## FINAL SEMI-ANNUAL (JANUARY AND APRIL 2008) SITE MAINTENANCE AND MONITORING REPORT

Former Textron, Inc. Wheatfield, New York

August 12, 2008

Submitted to:

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

Prepared by:

Shaw Environmental, Inc. 13 British American Boulevard Latham, New York 12110-1405

#### TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1 1.2	Scope of Work and Organization	
2.0	FIELD SAMPLING ACTIVITIES	3
2.1	General	3
2.2	Hydraulic Monitoring	
2.3	Monitoring Well Sampling	
2.4	EXTRACTION WELL SAMPLING	3
3.0	LABORATORY ANALYTICAL METHODS AND RESULTS	4
4.0	SUMMARY OF OFF-SITE AND ON-SITE EXTRACTION SYSTEM OPERATIONS	5
4.1	REVIEW OF OFF-SITE AND ON-SITE SYSTEM OPERATIONS	5
	.1.1 Off-Site System	
	.1.2 On-Site System	
4.2		
•	.3 Evaluation	
	.3.1 Chemical Data for Off-Site and On-Site Systems	
4.4	.3.2 Hydraulic Response for Off-Site and On-Site Systems	
5.0	SUMMARY	9
5.1	Hydraulic Monitoring Data	9
5.2	Laboratory Data	9
5.3	OFF-SITE AND ON-SITE SYSTEM PERFORMANCE	9
6.0	REFERENCES	10
-		

#### LIST OF TABLES \_\_\_\_\_

- 1. Summary of Hydraulic Monitoring Data January and April 2008
- 2A. Summary of Vertical Hydraulic Gradients January 2008
- 2B. Summary of Vertical Hydraulic Gradients April 2008

LIST OF FIGURES	
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- 1. Groundwater Monitoring Plan Sample Locations
- 2. Groundwater Elevation Contour Map, Zone 1 Bedrock January 2008
- 3. On-Site Groundwater Elevation Contour Map, Zone 1 Bedrock January 2008
- 4. Groundwater Elevation Contour Map, Zone 1 Bedrock April 2008
- 5. On-Site Groundwater Elevation Contour Map, Zone 1 Bedrock April 2008

LIST OF APPENDICES	•		

A. Niagara County Sewer District Semi-Annual Report

#### 1.0 Introduction

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

#### 1.1 Scope of Work and Organization

**Section 1.0** provides an overview of the project and provides the organizational structure of the report. **Section 2.0** provides an overview of the field sampling activities regarding the hydraulic monitoring measurements, the groundwater monitoring well sampling, and groundwater extraction well sampling procedures. **Section 3.0** provides an overview of the laboratory analytical methodologies and results; **Section 4.0** provides an overview of the Off-Site and On-Site system operations for the quarter; and **Section 5.0** provides a brief summary of the hydraulic monitoring data, the laboratory data, and Off-Site and On-Site system operations.

#### 1.2 Background

The results of the January and April 2008 quarterly groundwater monitoring 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) between January and June 2008.

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 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 for both the On-Site and Off-Site System is for the period of January 1, 2008 through June 30, 2008.

#### 2.0 Field Sampling Activities

#### 2.1 General

Shaw personnel performed field activities according to the procedures detailed in the GMP. Quarterly groundwater monitoring was performed on January 23, 2008 and April 24, 2008 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 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 top of the water column (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 January and April 2008 is presented in **Table 1**. The groundwater level elevations from the Zone 1 wells are presented on **Figures 2** and **3** for the January 2008 event and **Figures 4** and **5** for the April 2008 event.

#### 2.3 Monitoring Well Sampling

No monitoring wells were scheduled for sampling during this reporting period.

#### 2.4 Extraction Well Sampling

No extraction wells were scheduled for sampling during this reporting period.

# Laboratory Analytical Methods and Results 3.0 No groundwater samples were collected for laboratory analysis during this reporting period.

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

#### 4.1.1 Off-Site System

There was only one reported operational change made to the Off-Site System during the First Quarter (January through March 2008). On February 5, 2008 the extraction pumps and flow controls for EW-2 and EW-5 were inspected and adjusted to allow for a more consistent flow from both of these extraction wells. 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 60,261 gallons per day (gpd). Approximately 5,511,060 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, 2008.

There were no reported operational changes made to the Off-Site System during the Second Quarter (April through June 2008). The average daily pumping rate for the Off-Site extraction system was calculated at 76,783 gpd. Approximately 6,987,290 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 sent from the system and are reported semi-annually to the Niagara County Sewer District.

#### 4.1.2 On-Site System

In concept, there were no operational changes made to the On-Site System during the reporting period. The thermal oxidizer, scrubber, air stripper ST-2, carbon units, and extraction well DW-9 remain inactive as approved by NYSDEC. The system experienced a continuation of the December 2007 recordable downtime event during this semi-annual monitoring period. The system ran intermittently between January 1<sup>st</sup> and February 18, 2008 due to a faulty contactor switch for the transfer pump after the air-stripper blower. The issue was finally resolved on February 18, 2008 when the contactor switch was replaced by Shaw field personnel.

NYSDEC representative, Mr. Nelson Schnabel, was at the facility on May 2, 2008 to conduct the annual SPDES inspection of the On-Site Groundwater Treatment System. Official results of this inspection have not been received at the time of this report.

A total of 3,501,136 gallons of groundwater was extracted from the subsurface and treated by the On-Site System between January and June 2008. Averaged daily flow rates varied from a low of 10,613 gpd (recorded during January 2008) to a high of 23,765 gpd (recorded during March 2008).

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

#### **Off-Site System**

As specified by Textron's Niagara County Sewer District No. 1 (NCSD) Industrial Discharge Permit (No. 07-07 effective January 31, 2007), 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 24, 2008 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**.

#### **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. Results of the monthly discharge monitoring indicate that Textron was in compliance with the NPDES permit during this operational period.

According to the effluent totalizer, approximately 3,501,136 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 January and April 2008 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 January 2008 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). 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). 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 January and April 2008 monitoring events. **Tables 2A** and **2B** present a summary of vertical hydraulic gradients between Zones 1 and 3 from the January and April 2008 hydraulic monitoring data, respectively. The data indicate that gradients range from 0.13 feet to 0.52 feet (upward). Maintenance of this 'upward gradient' shows effective containment of the plume within Zone 1.

#### 4.4 Routine Operational Corrective Measures

Shaw personnel were at the site on February 5, 2008 Shaw personnel made some minor adjustments to the Off-Site System which allowed for a more consistent flow to be obtained within extraction wells EW-2 and EW-5. Since this adjustment the Off-Site System has been consistently extracting over 2 million gallons of water per month from the subsurface.

On February 18, 2008 Shaw personnel were on site to replace a faulty contactor switch for the transfer pump for the on-site system; this switch was responsible for the system's downtime issues starting in December 2007. The system was restarted the same day without incident and has not recorded any reportable downtime events since.

The air stripper tower was cleaned on February 5, 2008 by Op-Tech Environmental Services, a subcontractor to Shaw, using a high pressure washer to remove the accumulated scale deposited in the trays. The towers were switched out prior to system startup. Eight 55-gallon drums of Redux-525<sup>TM</sup> have been utilized during this monitoring period to reduce the inorganic deposition and biofouling of the treatment system.

Working with the NYSDEC and New York State Department of Health (NYSDOH), Shaw personnel continued to perform a limited soil vapor assessment south of the main facility on during this reporting period. Analytical results were summarized and presented to the NYSDEC and NYSDOH.

#### 5.1 Hydraulic Monitoring Data

As discussed in **Section 2.2**, water level measurements were obtained on January 23. 2008 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 April 24, 2008. **Table 1** 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 capture 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 aguifers;
- 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., March 3, 2008, "Final Semi-Annual (August and October 2007) Site Maintenance and Monitoring Report".
- Shaw Environmental, Inc., February 26, 2008, "Final 2007 Annual Summary and Site Maintenance and Monitoring Report".

#### **TABLES**

#### TABLE 1

#### Summary of Hydraulic Monitoring Data January and April 2008 Former Textron, Inc. Wheatfield, New York

Top of Riser		January	23, 2008	April 24	1, 2008
Well Name	Elevation	Water Level	Water Level	Water Level	Water Level
	(Ft. MSL)	(Ft. BTOR)	Elevation	(Ft. BTOR)	Elevation
07.04(0)	,	40.00	(Ft. MSL)	44.04	(Ft. MSL)
87-01(0)	588.10	13.63	574.47	14.01	574.09
87-01(1)	587.99	17.02	570.97	18.05	569.94
87-02(1)	589.21	16.43	572.78	17.17	572.04
87-02(3)	588.63	12.57	576.06	12.98	575.65
87-04(0)	589.32	10.03	579.29	11.13	578.19
87-04(1)	589.08	12.93	576.15	15.18	573.90
87-04(3)	589.49	12.37	577.12	12.66	576.83
87-05(1)	589.37	13.64	575.73	15.38	573.99
87-05(3)	589.46	12.06	577.40	12.39	577.07
87-06(1)	588.27	12.08	576.19	14.41	573.86
87-08(1)	589.48	12.67	576.81	14.29	575.19
87-10(0)	587.30	12.00	575.30	14.01	573.29
87-10(1)	587.52	15.49	572.03	16.64	570.88
87-12(1)	583.84	16.76	567.08	17.78	566.06
87-13(0)	589.77	9.22	580.55	9.80	579.97
87-13(1)	590.06	14.57	575.49	15.93	574.13
87-13(3)	589.91	12.50	577.41	12.79	577.12
87-14(0)	589.56	9.92	579.64	10.72	578.84
87-14(1)	589.06	13.18	575.88	14.71	574.35
87-14(3)	590.35	12.34	578.01	12.62	577.73
87-15(0)	590.70	12.33	578.37	12.63	578.07
87-15(1)	590.27	13.01	577.26	14.00	576.27
87-15(3)	589.87	11.70	578.17	12.02	577.85
87-16(3B)	590.51	12.61	577.90	12.91	577.60
87-17(0)	589.50	11.89	577.61	12.21	577.29
87-17(1)	589.62	11.85	577.77	12.29	577.33
87-18(0)	585.95	11.78	574.17	12.23	573.72
87-18(1)	586.02	19.35	566.67	20.15	565.87
87-19(0)	581.57	9.42	572.15	9.27	572.30
87-19(1)	581.47	NG	NA	14.40	567.07
87-20(0)	578.77	7.61	571.16	7.37	571.40
87-20(1)	579.01	11.87	567.14	12.97	566.04
87-21(1)	577.33	NG	NA	11.40	565.93
87-22(1)	583.97	15.85	568.12	16.27	567.70
87-23(0)	587.27	5.61	581.66	5.14	582.13
87-23(1)	587.13	14.91	572.22	15.62	571.51

#### 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 January and April 2008 Former Textron, Inc. Wheatfield, New York

	Top of Riser	January	23, 2008	April 24	4, 2008
Well Name	Elevation	Water Level	Water Level	Water Level	Water Level
	(Ft. MSL)	(Ft. BTOR)	Elevation	(Ft. BTOR)	Elevation
00.00(4)	` ,	45.04	(Ft. MSL)	45.07	(Ft. MSL)
89-03(1)	581.01	15.94	565.07	15.97	565.04
89-04(1)	NA F77 F0	6.12	NA	6.00	NA 500.50
89-05(1A)	577.56	15.67	561.89	17.00	560.56
89-05(1B)	577.77	11.18	566.59	11.96	565.81
89-06(1)	575.93	10.85	565.08	11.04	564.89
89-07(1A)	577.66	12.67	564.99	12.93	564.73
89-07(1B)	577.48	12.09	565.39	12.25	565.23
89-12(1)	586.60	NG	NA	16.22	570.38
89-13(0)	588.18	11.20	576.98	12.38	575.80
89-14(0)	587.45	9.98	577.47	10.46	576.99
89-14(1)	587.59	12.28	575.31	13.25	574.34
89-15(1)	588.76	15.51	573.25	16.83	571.93
89-16(1)	576.76	8.81	567.95	8.80	567.96
89-17(1)	577.59	7.72	569.87	7.67	569.92
89-18(1)	576.75	13.04	563.71	14.21	562.54
93-02(1)	579.05	18.77	560.28	19.38	559.67
93-03(1)	572.30	12.74	559.56	13.60	558.70
94-02(1)	574.50	9.37	565.13	9.70	564.80
96-01(1)	585.18	17.83	567.35	18.82	566.36
96-02(1)	584.82	17.68	567.14	18.63	566.19
B-8(0)	590.26	10.30	579.96	10.03	580.23
B-12(0)	589.48	10.02	579.46	12.79	576.69
B-13(1)	588.41	12.49	575.92	14.71	573.70
B-14(1)	589.54	14.16	575.38	15.90	573.64
89-SW(2)	577.54	10.61	566.93	11.62	565.92
EW-2	568.15	42.55	525.60	10.80	557.35
EW-3	569.56	12.14	557.42	18.68	550.88
EW-4	570.07	16.00	554.07	23.82	546.25
EW-5	569.47	16.82	552.65	25.63	543.84
EW-6	568.17	NG	NA	11.35	556.82
EW-7 (**)	580.96	6.01	574.95	14.87	566.09
EW-8 (**)	578.44	15.38	563.06	12.02	566.42
DW-9 (**)	581.30	5.07	576.23	6.64	574.66
DW-10 (**)	583.95	17.13	566.82	9.93	574.02
DW-11 (**)	583.05	8.32	574.73	9.41	573.64
DW-12 (**)	580.48	11.93	568.55	16.07	564.41
EW-13	579.84	12.28	567.56	17.15	562.69
L V V - 13	313.04	12.20	307.30	17.13	1 302.09

#### 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
January 2008 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) 87-02(3)	589.21 588.63	16.43 12.57	January 23, 2008	572.78 576.06	3.28	7.00	0.47
87-04(1) 87-04(3)	589.08 589.49	12.93 12.37	January 23, 2008	576.15 577.12	0.97	7.00	0.14
87-05(1) 87-05(3)	589.37 589.46	13.64 12.06	January 23, 2008	575.73 577.40	1.67	7.00	0.24
87-13(1) 87-13(3)	590.06 589.91	14.57 12.50	January 23, 2008	575.49 577.41	1.92	7.00	0.27
87-14(1) 87-14(3)	589.06 590.35	13.18 12.34	January 23, 2008	575.88 578.01	2.13	7.00	0.30
87-15(1) 87-15(3)	590.27 589.87	13.01 11.70	January 23, 2008	577.26 578.17	0.91	7.00	0.13

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

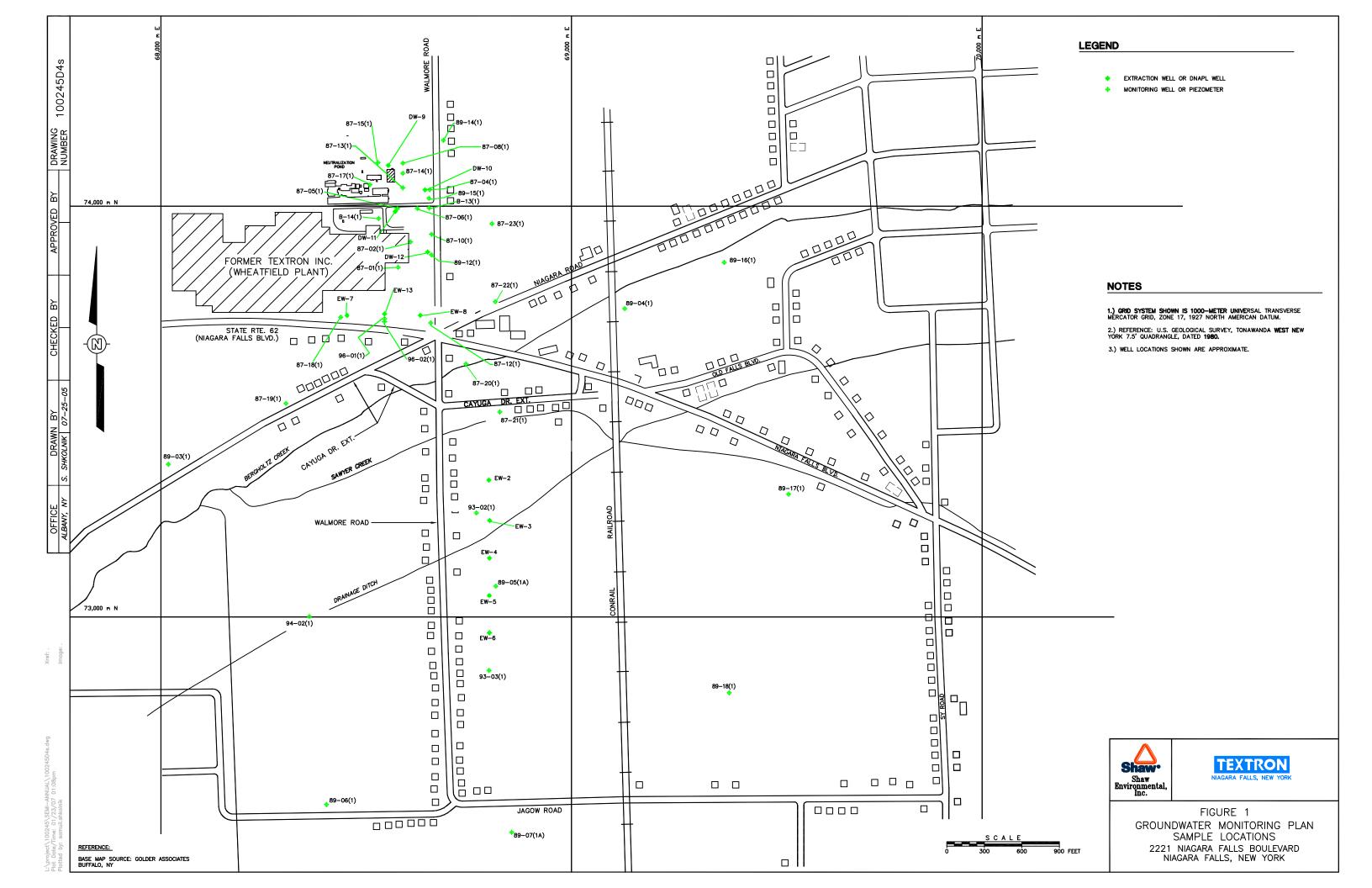
#### **TABLE 2B**

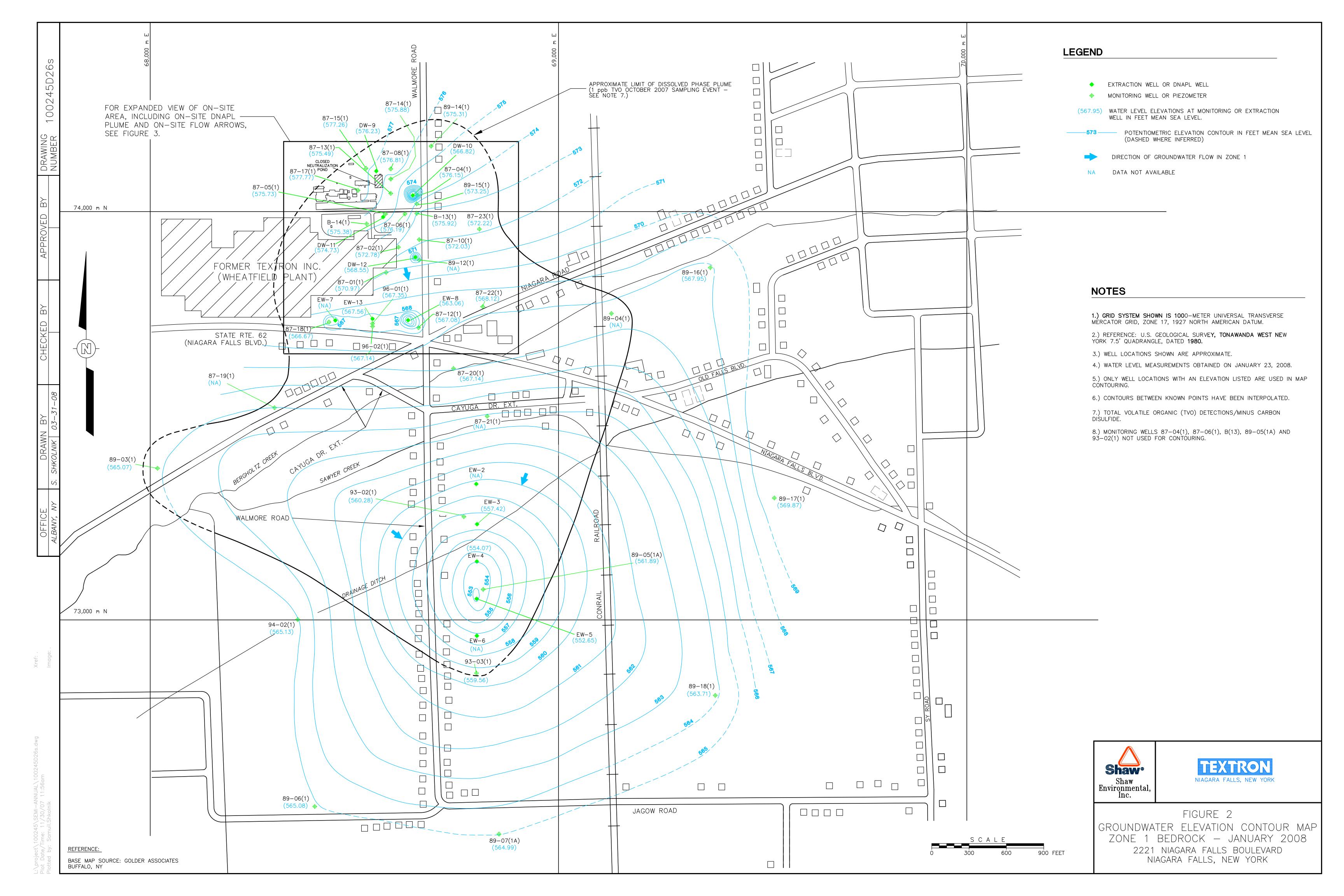
Summary of Vertical Hydraulic Gradients
April 2008 Quarterly Hydraulic Monitoring Event
Former Textron, Inc.
Wheatfield, New York

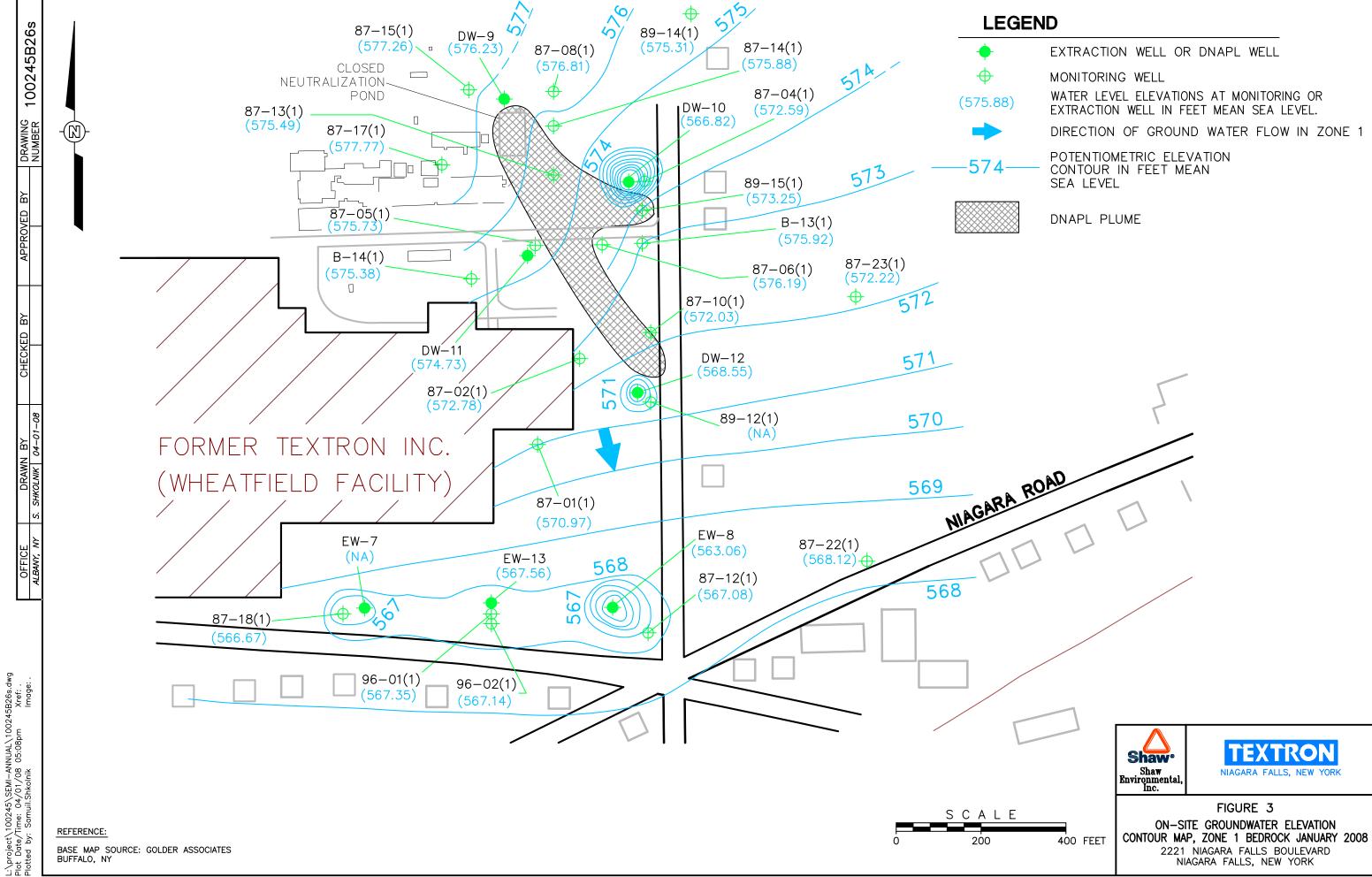
Well Name	Top of Riser Elevation (ft MSL)	Water Level (ft BTOR)	Date Measured	Water Level Elevation (ft MSL)	Head Difference Zone 3 - Zone 1 (dH) (ft)	Thickness Zone 2 (dL) (ft)	Verticle Gradient (dH/dL)
87-02(1) 87-02(3)	589.21 588.63	17.17 12.98	April 24, 2008	572.04 575.65	3.61	7.00	0.52
87-04(1) 87-04(3)	589.08 589.49	15.18 12.66	April 24, 2008	573.90 576.83	2.93	7.00	0.42
87-05(1) 87-05(3)	589.37 589.46	15.38 12.39	April 24, 2008	573.99 577.07	3.08	7.00	0.44
87-13(1) 87-13(3)	590.06 589.91	15.93 12.79	April 24, 2008	574.13 577.12	2.99	7.00	0.43
87-14(1) 87-14(3)	589.06 590.35	14.71 12.62	April 24, 2008	574.35 577.73	3.38	7.00	0.48
87-15(1) 87-15(3)	590.27 589.87	14.00 12.02	April 24, 2008	576.27 577.85	1.58	7.00	0.23

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

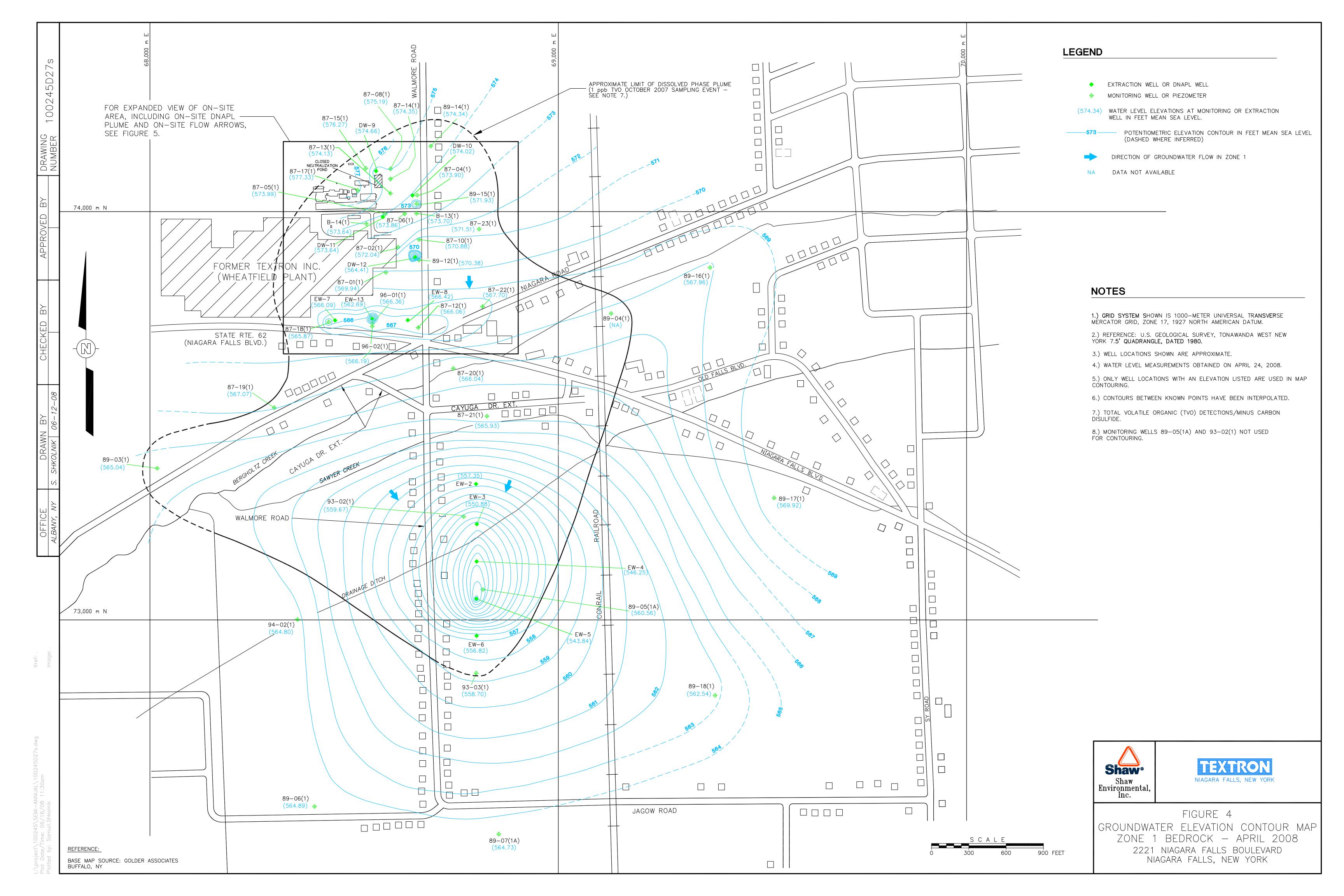
#### **FIGURES**

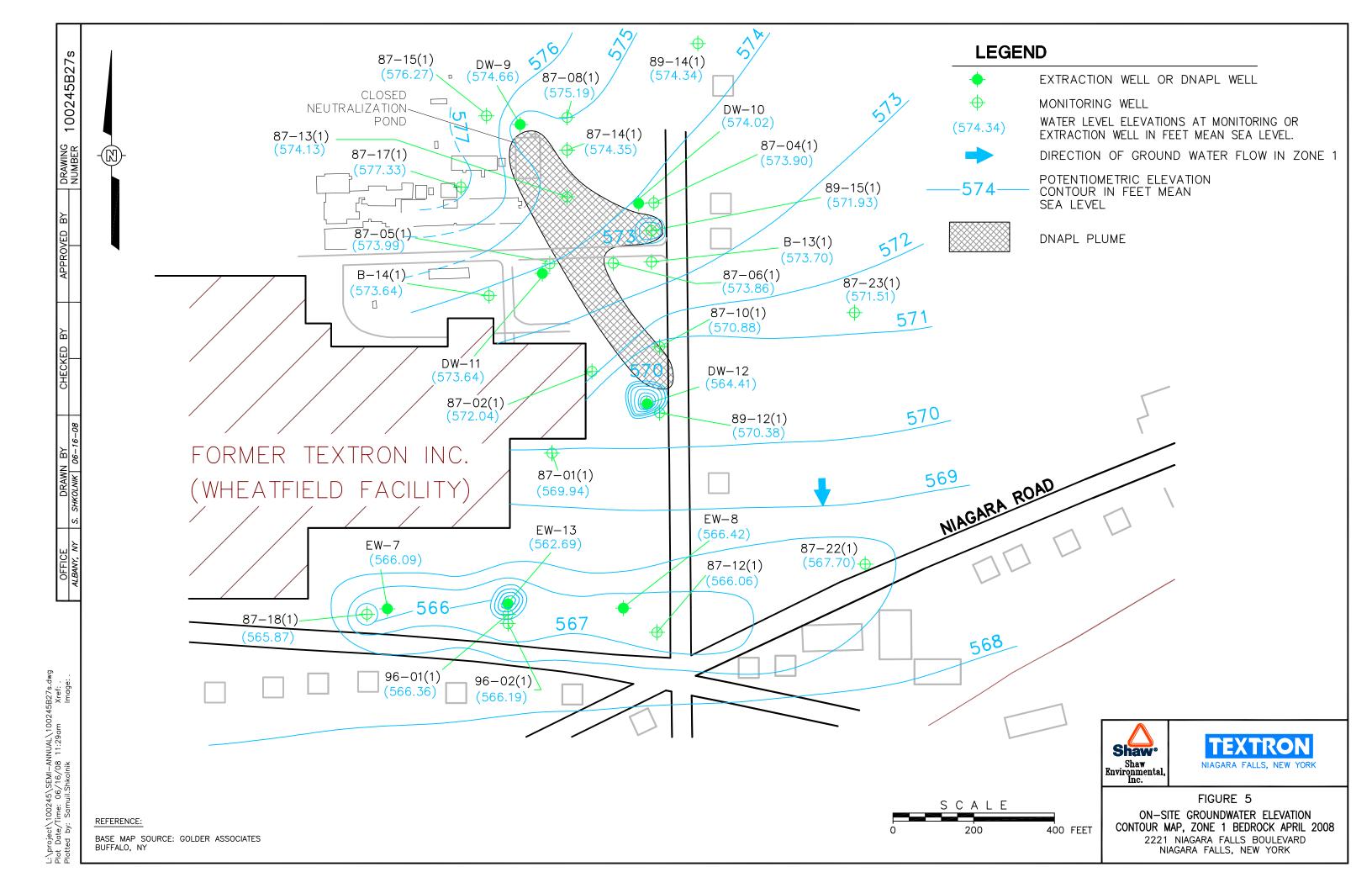






NIAGARA FALLS, NEW YORK





### APPENDIX A

#### NIAGARA COUNTY SEWER DISTRICT SEMI-ANNUAL REPORT

Fax: 518.783.8397



June 3, 2008

Mr. Dan Kummer Niagara County Sewer District #1 7346 Liberty Drive Niagara Falls, New York 14304-3762

Re: Niagara County Sewer District Discharge Monitoring

**Semi-Annual Analytical Results** 

Permit Number: 07-07

**Textron Off-Site Groundwater Extraction System** 

Textron, Inc., Wheatfield, New York Sample Date: April 23-24, 2008

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 07-07, between April 23 and 24, 2008. The field sampling sheets are included as **Appendix A**. The samples were kept on ice and delivered to TestAmerica, Inc. (formerly Severn Trent Laboratories, Inc.) in Amherst, New York. All sampling activities were conducted in accordance with the requirements stated in NCSD Permit Number 07-07.

Approximately 10,773,268 gallons of groundwater was extracted by the Off-Site system and discharged to the NCSD sanitary sewer between November 1, 2007 and April 30, 2008. 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 1**, the estimate daily discharge loading during the monitoring period did not exceed the permitted limits. The analytical results for the April 2008

#### sampling event are provided in **Appendix B**.

Please do not hesitate to contact me at (412) 858-3977 should you have any questions regarding this project.

Sincerely,

Shaw Environmental, Inc.

Cecilia Campbell

Cecelia Campbell Project Geologist

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, 2007 Daily Flow Rates

Date/Time	Total Flow Reading	Total Daily Flow (gal)
11/1/07 7:10 AM	3,309,935	39,726
11/2/07 7:10 AM	3,349,614	39,679
11/3/07 7:10 AM	3,389,330	39,716
11/4/07 7:10 AM	3,428,775	39,445
11/5/07 7:10 AM	3,467,902	39,127
11/6/07 7:10 AM	3,506,951	39,049
11/7/07 7:10 AM	3,546,145	39,194
11/8/07 7:10 AM	3,585,333	39,188
11/9/07 7:10 AM	3,624,717	39,384
11/10/07 7:10 AM	3,664,894	40,177
11/11/07 7:10 AM	3,705,963	41,069
11/12/07 7:10 AM	3,747,543	41,580
11/13/07 7:10 AM	3,789,549	42,006
11/14/07 7:10 AM	3,832,323	42,774
11/15/07 7:10 AM	3,875,824	43,501
11/16/07 7:10 AM	3,918,599	42,775
11/17/07 7:10 AM	3,960,788	42,189
11/18/07 7:10 AM	4,002,627	41,839
11/19/07 7:10 AM	4,043,877	41,250
11/20/07 7:10 AM	4,084,961	41,084
11/21/07 7:10 AM	4,126,773	41,812
11/22/07 7:10 AM	4,170,995	44,222
11/23/07 7:10 AM	4,221,939	50,944
11/24/07 7:10 AM	4,273,364	51,425
11/25/07 7:10 AM	4,322,839	49,475
11/26/07 7:10 AM	4,370,643	47,804
11/27/07 7:10 AM	4,418,842	48,199
11/28/07 7:10 AM	4,468,360	49,518
11/29/07 7:10 AM	4,517,138	48,778
11/30/07 7:10 AM	4,565,881	48,743

Maximum Daily Flow for November (gallons/day): 51,425 Average Daily Flow for November (gallons/day): 43,189

## 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, 2007 Daily Flow Rates

Date/Time	Total Flow Reading	Total Daily Flow (gal)
12/1/07 7:10 AM	4,614,009	48,128
12/2/07 7:10 AM	4,660,896	46,887
12/3/07 7:10 AM	4,707,846	46,950
12/4/07 7:10 AM	4,760,797	52,951
12/5/07 7:10 AM	4,813,051	52,254
12/6/07 7:10 AM	4,864,004	50,953
12/7/07 7:10 AM	4,913,520	49,516
12/8/07 7:10 AM	4,961,780	48,260
12/9/07 7:10 AM	5,009,302	47,522
12/10/07 7:10 AM	5,056,246	46,944
12/11/07 7:10 AM	5,102,619	46,373
12/12/07 7:10 AM	5,149,690	47,071
12/13/07 7:10 AM	5,202,021	52,331
12/14/07 7:10 AM	5,255,604	53,583
12/15/07 7:10 AM	5,307,962	52,358
12/16/07 7:10 AM	5,359,926	51,964
12/17/07 7:10 AM	5,411,359	51,433
12/18/07 7:10 AM	5,461,401	50,042
12/19/07 7:10 AM	5,510,922	49,521
12/20/07 7:10 AM	5,559,702	48,780
12/21/07 7:10 AM	5,608,481	48,779
12/22/07 7:10 AM	5,660,590	52,109
12/23/07 7:10 AM	5,731,133	70,543
12/24/07 7:10 AM	5,800,181	69,048
12/25/07 7:10 AM	5,866,053	65,872
12/26/07 7:10 AM	5,930,785	64,732
12/27/07 7:10 AM	5,994,907	64,122
12/28/07 7:10 AM	6,058,416	63,509
12/29/07 7:10 AM	6,114,457	56,041
12/30/07 7:10 AM	6,156,218	41,761
12/31/07 7:10 AM	6,197,263	41,045

Maximum Daily Flow for December (gallons/day): 70,543 Average Daily Flow for December (gallons/day): 52,625

## Table 3 Niagara County Sewer Discharge Monitoring Off-Site Groundwater Extraction System Textron, Inc.

#### Wheatfield, New York January 1 - January 31, 2008 Daily Flow Rates

Date/Time	Total Flow Reading	Total Daily Flow (gal)
1/1/08 7:10 AM	6,238,120	40,857
1/2/08 7:10 AM	6,278,821	40,701
1/3/08 7:10 AM	6,319,195	40,374
1/4/08 7:10 AM	6,369,870	50,675
1/5/08 7:10 AM	6,423,105	53,235
1/6/08 7:10 AM	6,476,179	53,074
1/7/08 7:10 AM	6,530,482	54,303
1/8/08 10:37 AM	6,591,735	61,253
1/9/08 7:10 AM	6,626,173	34,438
1/10/08 7:10 AM	6,666,933	40,760
1/11/08 7:10 AM	6,722,522	55,589
1/12/08 7:10 AM	6,775,095	52,573
1/13/08 7:10 AM	6,816,133	41,038
1/14/08 7:10 AM	6,857,541	41,408
1/15/08 7:10 AM	6,910,111	52,570
1/16/08 7:10 AM	6,957,947	47,836
1/17/08 7:10 AM	7,009,546	51,599
1/18/08 7:10 AM	7,053,603	44,057
1/19/08 7:10 AM	7,098,065	44,462
1/20/08 7:10 AM	7,134,402	36,337
1/21/08 7:10 AM	7,169,184	34,782
1/22/08 7:10 AM	7,216,373	47,189
1/23/08 7:10 AM	7,257,430	41,057
1/24/08 7:10 AM	7,307,260	49,830
1/25/08 7:10 AM	7,341,954	34,694
1/26/08 7:10 AM	7,387,856	45,902
1/27/08 7:10 AM	7,422,632	34,776
1/28/08 7:10 AM	7,454,771	32,139
1/29/08 7:10 AM	7,503,237	48,466
1/30/08 7:10 AM	7,538,941	35,704
1/31/08 7:10 AM	7,587,006	48,065

Maximum Daily Flow for January (gallons/day): 61,253 Average Daily Flow for January (gallons/day): 44,830

## Table 4 Niagara County Sewer Discharge Monitoring Off-Site Groundwater Extraction System Textron, Inc.

#### Wheatfield, New York February 1 - February 29, 2008 Daily Flow Rates

Date/Time	Total Flow Reading	Total Daily Flow (gal)
2/1/08 7:10 AM	7,630,466	43,460
2/2/08 7:10 AM	7,664,244	33,778
2/3/08 7:10 AM	7,697,027	32,783
2/4/08 7:10 AM	7,729,638	32,611
2/5/08 7:10 AM	7,775,413	45,775
2/6/08 7:10 AM	7,845,042	69,629
2/7/08 7:10 AM	7,932,428	87,386
2/8/08 7:10 AM	8,016,751	84,323
2/9/08 7:10 AM	8,099,808	83,057
2/10/08 7:10 AM	8,182,741	82,933
2/11/08 7:10 AM	8,264,992	82,251
2/12/08 7:10 AM	8,346,494	81,502
2/13/08 7:10 AM	8,427,128	80,634
2/14/08 7:10 AM	8,506,978	79,850
2/15/08 7:10 AM	8,585,465	78,487
2/16/08 7:10 AM	8,662,668	77,203
2/17/08 7:10 AM	8,739,117	76,449
2/18/08 7:10 AM	8,816,637	77,520
2/19/08 7:10 AM	8,898,193	81,556
2/20/08 7:10 AM	8,979,391	81,198
2/21/08 7:10 AM	9,059,854	80,463
2/22/08 7:10 AM	9,139,781	79,927
2/23/08 7:10 AM	9,219,108	79,327
2/24/08 7:10 AM	9,283,242	64,134
2/25/08 7:10 AM	9,345,621	62,379
2/26/08 7:10 AM	9,407,448	61,827
2/27/08 7:10 AM	9,468,958	61,510
2/28/08 7:10 AM	9,529,783	60,825
2/29/08 7:10 AM	9,590,387	60,604

Maximum Daily Flow for February (gallons/day): 87,386 Average Daily Flow for February (gallons/day): 69,082

## Table 5 Niagara County Sewer Discharge Monitoring Off-Site Groundwater Extraction System Textron, Inc.

#### Wheatfield, New York March 1 - March 31, 2008 Daily Flow Rates

Date/Time	Total Flow Reading	Total Daily Flow (gal)
3/1/08 7:10 AM	9,650,834	#REF!
3/2/08 7:10 AM	9,711,408	60,574
3/3/08 7:10 AM	9,772,041	60,633
3/4/08 7:10 AM	9,834,740	62,699
3/5/08 7:10 AM	9,899,709	64,969
3/6/08 7:10 AM	9,963,708	63,999
3/7/08 7:10 AM	10,027,356	63,648
3/8/08 7:10 AM	10,090,564	63,208
3/9/08 7:10 AM	10,153,206	62,642
3/10/08 7:10 AM	10,215,179	61,973
3/11/08 7:10 AM	10,277,052	61,873
3/12/08 7:10 AM	10,338,886	61,834
3/13/08 7:10 AM	10,400,415	61,529
3/14/08 7:10 AM	10,461,612	61,197
3/15/08 7:10 AM	10,523,034	61,422
3/16/08 7:10 AM	10,585,178	62,144
3/17/08 7:10 AM	10,634,780	49,602
3/18/08 7:10 AM	10,699,821	65,041
3/19/08 7:10 AM	10,766,837	67,016
3/20/08 7:10 AM	10,835,118	68,281
3/21/08 7:10 AM	10,903,258	68,140
3/22/08 7:10 AM	10,970,954	67,696
3/23/08 7:10 AM	11,038,456	67,502
3/24/08 7:10 AM	11,105,781	67,325
3/25/08 7:10 AM	11,172,960	67,179
3/26/08 7:10 AM	11,240,315	67,355
3/27/08 7:10 AM	11,320,976	80,661
3/28/08 7:10 AM	11,406,697	85,721
3/29/08 7:10 AM	11,492,824	86,127
3/30/08 7:10 AM	11,578,442	85,618
3/31/08 7:10 AM	11,663,638	85,196

Maximum Daily Flow for March (gallons/day): 86,127 Average Daily Flow for March (gallons/day): 66,879

## Table 6 Niagara County Sewer Discharge Monitoring Off-Site Groundwater Extraction System Textron, Inc. Wheatfield, New York April 1 - April 30, 2008 Daily Flow Rates

Date/Time	Total Flow Reading	Total Daily Flow (gal)
4/1/08 7:10 AM	11,749,180	85,542
4/2/08 7:10 AM	11,834,600	85,420
4/3/08 7:10 AM	11,918,357	83,757
4/4/08 7:10 AM	12,000,557	82,200
4/5/08 7:10 AM	12,082,577	82,020
4/6/08 7:10 AM	12,164,606	82,029
4/7/08 7:10 AM	12,246,378	81,772
4/8/08 7:10 AM	12,328,478	82,100
4/9/08 7:10 AM	12,409,906	81,428
4/10/08 7:10 AM	12,490,448	80,542
4/11/08 7:10 AM		
4/12/08 7:10 AM	12,649,722	79,637
4/13/08 7:10 AM	12,732,013	82,291
4/14/08 7:10 AM	12,814,742	82,729
4/15/08 7:10 AM	12,897,551	82,809
4/16/08 7:10 AM	12,980,267	82,716
4/17/08 7:10 AM	13,063,059	82,792
4/18/08 7:10 AM	13,144,806	81,747
4/19/08 7:10 AM	13,225,936	81,130
4/20/08 7:10 AM	13,306,418	80,482
4/21/08 7:10 AM	13,385,710	79,292
4/22/08 7:10 AM	13,464,128	78,418
4/23/08 7:10 AM	13,539,701	75,573
4/24/08 7:10 AM	13,617,210	77,509
4/25/08 7:10 AM	13,694,543	77,333
4/26/08 7:10 AM	13,771,569	77,026
4/27/08 7:10 AM	13,848,605	77,036
4/28/08 7:10 AM	13,925,952	77,347
4/29/08 7:10 AM	14,004,612	78,660
4/30/08 7:10 AM	14,083,203	78,591

Maximum Daily Flow for April (gallons/day): 85,542 Average Daily Flow for April (gallons/day): 80,687

-- - Data not available for date indicated

## Table 7 Niagara County Sewer Discharge Monitoring Off-Site Groundwater Extraction System Textron, Inc.

Wheatfield, New York Permit Number: 07-07 April 23 - 24, 2008

Sample ID: MH No. 9-3

Parameter via US EPA Method 624	Reported Concentration * (µg/L)	Total Flow (gallons per day) <sup>(1)</sup>	Discharge Loading Pounds per Day <sup>(2)</sup>	Maximum Daily Discharge Loading Limits
Trichloroethene	4.4	77,509	0.002845975	1.0
1,2-Dichloroethene (Total)	670	77,509	0.433364445	2.500
Vinyl Chloride	< 5	77,509	0.001617032	0.4000
Methylene Chloride	1.4	77,509	0.000905538	0.2

#### Notes:

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

For calculation purposes 'Not Detected' values are assigned a value of 1/2 the method detection limit;

CF = Conversion Factor 8.3 x 10<sup>-9</sup>

<sup>&</sup>lt; - Not detected at indicated method detection limit;

<sup>(1)</sup> Total flow during sampling period was based on the total flow measurements for the sampling date;

 $<sup>^{(2)}</sup>$  Determined as follows: (Concentration in  $\mu g/L)$  x (flow rate in gpd) x (CF)

<sup>\* -</sup> Indicates results reported as an average of the 4 samples collected.

## APPENDIX A FIELD SAMPLING SHEETS

# Chain of Custody Record

**TestAmerica** 

THE LEADER IN ENVIRONMENTAL TESTING

( 1 Stoke Special Instructions/ Conditions of Receipt 1 104 (A fee may be assessed if samples are retained longer than 1 month) Chain of Custody Number of Time Time かんり Page\_ 5/2 Date Date 08 Analysis (Attach list if more space is needed) 123 Lab Number Months Date 4 SERVETHS Disposal By Lab Trchive For 856-3977 do QC Requirements (Specify) \oAn\S \Oa\V Containers & Preservatives HOBN 1. Received By 3. Received By 2. Received By 300 HCI Telephone Number (Area Code)/Fax Number Lab Contact EONH #SSCH Seudur ☐ Return To Client Sample Disposal Site Contact
Clowin lios 518/783-Time Carrier/Waybill Number Matrix · Ch pas Project Manager noanby 1i.P Date □ Unknown 2048 (24/06/22) Date Date Time 21 Days 4173/08 23/08 □ Poison B RUD Date Zip Code 25 14 Days Sample I.D. No. and Description (Containers for each sample may be combined on one line) Skin Irritant SHAW ENVIPONMENTAL BRITISH AMERICAN STATE 7 Days ☐ Non-Hazard ☐ Flammable Contract/Purchase Order/Quote No. Project Name and Location (State) ☐ 48 Hours Possible Hazard Identification Turn Around Time Required で十年の一名 LATITUM EXTRON と-6年刊が MJ サワーと -6 PHW 1. Relinquished By 2. Relinquished By 3. Relinquished By TAL-4142 (0907) 24 Hours Comments Address

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Site Name: <u>Textro</u>	on, Wheatfield, NY	
Project Number:	100245	
NCSD Permit Number	::_07-07	
Sample Location:	EW- 6	
Date: April 23, 2008		
Time: 0830		
Field Personnel: Kevi	n Cronin	
Physical Condition of	Location: Good	
	50° F	
Wind: Light		
Precipitation: None		
Sampling Method: Dec	dicated Poly Bailer	
Sample Number:	MH No. 9-3	
Sample Description:	Clear	
Analysis Requested:	Priority Pollutants VOAs	
Notes: TestAmerica v	vill composite samples.	
	Kevin C. Cranin	
Sampler Signature:		

Site Name: Textron, Wheatfield, NY
Project Number: 100245
NCSD Permit Number: 07-07
Sample Location: <u>EW- 6</u>
Date: April 23, 2008
Time: 1415
Field Personnel: Kevin Cronin
Manifest Constitution of Constitution of Constitution
Physical Condition of Location: Good
Ambient Temperature: 65° F
Wind: Light  Proginitation: None
Precipitation: None
Sampling Method: Dedicated Poly Bailer
Sample Number: MH No. 9-3
Sample Description: Clear
Analysis Requested: Priority Pollutants VOAs
Notes: TestAmerica will composite samples.
Sampler Signature:

Site Name: Textro	on, Wheatfield, NY	
Project Number:	100245	
NCSD Permit Number	r: <u>07-07</u>	
Sample Location:	EW- 6	
Date: April 23, 2008	3	
Time: 2045		
Field Personnel: Kevi	n Cronin	
Physical Condition of	Location: Good	
Ambient Temperature	: 45° F	
Wind: Calm		
Precipitation: None		
Sampling Method: De	dicated Poly Bailer	
Commis Number	MILNIO 0 2	
Sample Number:		
Sample Description:		
Analysis Requested:	Priority Pollutants VOAs	
Notes: TestAmerica y	vill composite samples.	
Trotos. Toba mierioa y	The Composite Samples.	
	Kevin C. Cranin	
Communication Circumstances	For C. Schron	
Sampler Signature:		

### APPENDIX B ANALYTICAL REPORT



RECEIVED MAY 1 2 2008

#### ANALYTICAL REPORT

Job#: <u>A08-4503</u>

Project#: NY3A9137

Site Name: <u>Shaw Environmental & Infrastructure, Inc.</u>
Task: Semi-Annual Event - Textron, Wheatfield, NY

Cecelia Campbell Shaw E & I 2790 Mosside Blvd.,5th Floor Monroeville, PA 15146

TestAmerica Laboratories Inc.

Candace L. Fox Project Manager

05/07/2008



### **TestAmerica Buffalo Current Certifications**

#### As of 6/15/2007

STATE	Program	Cert # / Lab ID
Arkansas	SDWA, 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
lowa	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*	Registration, NELAP CWA, RCRA	68-00281
Tennessee	SDWA	02970
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington	CWA,RCRA	C1677
West Virginia	CWA,RCRA	252
Wisconsin	CWA, RCRA	998310390

<sup>\*</sup>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.

#### SAMPLE SUMMARY

			SAMPLED		RECEIVI	ED .
LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE	TIME	DATE	TIME
A8450301	MH#9-3	GW	04/24/2008	02:20	04/24/2008	15:35
A8450302	Trip Blank	WATER	04/24/2008	00:00	04/24/2008	15:35

#### METHODS SUMMARY

Job#: A08-4503

Project#: <u>NY3A9137</u> Site Name: <u>Shaw Environmental & Infrastructure, Inc.</u>

ANALYTICAL METHOD

PARAMETER

METHOD 624 - PRIORITY POLLUTANT VOLATILES

CFR136 624

#### References:

CFR136

Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act, and Appendix A-C; 40 CFR Part 136, USEPA Office of Water.

#### SDG NARRATIVE

Job#: <u>A08-4503</u>

Project#: NY3A9137

Site Name: Shaw Environmental & Infrastructure, Inc.

#### General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

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. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

#### Sample Receipt Comments

#### A08-4503

Sample Cooler(s) were received at the following temperature(s); 8.2 °C Lab to composite volatile samples for point by date/time.

Samples were received at a temperature of  $8.2^{\circ}$ C. As the samples were collected the same day, it was not possible for the samples to cool to  $4^{\circ}$ C prior to receipt. There is no impact on the data.

#### GC/MS Volatile Data

Volatile sample MH#9-3 was composited in the laboratory, prior to analysis.

#### \*\*\*\*\*

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

Date: 05/07/2008 Time: 11:42:26

#### Dilution Log w/Code Information For Job A08-4503

6/18 Page:

Rept: AN1266R

Client Sample ID Lab Sample ID Parameter (Inorganic)/Method (Organic) Dilution Code

MH#9-3

A8450301DL

624

10.00 008

Dilution Code Definition:

002 - sample matrix effects

003 - excessive foaming

004 - high levels of non-target compounds

005 - sample matrix resulted in method non-compliance for an Internal Standard

006 - sample matrix resulted in method non-compliance for Surrogate

007 - nature of the TCLP matrix

008 - high concentration of target analyte(s)

009 - sample turbidity

010 - sample color

011 - insufficient volume for lower dilution

012 - sample viscosity

013 - other



#### DATA QUALIFIER PAGE

These definitions are provided in the event the data in this report requires the use of one or more of the qualifiers. Not all qualifiers defined below are necessarily used in the accompanying data package.

#### **ORGANIC DATA QUALIFIERS**

ND or U Indicates compound was analyzed for, but not detected.

- J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B This flag is used when the analyte is found in the associated blank, as well as in the sample.
- E This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- D This flag identifies all compounds identified in an analysis at the secondary dilution factor.
- N Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.
- P This flag is used for CLP methodology only. For Pesticide/Aroclor target analytes, when a difference for detected concentrations between the two GC columns is greater than 25%, the lower of the two values is reported on the data page and flagged with a "P".
- A This flag indicates that a TIC is a suspected aldol-condensation product.
- Indicates coelution.
- \* Indicates analysis is not within the quality control limits.

#### INORGANIC DATA QUALIFIERS

- ND or U Indicates element was analyzed for, but not detected. Report with the detection limit value.
- J or B Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
- N Indicates spike sample recovery is not within the quality control limits.
- S Indicates value determined by the Method of Standard Addition.
- E Indicates a value estimated or not reported due to the presence of interferences.
- H Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
- G Indicates a value greater than or equal to the project reporting limit but less than the laboratory quantitation limit
- \* Indicates the spike or duplicate analysis is not within the quality control limits.
- + Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

Client ID Job No Lab ID Sample Date		MH#9-3 A08-4503 04/24/2008	A8450301	MH#9-3 A08-4503 04/24/2008	A8450301DL				
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acrolein	UG/L	ND	100	ND	1000	NA		NA	
Acrylonitrile	UG/L	ND	100	ND	1000	NA		NA	
Benzene	UG/L	ND	5.0	ND	50	NA NA		NA.	
Bromodichloromethane	UG/L	ND	5.0	ND	50	NA NA		NA.	
Bromoform	UG/L	ND	5.0	ND	50	NA NA		NA	
Bromomethane	UG/L	ND	5.0	ND	50	NA NA		NA NA	
Carbon Tetrachloride	UG/L	ND	5.0	ND	50	NA NA		NA NA	
Chlorobenzene	UG/L	ND	5.0	ND	50	NA NA		NA NA	
Chloroethane	UG/L	ND	5.0	ND	50	NA NA		NA NA	
2-Chloroethylvinyl ether	UG/L	ND	25	ND	250	NA NA		NA NA	
Chloroform	UG/L	ND ND	5.0	ND	50	NA NA		NA NA	
Chloromethane	UG/L	ND	5.0	ND	50	NA NA		NA NA	
Dibromochloromethane	UG/L	ND ND	5.0	ND	50	NA NA		NA NA	
1,2-Dichlorobenzene	UG/L	ND	5.0	ND	50	NA NA		NA NA	
1,3-Dichlorobenzene	UG/L	ND	5.0	ND	50	NA NA		NA NA	
1,4-Dichlorobenzene	UG/L	ND ND	5.0	ND	50	NA NA		NA NA	
1,1-Dichloroethane	UG/L	2.6 J	5.0	ND	50	NA NA			
1,2-Dichloroethane	UG/L	ND ND	5.0	ND	50	NA NA		NA NA	
1,1-Dichloroethene	UG/L	ND ND	5.0	ND	50	NA NA			
1,2-Dichloroethene (Total)	UG/L	650 E	10	670 D	100	NA NA		NA	
1,2-Dichloropropane	UG/L	ND D	5.0	ND	50	NA NA		NA	
cis-1,3-Dichloropropene	UG/L	ND	5.0	ND	50	NA NA		NA	
trans-1,3-Dichloropropene	UG/L	ND ND	5.0	ND	50	NA NA		NA	
Ethylbenzene	UG/L	ND	5.0	ND	50	NA NA		NA	
Methylene chloride	UG/L	1.4 J	5.0	ND	50	NA NA		NA	
1,1,2,2-Tetrachloroethane	UG/L	ND ND	5.0	ND	50	NA NA		NA	
Tetrachloroethene	UG/L	ND	5.0	ND	50	NA NA		NA	
Toluene	UG/L	ND	5.0	ND ND	50	NA NA		NA NA	
1,1,1-Trichloroethane	UG/L	3.6 J	5.0	ND	50			NA	
1,1,2-Trichloroethane	UG/L	ND	5.0	ND ND	50	NA NA		NA	
Trichloroethene	UG/L	4.4 J	5.0	ND	50	NA NA		NA	
Trichlorofluoromethane	UG/L	ND ND	5.0	ND ND		NA NA		NA	
Vinyl chloride	UG/L	ND ND	5.0	ND ND	50	NA NA		NA	
SURROGATE(S)	100/ L	עאו	2.0	บก	50	NA NA	ļ	NA	Į.
Toluene-D8	1%	101	97. 440	404	07.440				
p-Bromofluorobenzene	%	93	87-110 78-122	101	87-110	NA		NA	
1,2-Dichloroethane-D4	%	102	78-122 88-132	90	78-122	NA		· NA	
T, L DIGITO DE CHAME-D4	<u></u>	102	88-132	108	88-132	NA NA	Į Į	NA	l

Chronology and QC Summary Package

Client ID Job No Lab ID Sample Date		VBLK03 A08-4503	A8B1429702						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acrolein	UG/L	ND	100	NA NA		NA		NA	
Acrylonitrile	UG/L	ND	100	NA ·		NA		NA	
Benzene	UG/L	ND	5.0	NA		NA NA		NA NA	
Bromodichloromethane	UG/L	ND	5.0	NA		NA NA		NA NA	
Bromoform	UG/L	ND	5.0	NA		NA NA			
Bromomethane	UG/L	ND	5.0	NA NA		NA NA		NA NA	}
Carbon Tetrachloride	UG/L	ND	5.0	NA NA		***		NA	
Chlorobenzene	UG/L	ND	5.0	NA NA		NA NA		NA	
Chloroethane	UG/L	ND	5.0	NA NA		NA NA		NA ·	
2-Chloroethylvinyl ether	UG/L	ND	25			NA ***		NA	
Chloroform	UG/L		5.0	NA		NA NA		NA	
Chloromethane	UG/L	ND		NA		NA NA		NA	
Dibromochloromethane		ND	5.0	NA		NA NA		NA	
	UG/L	ND	5.0	NA		NA NA	1	NA	
1,2-Dichlorobenzene	UG/L	ND	5.0	NA		NA NA		NA	
1,3-Dichlorobenzene	UG/L	ND	5.0	NA		NA NA		NA	
1,4-Dichlorobenzene	ug/L	ND	5.0	NA		NA NA		NA	ļ
1,1-Dichloroethane	ne\r	ND	5.0	NA		NA		NA	
1,2-Dichloroethane	ne\r	ND	5.0	NA		NA NA		NA	
1,1-Dichloroethene	ne/r	ND	5.0	NA		NA NA		NA	
1,2-Dichloroethene (Total)	UG/L	ND	10	NA		NA		NA	
1,2-Dichloropropane	UG/L	ND	5.0	NA		NA	1	NA	
cis-1,3-Dichloropropene	UG/L	ND	5.0	NA		NA NA		NA NA	
trans-1,3-Dichloropropene	UG/L	ND	5.0	NA		NA NA		NA NA	
Ethylbenzene	UG/L	ND	5.0	NA		NA		NA NA	
Methylene chloride	UG/L	ND	5.0	NA.		NA NA		NA NA	
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	NA.		NA NA			
Tetrachloroethene	UG/L	ND	5.0	NA		NA NA		NA	
Toluene	UG/L	ND	5.0	NA NA		NA NA	1	NA	
1,1,1-Trichloroethane	UG/L	ND	5.0	NA NA				NA	
1,1,2-Trichloroethane	UG/L	ND ND	5.0	NA NA		NA NA		NA	
Trichloroethene	UG/L	ND	5.0	NA NA		NA ·		NA	
Trichlorofluoromethane	UG/L	ND	5.0			NA	į į	NA	
Vinyl chloride	UG/L	ND	5.0	NA NA		NA		NA	
SURROGATE(S)	00/ L	ND	2.0	NA	1	NA NA		NA	
Toluene-D8	%	400	07 440					711	
p-Bromofluorobenzene	1	100	87-110	NA		NA	[	NA	
1,2-Dichloroethane-D4	%	95	78-122	NA		NA		NA	
1,4-01chtoroethane-04	(%	99	88-132	NA	[	NA	Ì	NA	

Date: 05/07/2008 Time: 11:42:50 Shaw Environmental & Infrastructure, Inc. Semi-Annual Event - Textron, Wheatfield, NY METHOD 624 - PRIORITY POLLUTANT VOLATILES Rept: ANO326

Client ID Job No Lab ID Sample Date		LCS03 A08-4503	A8B1429701						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acrolein	UG/L	260	100	NA	1	NA NA	}	NA NA	•
Acrylonitrile	UG/L	110	100	NA		NA NA		NA NA	
Benzene	UG/L	20	5.0	NA		NA		NA NA	
Bromodichloromethane	UG/L	20	5.0	NA NA		NA NA		NA NA	
Bromoform	UG/L	20	5.0	NA NA		NA		NA NA	
Bromomethane	UG/L	17	5.0	NA		NA		NA NA	
Carbon Tetrachloride	UG/L	20	5.0	NA NA		NA		NA	
Chlorobenzene	UG/L	21	5.0	NA NA		NA	'	NA NA	
Chloroethane	UG/L	18	5.0	NA NA		NA		NA	
2-Chloroethylvinyl ether	UG/L	100	25	NA :		NA		NA NA	
Chloroform	UG/L	20	5.0	NA		NA		NA NA	
Chloromethane	UG/L	19	5.0	NA NA		NA		NA NA	
Dibromochloromethane	UG/L	20	5.0	NA NA		NA NA		NA NA	
1,2-Dichlorobenzene	UG/L	21	5.0	NA NA		NA NA		NA NA	
1,3-Dichlorobenzene	UG/L	21	5.0	NA NA		NA NA		NA NA	
1,4-Dichlorobenzene	UG/L	21	5.0	NA NA		NA NA		NA	
1,1-Dichloroethane	UG/L	20	5.0	NA		NA NA		NA	
1,2-Dichloroethane	UG/L	20	5.0	NA		NA NA		NA NA	
1,1-Dichloroethene	UG/L	20	5.0	NA		NA NA		NA NA	
1,2-Dichloroethene (Total)	UG/L	41	10	NA		NA NA		NA NA	
1,2-Dichloropropane	UG/L	20	5.0	NA NA		NA NA		NA NA	
cis-1,3-Dichloropropene	UG/L	20	5.0	NA NA		NA NA		NA NA	
trans-1,3-Dichloropropene	UG/L	21	5.0	NA NA		NA NA		NA NA	
Ethylbenzene	UG/L	21	5.0	NA NA		NA NA		NA NA	
Methylene chloride	UG/L	20	5.0	NA.		NA NA		NA NA	
1,1,2,2-Tetrachloroethane	UG/L	22	5.0	NA.		NA NA		NA NA	
Tetrachloroethene	UG/L	21	5.0	NA NA		NA NA	,	NA NA	
Toluene	UG/L	21	5.0	NA NA		NA NA		NA NA	
1,1,1-Trichloroethane	UG/L	20	5.0	NA NA		NA NA		NA NA	
1,1,2-Trichtoroethane	UG/L	21	5.0	NA NA		NA NA		NA NA	
Trichloroethene	UG/L	20	5.0	NA NA		NA NA		NA NA	
Trichlorofluoromethane	UG/L	19	5.0	NA NA		NA NA			
Vinyl chloride	UG/L	20	5.0	NA NA				NA NA	
SURROGATE(S)	06/L	20	3.0	NA		NA NA		NA NA	L
Toluene-D8	%	100	87-110	NA NA		NA NA		N/A	
p-Bromofluorobenzene	%	98	78-122	NA NA		NA NA		NA NA	
1,2-Dichloroethane-D4	%	98	88-132	NA NA		NA NA		NA NA	
L Diction of Change 194	\**	70	00-132	INA	<u> </u>	I NA		NA NA	1

Date: 05/07/2008 Time: 11:42:50

Shaw Environmental & Infrastructure, Inc. Semi-Annual Event - Textron, Wheatfield, NY METHOD 624 - PRIORITY POLLUTANT VOLATILES Rept: ANO326

Client ID Job No Lab ID Sample Date		Trip Blank A08-4503 04/24/2008	A8450302						
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Acrolein	UG/L	ND	100	NA		NA		NA	
Acrylonitrile	UG/L	ND	100	NA NA		NA NA		NA	
Benzene	UG/L	ND	5.0	NA		NA NA		NA	
Bromodichloromethane	UG/L	ND	5.0	NA		NA NA		NA NA	
Bromoform	UG/L	ND	5.0	NA		NA		NA NA	
Bromomethane	UG/L	ND	5.0	NA		NA		NA NA	
Carbon Tetrachloride	UG/L	ND	5.0	NA.		NA NA		NA NA	1
Chlorobenzene	UG/L	ND	5.0	NA.		NA NA		NA NA	
Chloroethane	UG/L	ND	5.0	NA NA		NA NA		NA NA	
2-Chloroethylvinyl ether	UG/L	ND	25	NA.		NA NA		NA NA	
Chloroform	UG/L	ND	5.0	NA.		NA NA		NA NA	
Chloromethane	UG/L	ND ND	5.0	NA NA		NA NA		NA NA	
Dibromochloromethane	UG/L	ND	5.0	NA NA		NA NA			
1,2-Dichlorobenzene	UG/L	ND	5.0	NA NA		NA NA		NA NA	
1,3-Dichlorobenzene	UG/L	ND	5.0	NA NA		NA NA		NA NA	
1,4-Dichlorobenzene	UG/L	ND	5.0	NA NA		į		NA 	
1,1-Dichloroethane	UG/L	ND	5.0	NA NA		NA		NA 	
1,2-Dichloroethane	UG/L	ND ND	5.0	NA NA		NA NA		NA	
1,1-Dichloroethene	UG/L	ND	5.0	NA NA		NA		NA	
1,2-Dichloroethene (Total)	UG/L	ND ND	10	****		NA		NA	
1,2-Dichloropropane	UG/L		5.0	NA		NA		NA	
cis-1,3-Dichloropropene	UG/L	ND	5.0	NA		NA		NA	}
trans-1,3-Dichloropropene	UG/L	ND	5.0	NA		NA		NA	
Ethylbenzene		ND		NA		NA		NA	
Methylene chloride	UG/L	ND	5.0	NA		NA NA		NA	
	UG/L	ND	5.0	NA		NA		NA	
1,1,2,2-Tetrachloroethane	UG/L	ND	5.0	NA		NA		NA	
Tetrachloroethene	UG/L	ND	5.0	NA		NA		NA	:
Toluene	UG/L	ND	5.0	NA		NA		NA	
1,1,1-Trichloroethane	UG/L	ND	5.0	NA		NA		NA	
1,1,2-Trichloroethane	UG/L	ND -	5.0	NA		NA		NA	
Trichloroethene	UG/L	ND	5.0	NA NA		NA		NA	
Trichlorofluoromethane	UG/L	ND	5.0	NA		NA		NA	
Vinyl chloride	UG/L	ND	5.0	NA		NA		NA	
SURROGATE(S)	1								
Toluene-D8	%	100	87-110	NA		NA	[	NA	
p-Bromofluorobenzene	%	92	78-122	NA		NA		NA	
1,2-Dichloroethane-D4	%	103	88-132	NA NA		NA		NA	

Client Sample ID: VBLK03

LCS03 A8B1429701

Lab Sample ID: A8B1429702

		Concentr	ation	ĺ	
	Units of	Blank	Spike	% Recovery	QC
Analyte	Measure	Spike	Amount	Blank Spike	LIMITS
NETHOD 624 - PRIORITY POLLUTANT VOLATILE					
Acrolein	UG/L	260	400	65	62-14
Acrylonitrile	UG/L	106	100	107	53-1
Benzene	UG/L	20.3	20.0	102	64-1
Bromodichloromethane	UG/L	19.8	20.0	99	66-1
Bromoform	UG/L	20.0	20.0	100	73-1
Bromomethane	UG/L	17.3	20.0	87	14-1
Carbon Tetrachloride	UG/L	19.9	20.0	100	73-1
Chlorobenzene	UG/L	20,6	20.0	103	66-1
Chloroethane	UG/L	18.1	20.0	91	38-
2-Chloroethylvinyl ether	UG/L	105	100	106	1-7
Chloroform	UG/L	20.2	20.0	101	68-
Chloromethane	UG/L	19.1	20.0	96	1-1
Dibromochloromethane	UG/L	20.2	20.0	101	68-
1,2-Dichlorobenzene	UG/L	21.2	20.0	106	63-
1,3-Dichlorobenzene	UG/L	21.3	20.0	107	73-
1,4-Dichlorobenzene	UG/L	21.1	20.0	106	63-
1,1-Dichloroethane	UG/L	20.5	20.0	103	73-
1,2-Dichloroethane	UG/L	20.4	20.0	102	68-
1,1-Dichloroethene	UG/L	20.5	20.0	103	51-
1,2-Dichloropropane	UG/L	20.1	20.0	101	34-
cis-1,3-Dichloropropene	ug/L	20.3	20.0	102	24-
trans-1,3-Dichloropropene	ug/L	20.9	20.0	105	50-
Ethylbenzene	ug/L	21.0	20.0	105	59-
Methylene chloride	UG/L	19.6	20.0	98	61-
1,1,2,2-Tetrachloroethane	UG/L	21.8	20.0	109	61-
Tetrachloroethene	UG/L	21.0	20.0	105	74-
Toluene	ug/L	20.7	20.0	104	75-
1,1,1-Trichloroethane	ug/L	20.4	20.0	102	75-
1,1,2-Trichloroethane	UG/L	20.6	20.0	103	71-
Trichloroethene	ug/L	20.3	20.0	102	67-
Trichlorofluoromethane	uG/L	18.8	20.0	94	48-
Vinyl chloride	UG/L	20.2	20.0	101	4-

<sup>\*</sup> Indicates Result is outside QC Limits NC = Not Calculated ND = Not Detected

Client Sample ID Job No & Lab Sample ID	MH#9-3 A08-4503 A8450	301	MH#9-3 A08-4503 A8450301DL		
Sample Date Received Date Extraction Date Analysis Date	04/24/2008 04/24/2008 04/26/2008	15:35	04/24/2008 02:20 04/24/2008 15:35 04/26/2008 15:14		
Extraction HT Met? Analytical HT Met? Sample Matrix Dilution Factor Sample wt/vol % Dry	- YES GW 1.0 0.005	LITERS	- YES GW 10.0 0.005 LITERS		

Date: 05/07/2008	SHAW E & I	Rept: ANO374
Time: 11:43:22	QC SAMPLE CHRONOLOGY	Page: 2

Client Sample ID Job No & Lab Sample ID		302				
Sample Date	04/24/2008					
Received Date	04/24/2008	15:35		1		
Extraction Date	0.10.1000	00.77				
Analysis Date	04/26/2008	02:37				
Extraction HT Met?	-					
Analytical HT Met?	YES					
Sample Matrix	WATER					
Dilution Factor	1.0					
Sample wt/vol	0.005	LITERS				
% Dry						

Date: 05/07/2008	SHAW E & I	Rept: ANG	0374
Time: 11:43:22	QC SAMPLE CHRONOLOGY	Page:	3

Client Sample ID Job No & Lab Sample ID		429701	·	
Sample Date Received Date Extraction Date Analysis Date Extraction HT Met? Analytical HT Met? Sample Matrix Dilution Factor Sample wt/vol % Dry	04/26/200 - - - WATER 1.0 0.005	00:24		

Date: 05/07/2008	SHAW E & I	Rept: ANO374
Time: 11:43:22	QC SAMPLE CHRONOLOGY	Page: 4

Client Sample ID Job No & Lab Sample ID		429702			
Sample Date	*				
Received Date					
Extraction Date					
Analysis Date	04/25/200	8 23:21			
Extraction HT Met?	-				
Analytical HT Met?	-				
Sample Matrix	WATER				
Dilution Factor	1.0		1		
Sample wt/vol	0.005	LITERS			
% Dry					

#### Chain of Custody Record



TAL-4142 (0907)						
SHAW SWIPENMONTAL		Project Manager  CECTIA CAN Telephone Number (Area Code	WHELL - ANN	SOLVETAS	Date 4 23 /08	Chain of Custody Number
SHAW SWIPENMONTAL Address  13 BRITISH AMALCAN City State	BLUD	1(518) 783 - 199	6 (412) 858-		Lab Number	Page
~~!"( b\tar)!"(   \N7	Zip Code	Site Contact L. CRONIN	Lab Contact	Ana	alysis (Attach list if e space is needed)	
Project Name and Location (State)  TEXTRON WHIGHTFIELD, Contract/Purchase Order/Quote No.	NY	Carrier/Waybill Number	·	3		Special Instructions/
Contract/Purchase Order/Quote No.	/	Matrix	Containers & Preservatives			Conditions of Receipt
Sample I.D. No. and Description (Containers for each sample may be combined on one lii	ne) Date	Time Value Sed.	Unpres. H2SO4 HNO3 HCI NaOH NaOH			
MH#9-3	4/23/00 0	630 X	$M \cap M$	X		
MH#9-3	4/23/00/19	415	$X \cap X$	X		
MH#9-3 MH#9-3	4/23/08 2	045 X	$\nabla$			ONLY I VOA (1 BRO)
MH#9-3	4/24/00 00	Z 20 X				1 VOT (1 DEG
					++++	
					<del>                                     </del>	
					+++++++++++++++++++++++++++++++++++++++	
			<del></del>	<del>                                     </del>	+++++	
Possible Hazard Identification		Sample Disposal				
Non-Hazard Flammable Skin Irritant	☐ Poison B ☐ U	Unknown Return To Client	Disposal By Lab	Archive For	(A fee may be asses _ Months longer than 1 month	ssed if samples are retained
Turn Around Time Required  24 Hours	Days 21 Days	Nother STD.	QC Requirements (Specify,	)	_ morate Griger than 1 morate	,
1. Relinquished By		Date 4/24/68 1535	1. Received By	· /		Date Time
2. Relinquished By		Date Time	2. Received By			Date Time
3. Relinquished By		Date Time	3. Received By	- 4,		Date Time
Comments			C 26°			
DISTRIBUTION: WHITE Returned to Client with Report	CANADY	- C	8.200			
						The second secon