/10 7:10 AM	50,660,058	61,047
2/8/10 7:10 AM	50,720,843	60,785
2/9/10 7:10 AM	50,781,562	60,719
2/10/10 7:10 AM	50,842,237	60,675
2/11/10 7:10 AM	50,902,999	60,762
2/12/10 7:10 AM	50,963,635	60,636
2/13/10 7:10 AM	51,024,075	60,440
2/14/10 7:10 AM	51,084,415	60,340
2/15/10 7:10 AM	51,144,833	60,418
2/16/10 7:10 AM	51,205,407	60,574
2/17/10 7:10 AM	51,266,173	60,766
2/18/10 7:10 AM	51,326,959	60,786
2/19/10 7:10 AM	51,387,762	60,803
2/20/10 7:10 AM	51,448,624	60,862
2/21/10 7:10 AM	51,509,454	60,830
2/22/10 7:10 AM	51,570,385	60,931
2/23/10 7:10 AM	51,631,521	61,136
2/24/10 7:10 AM	51,710,732	**79,211**
2/25/10 7:10 AM	51,749,808	39,076
2/26/10 7:10 AM	51,811,511	61,703
2/27/10 7:10 AM	51,873,253	61,742
2/28/10 7:10 AM	51,935,034	61,781

Maximum Daily Flow for February (gallons/day): 79,211
Average Daily Flow for February (gallons/day): 61,053

Table 5
Niagara County Sewer Discharge Monitoring
Off-Site Groundwater Extraction System
Textron, Inc.
Wheatfield, New York
March 1 - March 31, 2010
Daily Flow Rates

Date/Time	Total Flow Reading	Total Daily Flow (gal)
3/1/10 7:10 AM	51,997,333	62,299
3/2/10 7:10 AM	52,060,408	63,075
3/3/10 7:10 AM	52,124,130	63,722
3/4/10 7:10 AM	52,188,290	64,160
3/5/10 7:10 AM	52,252,607	64,317
3/6/10 7:10 AM	52,316,873	64,266
3/7/10 7:10 AM	52,381,004	64,131
3/8/10 7:10 AM	52,445,001	63,997
3/9/10 7:10 AM	52,508,979	63,978
3/10/10 7:10 AM	52,573,555	64,576
3/11/10 7:10 AM	52,639,362	65,807
3/12/10 7:10 AM	52,705,638	66,276
3/13/10 7:10 AM	52,772,529	66,891
3/14/10 7:10 AM	52,839,532	67,003
3/15/10 7:10 AM	52,906,790	**67,258**
3/16/10 7:10 AM	52,972,562	65,772
3/17/10 7:10 AM	53,036,425	63,863
3/18/10 7:10 AM	53,099,803	63,378
3/19/10 7:10 AM	53,162,780	62,977
3/20/10 7:10 AM	53,225,669	62,889
3/21/10 7:10 AM	53,288,649	62,980
3/22/10 7:10 AM	53,351,165	62,516
3/23/10 7:10 AM	53,414,191	63,026
3/24/10 7:10 AM	53,478,583	64,392
3/25/10 7:10 AM	53,542,454	63,871
3/26/10 7:10 AM	53,606,992	64,538
3/27/10 7:10 AM	53,671,039	64,047
3/28/10 7:10 AM	53,734,469	63,430
3/29/10 7:10 AM	53,797,698	63,229
3/30/10 7:10 AM	53,860,622	62,924
3/31/10 7:10 AM	53,923,450	62,828

Maximum Daily Flow for March (gallons/day): 67,258
Average Daily Flow for March (gallons/day): 64,142

Table 6
Niagara County Sewer Discharge Monitoring
Off-Site Groundwater Extraction System
Textron, Inc.
Wheatfield, New York
April 1 - April 30, 2010
Daily Flow Rates

Date/Time	Total Flow Reading	Total Daily Flow (gal)
4/1/10 7:10 AM	53,985,979	62,529
4/2/10 7:10 AM	54,047,981	62,002
4/3/10 7:10 AM	54,109,856	61,875
4/4/10 7:10 AM	54,171,632	61,776
4/5/10 7:10 AM	54,233,217	61,585
4/6/10 7:10 AM	54,294,799	61,582
4/7/10 7:10 AM	--	62,807
4/8/10 7:10 AM	54,420,413	62,807
4/9/10 7:10 AM	54,486,439	**66,026**
4/10/10 7:10 AM	54,551,642	65,203
4/11/10 7:10 AM	54,614,924	63,282
4/12/10 7:10 AM	54,677,574	62,650
4/13/10 7:10 AM	54,740,104	62,530
4/14/10 7:10 AM	54,802,188	62,084
4/15/10 7:10 AM	54,863,931	61,743
4/16/10 7:10 AM	54,925,171	61,240
4/17/10 7:10 AM	54,986,129	60,958
4/18/10 7:10 AM	55,046,913	60,784
4/19/10 7:10 AM	55,107,597	60,684
4/20/10 7:10 AM	55,168,191	60,594
4/21/10 7:10 AM	55,228,869	60,678
4/22/10 7:10 AM	55,289,996	61,127
4/23/10 7:10 AM	55,351,486	61,490
4/24/10 7:10 AM	55,413,009	61,523
4/25/10 7:10 AM	55,474,235	61,226
4/26/10 7:10 AM	55,534,985	60,750
4/27/10 7:10 AM	55,595,531	60,546
4/28/10 7:10 AM	55,655,800	60,269
4/29/10 7:10 AM	55,715,923	60,123
4/30/10 7:10 AM	55,775,671	59,748

Maximum Daily Flow for April (gallons/day): 66,026
Average Daily Flow for April (gallons/day): 61,741

-- - Data not available for date indicated, therefore dail flow data is an average.

Table 7
Niagara County Sewer Discharge Monitoring
Off-Site Groundwater Extraction System
Textron, Inc.
Wheatfield, New York
Permit Number: 10-07
April 19 - 20, 2010
Sample ID: MH No. 9-3

Parameter via US EPA Method 624	Reported Concentration (µg/L)	Total Flow (gallons per day)[1]	Discharge Loading Pounds per Day[2]	Maximum Daily Discharge Loading Limits
Trichloroethene	< 5.0	60,594	< 0.002528285	1.0
1,2-Dichloroethene (Total)	50	60,594	0.025282847	2.500
Vinyl Chloride	< 5.0	60,594	< 0.002528285	0.4000
Methylene Chloride	< 5.0	60,594	< 0.002528285	0.2

Notes:

Total Flow Limit: 200,000 gallons per day (gpd);

< - Not detected at indicated method detection limit;

For calculation purposes 'Not Detected' values are assigned the value of the method detection limit;

[1] Total flow during sampling period was based on the total flow measurements for the sampling date;

[2] Determined as follows: (Concentration in µg/L) x (flow rate in gpd) x (CF)

CF = Conversion Factor 8.3×10^{-9}

APPENDIX A

FIELD SAMPLING SHEETS

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sample: Kevin Crowin	Lab PM: Candace Fox	Carrier Tracking No(s):	COC No: 04142010 14:49_1
Client Contact: Cecelia Campbell	Phone: (716) 472-0434	E-Mail: candace.fox@testamericainc.com		Page: 1
Company: Shaw E & I, Inc. - Monroeville, PA				Job #:
Address: 790 Mosside Boulevard	Due Date Requested:			
City: Monroeville	TAT Requested (Business Days): 10			
State, Zip: PA, 15146-2792				
Phone: (412) 858-3977	PO #: 523218 OP / 135428			
Email: cecelia.campbell@shawgrp.com	WO #: RTD1248			
Project Name: Semi-Annual Event - Textron, Wheatfield, NY - NY3A	Project #: Semi-Annual Event - Textron, Wheatfield, NY			
Site: Shaw Environmental & Infrastructure, Inc. - NY3A91	SSOW#:			

Parameter(s) Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	624 VOAS	Total Number of containers	Special Instructions/Note:
			Preserv-Cont Code:				A-V		
MH#9-3	4/19/10	1605	G	W	N	N	2	2	
MH#9-3	↓	2020	G	W			2	2	
MH#9-3	4/20/10	0535	G	W			2	2	
MH#9-3	↓	1245	G	W	↓	↓	2	2	
TRIP BLANK									

Preservation Codes:
A=HCL Z=Z
B=NaOH
C=Zn Acetate
D=Nitric Acid
I=Ice
N=None
S=H2SO4
V=MCAA

Container Codes:
A=Amber T=Tedlar
G=Glass V=Vial
P=Poly/Plastic
S=Summa

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4/20/10 1530		[signature]	4.20.10 1530	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TEXTRON, INC.
FIELD SAMPLING DATA SHEET
NIAGARA COUNTY SEWER DISTRICT SAMPLING EVENT

Site Name: Textron, Wheatfield, NY
Project Number: 100245
NCSD Permit Number: 07-07
Sample Location: EW- 6
Date: 4-19-10
Time: 1605
Field Personnel: KEVIN CRONIN

Physical Condition of Location: GOOD
Ambient Temperature: 60°
Wind: LIGHT
Precipitation: NONE

Sampling Method: Dedicated Poly Bailer

Sample Number: MH No. 9-3
Sample Description: CLEAR
Analysis Requested: 624 VOAS

Notes:

Sampler Signature: Kevin Cro

TEXTRON, INC.
FIELD SAMPLING DATA SHEET
NIAGARA COUNTY SEWER DISTRICT SAMPLING EVENT

Site Name: Textron, Wheatfield, NY
Project Number: 100245
NCSD Permit Number: 07-07
Sample Location: EW- 6
Date: 4-19-10
Time: 2020
Field Personnel: KEVIN CRONIN

Physical Condition of Location: GOOD
Ambient Temperature: 50°F
Wind: LIGHT
Precipitation: NONE

Sampling Method: Dedicated Poly Bailer

Sample Number: MH No. 9-3
Sample Description: CLEAR
Analysis Requested: 624 VOAs

Notes:

Sampler Signature: Kevin Cron

TEXTRON, INC.
FIELD SAMPLING DATA SHEET
NIAGARA COUNTY SEWER DISTRICT SAMPLING EVENT

Site Name: Textron, Wheatfield, NY
Project Number: 100245
NCSD Permit Number: 07-07
Sample Location: EW- 6
Date: 4-20-10
Time: 0535
Field Personnel: KEVIN CRONIN

Physical Condition of Location: GOOD
Ambient Temperature: 32°
Wind: LIGHT
Precipitation: NONE

Sampling Method: Dedicated Poly Bailer

Sample Number: MH No. 9-3
Sample Description: CLEAR
Analysis Requested: 624 VOAs

Notes:

Sampler Signature: Kevin Cronin

TEXTRON, INC.
FIELD SAMPLING DATA SHEET
NIAGARA COUNTY SEWER DISTRICT SAMPLING EVENT

Site Name: Textron, Wheatfield, NY
Project Number: 100245
NCSD Permit Number: 07-07
Sample Location: EW- 6
Date: 4-20-10
Time: 1245
Field Personnel: KEVIN CROWIN

Physical Condition of Location: GOOD
Ambient Temperature: 60°F
Wind: LIGHT
Precipitation: NONE

Sampling Method: Dedicated Poly Bailer

Sample Number: MH No. 9-3
Sample Description: CLEAR
Analysis Requested: 624 VOAS

Notes:

Sampler Signature: Kevin Crowin

APPENDIX B

ANALYTICAL REPORT

Analytical Report

Work Order: RTD1605

Project Description

Semi-Annual Event - Textron, Wheatfield, NY

For:

Cecelia Campbell

Shaw E & I, Inc. - Monroeville, PA

2790 Mosside Boulevard

Monroeville, PA 15146-2792

Candace L. Fox

Candace Fox

Project Manager

candace.fox@testamericainc.com

Tuesday, April 27, 2010

Shaw E & I, Inc. - Monroeville, PA
2790 Mosside Boulevard
Monroeville, PA 15146-2792

Work Order: RTD1605

Project: Semi-Annual Event - Textron, Wheatfield, NY
Project Number: SHAW

Received: 04/20/10
Reported: 04/27/10 14:29

TestAmerica Buffalo
Current Certifications

As of 12/21/2009

STATE	Program	Cert # / Lab ID
Arkansas	*CWA, RCRA, SOIL*	*88-0686*
California*	*NELAP CWA, RCRA*	*01169CA*
Connecticut	*SDWA, CWA, RCRA, SOIL*	*PH-0568*
Florida*	*NELAP CWA, RCRA*	*E87672*
Georgia*	*SDWA,NELAP CWA, RCRA*	*956*
Illinois*	*NELAP SDWA, CWA, RCRA*	*200003*
Iowa	*SW/CS*	*374*
Kansas*	*NELAP SDWA, CWA, RCRA*	*E-10187*
Kentucky	*SDWA*	*90029*
Kentucky UST	*UST*	*30*
Louisiana*	*NELAP CWA, RCRA*	*2031*
Maine	*SDWA, CWA*	*NY0044*
Maryland	*SDWA*	*294*
Massachusetts	*SDWA, CWA*	*M-NY044*
Michigan	*SDWA*	*9937*
Minnesota	*SDWA,CWA, RCRA*	*036-999-337*
New Hampshire*	*NELAP SDWA, CWA*	*233701*
New Jersey*	*NELAP,SDWA, CWA, RCRA,*	*NY455*
New York*	*NELAP, AIR, SDWA, CWA, RCRA,CLP*	*10026*
Oklahoma	*CWA, RCRA*	*9421*
Pennsylvania*	*NELAP CWA,RCRA*	*68-00281*
Tennessee	*SDWA*	*02970*
Texas*	*NELAP CWA, RCRA*	*T104704412-08-TX*
USDA	*FOREIGN SOIL PERMIT*	*S-41579*
Virginia	*SDWA*	*278*
Washington*	*NELAP CWA,RCRA*	*C1677*
Wisconsin	*CWA, RCRA*	*998310390*
West Virginia	*CWA,RCRA*	*252*

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

Shaw E & I, Inc. - Monroeville, PA
2790 Mosside Boulevard
Monroeville, PA 15146-2792

Work Order: RTD1605

Project: Semi-Annual Event - Textron, Wheatfield, NY
Project Number: SHAW

Received: 04/20/10
Reported: 04/27/10 14:29

CASE NARRATIVE

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

Samples were received in good condition at 3.5 degrees celcius.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

Shaw E & I, Inc. - Monroeville, PA
2790 Mosside Boulevard
Monroeville, PA 15146-2792

Work Order: RTD1605

Project: Semi-Annual Event - Textron, Wheatfield, NY
Project Number: SHAW

Received: 04/20/10
Reported: 04/27/10 14:29

DATA QUALIFIERS AND DEFINITIONS

J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
P16	Lab to composite volatile samples by date/time/flow.
P-HS	Sample container contained headspace.
SL	Volatile sample was composited in the laboratory prior to analysis.
NR	Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

Shaw E & I, Inc. - Monroeville, PA
2790 Mosside Boulevard
Monroeville, PA 15146-2792

Work Order: RTD1605

Project: Semi-Annual Event - Textron, Wheatfield, NY
Project Number: SHAW

Received: 04/20/10
Reported: 04/27/10 14:29

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTD1605-01 (MH#9-3 - Water)					**Sampled: 04/20/10 12:45**			**Recvd: 04/20/10 15:30**		
Volatile Organic Compounds										
1,2-Dichloroethene, Total	**50**	SL	10	3.2	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Sample ID: RTD1605-02 (TRIP BLANK - Water)					**Sampled: 04/20/10**			**Recvd: 04/20/10 15:30**		
Volatile Organic Compounds										
1,2-Dichlorobenzene	**2.1**	P-HS,J	5.0	0.44	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
1,4-Dichlorobenzene	**3.4**	P-HS,J	5.0	0.51	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Benzene	**1.3**	P-HS,J	5.0	0.60	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Chlorobenzene	**4.1**	P-HS,J	5.0	0.48	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624

Shaw E & I, Inc. - Monroeville, PA
2790 Mosside Boulevard
Monroeville, PA 15146-2792

Work Order: RTD1605

Project: Semi-Annual Event - Textron, Wheatfield, NY
Project Number: SHAW

Received: 04/20/10
Reported: 04/27/10 14:29

Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
MH#9-3	RTD1605-01	Water	04/20/10 12:45	04/20/10 15:30	P16
TRIP BLANK	RTD1605-02	Water	04/20/10	04/20/10 15:30	

Shaw E & I, Inc. - Monroeville, PA
2790 Mosside Boulevard
Monroeville, PA 15146-2792

Work Order: RTD1605

Project: Semi-Annual Event - Textron, Wheatfield, NY
Project Number: SHAW

Received: 04/20/10
Reported: 04/27/10 14:29

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTD1605-01 (MH#9-3 - Water)						**Sampled: 04/20/10 12:45**		**Recvd: 04/20/10 15:30**		
Volatile Organic Compounds										
1,1,1-Trichloroethane	ND	SL	5.0	0.38	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
1,1,2,2-Tetrachloroethane	ND	SL	5.0	0.26	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
1,1,2-Trichloroethane	ND	SL	5.0	0.48	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
1,1-Dichloroethane	ND	SL	5.0	0.59	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
1,1-Dichloroethene	ND	SL	5.0	0.85	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
1,2-Dichlorobenzene	ND	SL	5.0	0.44	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
1,2-Dichloroethane	ND	SL	5.0	0.60	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
1,2-Dichloroethene, Total	**50**	SL	10	3.2	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
1,2-Dichloropropane	ND	SL	5.0	0.61	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
1,3-Dichlorobenzene	ND	SL	5.0	0.54	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
1,4-Dichlorobenzene	ND	SL	5.0	0.51	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
2-Chloroethyl vinyl ether	ND	SL	25	1.8	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Acrolein	ND	SL	100	17	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Acrylonitrile	ND	SL	100	1.9	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Benzene	ND	SL	5.0	0.60	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Bromodichloromethane	ND	SL	5.0	0.54	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Bromoform	ND	SL	5.0	0.47	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Bromomethane	ND	SL	5.0	1.2	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Carbon Tetrachloride	ND	SL	5.0	0.51	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Chlorobenzene	ND	SL	5.0	0.48	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Dibromochloromethane	ND	SL	5.0	0.41	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Chloroethane	ND	SL	5.0	0.87	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Chloroform	ND	SL	5.0	0.54	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Chloromethane	ND	SL	5.0	0.64	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
cis-1,3-Dichloropropene	ND	SL	5.0	0.33	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Ethylbenzene	ND	SL	5.0	0.46	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Methylene Chloride	ND	SL	5.0	0.81	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Tetrachloroethene	ND	SL	5.0	0.34	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Toluene	ND	SL	5.0	0.45	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
trans-1,3-Dichloropropene	ND	SL	5.0	0.44	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Trichloroethene	ND	SL	5.0	0.60	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Trichlorofluoromethane	ND	SL	5.0	0.45	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
Vinyl chloride	ND	SL	5.0	0.75	ug/L	1.00	04/23/10 13:06	TRB	10D2238	624
1,2-Dichloroethane-d4	*99 %*	*SL*	*Surr Limits: (88-132%)*				*04/23/10 13:06*	*TRB*	*10D2238*	*624*
4-Bromofluorobenzene	*94 %*	*SL*	*Surr Limits: (78-122%)*				*04/23/10 13:06*	*TRB*	*10D2238*	*624*
Toluene-d8	*91 %*	*SL*	*Surr Limits: (87-110%)*				*04/23/10 13:06*	*TRB*	*10D2238*	*624*

Shaw E & I, Inc. - Monroeville, PA
2790 Mosside Boulevard
Monroeville, PA 15146-2792

Work Order: RTD1605

Project: Semi-Annual Event - Textron, Wheatfield, NY
Project Number: SHAW

Received: 04/20/10
Reported: 04/27/10 14:29

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RTD1605-02 (TRIP BLANK - Water)						**Sampled: 04/20/10**			**Recvd: 04/20/10 15:30**	
Volatile Organic Compounds										
1,1,1-Trichloroethane	ND	P-HS	5.0	0.38	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
1,1,2,2-Tetrachloroethane	ND	P-HS	5.0	0.26	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
1,1,2-Trichloroethane	ND	P-HS	5.0	0.48	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
1,1-Dichloroethane	ND	P-HS	5.0	0.59	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
1,1-Dichloroethene	ND	P-HS	5.0	0.85	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
1,2-Dichlorobenzene	**2.1**	P-HS,J	5.0	0.44	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
1,2-Dichloroethane	ND	P-HS	5.0	0.60	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
1,2-Dichloroethene, Total	ND	P-HS	10	3.2	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
1,2-Dichloropropane	ND	P-HS	5.0	0.61	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
1,3-Dichlorobenzene	ND	P-HS	5.0	0.54	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
1,4-Dichlorobenzene	**3.4**	P-HS,J	5.0	0.51	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
2-Chloroethyl vinyl ether	ND	P-HS	25	1.8	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Acrolein	ND	P-HS	100	17	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Acrylonitrile	ND	P-HS	100	1.9	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Benzene	**1.3**	P-HS,J	5.0	0.60	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Bromodichloromethane	ND	P-HS	5.0	0.54	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Bromoform	ND	P-HS	5.0	0.47	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Bromomethane	ND	P-HS	5.0	1.2	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Carbon Tetrachloride	ND	P-HS	5.0	0.51	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Chlorobenzene	**4.1**	P-HS,J	5.0	0.48	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Dibromochloromethane	ND	P-HS	5.0	0.41	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Chloroethane	ND	P-HS	5.0	0.87	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Chloroform	ND	P-HS	5.0	0.54	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Chloromethane	ND	P-HS	5.0	0.64	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
cis-1,3-Dichloropropene	ND	P-HS	5.0	0.33	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Ethylbenzene	ND	P-HS	5.0	0.46	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Methylene Chloride	ND	P-HS	5.0	0.81	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Tetrachloroethene	ND	P-HS	5.0	0.34	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Toluene	ND	P-HS	5.0	0.45	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
trans-1,3-Dichloropropene	ND	P-HS	5.0	0.44	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Trichloroethene	ND	P-HS	5.0	0.60	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Trichlorofluoromethane	ND	P-HS	5.0	0.45	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
Vinyl chloride	ND	P-HS	5.0	0.75	ug/L	1.00	04/22/10 09:37	TRB	10D2043	624
1,2-Dichloroethane-d4	*104 %*	*P-HS*	*Surr Limits: (88-132%)*				*04/22/10 09:37*	*TRB*	*10D2043*	*624*
4-Bromofluorobenzene	*99 %*	*P-HS*	*Surr Limits: (78-122%)*				*04/22/10 09:37*	*TRB*	*10D2043*	*624*
Toluene-d8	*92 %*	*P-HS*	*Surr Limits: (87-110%)*				*04/22/10 09:37*	*TRB*	*10D2043*	*624*

Shaw E & I, Inc. - Monroeville, PA
2790 Mosside Boulevard
Monroeville, PA 15146-2792

Work Order: RTD1605

Project: Semi-Annual Event - Textron, Wheatfield, NY
Project Number: SHAW

Received: 04/20/10
Reported: 04/27/10 14:29

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
Volatile Organic Compounds									
624	10D2043	RTD1605-02	5.00	mL	5.00	mL	04/21/10 11:16	TRB	5030B MS
624	10D2238	RTD1605-01	5.00	mL	5.00	mL	04/23/10 11:32	TRB	5030B MS

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Received: 04/20/10
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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds											
Blank Analyzed: 04/21/10 (Lab Number:10D2043-BLK1, Batch: 10D2043)											
1,1,1-Trichloroethane			5.0	0.38	ug/L	ND					
1,1,2,2-Tetrachloroethane			5.0	0.26	ug/L	ND					
1,1,2-Trichloroethane			5.0	0.48	ug/L	ND					
1,1-Dichloroethane			5.0	0.59	ug/L	ND					
1,1-Dichloroethene			5.0	0.85	ug/L	ND					
1,2-Dichlorobenzene			5.0	0.44	ug/L	ND					
1,2-Dichloroethane			5.0	0.60	ug/L	ND					
1,2-Dichloroethene, Total			10	3.2	ug/L	ND					
1,2-Dichloropropane			5.0	0.61	ug/L	ND					
1,3-Dichlorobenzene			5.0	0.54	ug/L	ND					
1,4-Dichlorobenzene			5.0	0.51	ug/L	ND					
2-Chloroethyl vinyl ether			25	1.8	ug/L	ND					
Acrolein			100	17	ug/L	ND					
Acrylonitrile			100	1.9	ug/L	ND					
Benzene			5.0	0.60	ug/L	ND					
Bromodichloromethane			5.0	0.54	ug/L	ND					
Bromoform			5.0	0.47	ug/L	ND					
Bromomethane			5.0	1.2	ug/L	ND					
Carbon Tetrachloride			5.0	0.51	ug/L	ND					
Chlorobenzene			5.0	0.48	ug/L	ND					
Dibromochloromethane			5.0	0.41	ug/L	ND					
Chloroethane			5.0	0.87	ug/L	ND					
Chloroform			5.0	0.54	ug/L	ND					
Chloromethane			5.0	0.64	ug/L	ND					
cis-1,3-Dichloropropene			5.0	0.33	ug/L	ND					
Ethylbenzene			5.0	0.46	ug/L	ND					
Methylene Chloride			5.0	0.81	ug/L	ND					
Tetrachloroethene			5.0	0.34	ug/L	ND					
Toluene			5.0	0.45	ug/L	ND					
trans-1,3-Dichloropropene			5.0	0.44	ug/L	ND					
Trichloroethene			5.0	0.60	ug/L	ND					
Trichlorofluoromethane			5.0	0.45	ug/L	ND					
Vinyl chloride			5.0	0.75	ug/L	ND					
Surrogate: 1,2-Dichloroethane-d4					*ug/L*		*100*	*88-132*			
Surrogate: 4-Bromofluorobenzene					*ug/L*		*92*	*78-122*			
Surrogate: Toluene-d8					*ug/L*		*94*	*87-110*			

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Work Order: RTD1605

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Received: 04/20/10
Reported: 04/27/10 14:29

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds											
LCS Analyzed: 04/21/10 (Lab Number:10D2043-BS1, Batch: 10D2043)											
1,1,1-Trichloroethane		20.0	5.0	0.38	ug/L	19.8	99	75-125			
1,1,2,2-Tetrachloroethane		20.0	5.0	0.26	ug/L	20.2	101	61-140			
1,1,2-Trichloroethane		20.0	5.0	0.48	ug/L	20.2	101	71-129			
1,1-Dichloroethane		20.0	5.0	0.59	ug/L	23.3	116	73-128			
1,1-Dichloroethene		20.0	5.0	0.85	ug/L	17.7	89	51-150			
1,2-Dichlorobenzene		20.0	5.0	0.44	ug/L	19.6	98	63-137			
1,2-Dichloroethane		20.0	5.0	0.60	ug/L	21.3	107	68-132			
1,2-Dichloropropane		20.0	5.0	0.61	ug/L	24.8	124	34-166			
1,3-Dichlorobenzene		20.0	5.0	0.54	ug/L	20.1	100	73-127			
1,4-Dichlorobenzene		20.0	5.0	0.51	ug/L	19.4	97	63-137			
2-Chloroethyl vinyl ether		100	25	1.8	ug/L	123	123	1-224			
Benzene		20.0	5.0	0.60	ug/L	23.6	118	64-136			
Bromodichloromethane		20.0	5.0	0.54	ug/L	21.7	109	66-135			
Bromoform		20.0	5.0	0.47	ug/L	16.0	80	71-129			
Bromomethane		20.0	5.0	1.2	ug/L	20.4	102	14-186			
Carbon Tetrachloride		20.0	5.0	0.51	ug/L	19.2	96	73-127			
Chlorobenzene		20.0	5.0	0.48	ug/L	19.7	98	66-134			
Dibromochloromethane		20.0	5.0	0.41	ug/L	17.7	89	68-133			
Chloroethane		20.0	5.0	0.87	ug/L	22.8	114	38-162			
Chloroform		20.0	5.0	0.54	ug/L	22.1	111	68-133			
Chloromethane		20.0	5.0	0.64	ug/L	35.2	176	1-204			
cis-1,3-Dichloropropene		20.0	5.0	0.33	ug/L	21.7	109	24-176			
Ethylbenzene		20.0	5.0	0.46	ug/L	19.5	97	59-141			
Methylene Chloride		20.0	5.0	0.81	ug/L	23.0	115	61-140			
Tetrachloroethene		20.0	5.0	0.34	ug/L	17.2	86	74-127			
Toluene		20.0	5.0	0.45	ug/L	19.3	96	75-126			
trans-1,3-Dichloropropene		20.0	5.0	0.44	ug/L	17.6	88	50-150			
Trichloroethene		20.0	5.0	0.60	ug/L	21.5	108	67-134			
Trichlorofluoromethane		20.0	5.0	0.45	ug/L	24.9	125	48-152			
Vinyl chloride		20.0	5.0	0.75	ug/L	31.1	156	4-196			
Surrogate: 1,2-Dichloroethane-d4					*ug/L*		*97*	*88-132*			
Surrogate: 4-Bromofluorobenzene					*ug/L*		*97*	*78-122*			
Surrogate: Toluene-d8					*ug/L*		*94*	*87-110*			
Volatile Organic Compounds											
Blank Analyzed: 04/23/10 (Lab Number:10D2238-BLK1, Batch: 10D2238)											

Shaw E & I, Inc. - Monroeville, PA
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Monroeville, PA 15146-2792

Work Order: RTD1605

Project: Semi-Annual Event - Textron, Wheatfield, NY
Project Number: SHAW

Received: 04/20/10
Reported: 04/27/10 14:29

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds											
Blank Analyzed: 04/23/10 (Lab Number:10D2238-BLK1, Batch: 10D2238)											
1,1,1-Trichloroethane			5.0	0.38	ug/L	ND					
1,1,2,2-Tetrachloroethane			5.0	0.26	ug/L	ND					
1,1,2-Trichloroethane			5.0	0.48	ug/L	ND					
1,1-Dichloroethane			5.0	0.59	ug/L	ND					
1,1-Dichloroethene			5.0	0.85	ug/L	ND					
1,2-Dichlorobenzene			5.0	0.44	ug/L	ND					
1,2-Dichloroethane			5.0	0.60	ug/L	ND					
1,2-Dichloroethene, Total			10	3.2	ug/L	ND					
1,2-Dichloropropane			5.0	0.61	ug/L	ND					
1,3-Dichlorobenzene			5.0	0.54	ug/L	ND					
1,4-Dichlorobenzene			5.0	0.51	ug/L	ND					
2-Chloroethyl vinyl ether			25	1.8	ug/L	ND					
Acrolein			100	17	ug/L	ND					
Acrylonitrile			100	1.9	ug/L	ND					
Benzene			5.0	0.60	ug/L	ND					
Bromodichloromethane			5.0	0.54	ug/L	ND					
Bromoform			5.0	0.47	ug/L	ND					
Bromomethane			5.0	1.2	ug/L	ND					
Carbon Tetrachloride			5.0	0.51	ug/L	ND					
Chlorobenzene			5.0	0.48	ug/L	ND					
Dibromochloromethane			5.0	0.41	ug/L	ND					
Chloroethane			5.0	0.87	ug/L	ND					
Chloroform			5.0	0.54	ug/L	ND					
Chloromethane			5.0	0.64	ug/L	ND					
cis-1,3-Dichloropropene			5.0	0.33	ug/L	ND					
Ethylbenzene			5.0	0.46	ug/L	ND					
Methylene Chloride			5.0	0.81	ug/L	ND					
Tetrachloroethene			5.0	0.34	ug/L	ND					
Toluene			5.0	0.45	ug/L	ND					
trans-1,3-Dichloropropene			5.0	0.44	ug/L	ND					
Trichloroethene			5.0	0.60	ug/L	ND					
Trichlorofluoromethane			5.0	0.45	ug/L	ND					
Vinyl chloride			5.0	0.75	ug/L	ND					
Surrogate: 1,2-Dichloroethane-d4					*ug/L*		*101*	*88-132*			
Surrogate: 4-Bromofluorobenzene					*ug/L*		*95*	*78-122*			
Surrogate: Toluene-d8					*ug/L*		*92*	*87-110*			

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Received: 04/20/10
Reported: 04/27/10 14:29

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds											
LCS Analyzed: 04/23/10 (Lab Number:10D2238-BS1, Batch: 10D2238)											
1,1,1-Trichloroethane		20.0	5.0	0.38	ug/L	21.0	105	75-125			
1,1,2,2-Tetrachloroethane		20.0	5.0	0.26	ug/L	20.6	103	61-140			
1,1,2-Trichloroethane		20.0	5.0	0.48	ug/L	21.5	108	71-129			
1,1-Dichloroethane		20.0	5.0	0.59	ug/L	25.1	126	73-128			
1,1-Dichloroethene		20.0	5.0	0.85	ug/L	15.7	79	51-150			
1,2-Dichlorobenzene		20.0	5.0	0.44	ug/L	20.5	103	63-137			
1,2-Dichloroethane		20.0	5.0	0.60	ug/L	22.8	114	68-132			
1,2-Dichloropropane		20.0	5.0	0.61	ug/L	26.7	134	34-166			
1,3-Dichlorobenzene		20.0	5.0	0.54	ug/L	20.9	105	73-127			
1,4-Dichlorobenzene		20.0	5.0	0.51	ug/L	20.3	102	63-137			
2-Chloroethyl vinyl ether		100	25	1.8	ug/L	122	122	1-224			
Benzene		20.0	5.0	0.60	ug/L	25.1	126	64-136			
Bromodichloromethane		20.0	5.0	0.54	ug/L	23.4	117	66-135			
Bromoform		20.0	5.0	0.47	ug/L	18.0	90	71-129			
Bromomethane		20.0	5.0	1.2	ug/L	19.0	95	14-186			
Carbon Tetrachloride		20.0	5.0	0.51	ug/L	20.8	104	73-127			
Chlorobenzene		20.0	5.0	0.48	ug/L	20.8	104	66-134			
Dibromochloromethane		20.0	5.0	0.41	ug/L	19.6	98	68-133			
Chloroethane		20.0	5.0	0.87	ug/L	25.4	127	38-162			
Chloroform		20.0	5.0	0.54	ug/L	23.3	116	68-133			
Chloromethane		20.0	5.0	0.64	ug/L	36.9	185	1-204			
cis-1,3-Dichloropropene		20.0	5.0	0.33	ug/L	24.6	123	24-176			
Ethylbenzene		20.0	5.0	0.46	ug/L	20.8	104	59-141			
Methylene Chloride		20.0	5.0	0.81	ug/L	23.5	118	61-140			
Tetrachloroethene		20.0	5.0	0.34	ug/L	17.9	89	74-127			
Toluene		20.0	5.0	0.45	ug/L	19.8	99	75-126			
trans-1,3-Dichloropropene		20.0	5.0	0.44	ug/L	19.6	98	50-150			
Trichloroethene		20.0	5.0	0.60	ug/L	23.6	118	67-134			
Trichlorofluoromethane		20.0	5.0	0.45	ug/L	29.9	150	48-152			
Vinyl chloride		20.0	5.0	0.75	ug/L	36.5	182	4-196			
Surrogate: 1,2-Dichloroethane-d4					*ug/L*		*98*	*88-132*			
Surrogate: 4-Bromofluorobenzene					*ug/L*		*99*	*78-122*			
Surrogate: Toluene-d8					*ug/L*		*91*	*87-110*			

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Kaius Cerwin	Lab PM: Candace Fox	Carrier Tracking No(s):	COC No: 04142010 14:49_1
Client Contact: Cecelia Campbell	Phone: (716) 472-0434	E-Mail: candace.fox@testamericainc.com		Page: 1
Company: Shaw E & I, Inc. - Monroeville, PA				Job #:
Address: 2790 Mosside Boulevard	Due Date Requested:			
City: Monroeville	TAT Requested (Business Days): 10			
State, Zip: PA, 15146-2792				
Phone: (412) 858-3977	PO #: 523218 OP / 135428			
Email: cecelia.campbell@shawgrp.com	WO #: RTD1248			
Project Name: Semi-Annual Event - Textron, Wheatfield, NY - NY3A	Project #: Semi-Annual Event - Textron, Wheatfield, NY			
Site: Shaw Environmental & Infrastructure, Inc. - NY3A91	SSOW#:			

Parameter(s) Requested

Preservation Codes: A=HCL, H=NaOH, C=Zn Acetate, D=Nitric Acid, I=Ice, N=None, S=H2SO4, V=MCAA, Z=Z

Container Codes: A=Amber, G=Glass, P=Poly/Plastic, S=Summa, T=Tedlar, V=Vial

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	824 VOAS	Total Number of containers	Special Instructions/Note:
			Preserv-Cont Code:				A-V		
MH#9-3	4/19/10	1605	G	W	N	N	2	2	
MH#9-3	↓	2020	G	W	↓	↓	2	2	
MH#9-3	4/20/10	0535	G	W	↓	↓	2	2	
MH#9-3	↓	1245	G	W	↓	↓	2	2	
TRIP BLANK									

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:		Time:	Method of Shipment:	
Relinquished by: [signature]	Date/Time: 4/20/10 1530	Company	Received by: [signature]	Date/Time: 4-20-10 1530	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.		Cooler Temperature(s) °C and Other Remarks: 3.5°		