

**APPENDIX D**

**FIELD REPORTS GROUNDWATER SAMPLING  
EVENTS/RESULTS**

**OCTOBER 2008**

**APRIL 2009**

**FIELD REPORT**

**SAMPLING OF GROUNDWATER  
MONITORING WELL  
BUFFALO BUSINESS PARK  
BUFFALO, NEW YORK**

**OCTOBER 2008**

**PREPARED FOR:**

**LTP SERVICES, INC.  
P.O. BOX 117  
SOUTH WALES, NY 14139  
ATTENTION: MR. PETER TARNAWSKYJ**

**PREPARED BY:**

**ENVIRONMENTAL SAMPLING & SERVICES, INC.  
7183 BALLA DRIVE  
NORTH TONAWANDA, NEW YORK 14120**

## **1.0 INTRODUCTION**

This report describes the sampling of one (1) groundwater monitoring well at the Buffalo Business Park, located in Buffalo, New York. Sampling was performed on October 13, 2008 by Environmental Sampling & Services, Inc. (ES&S) personnel. Samples were collected for volatiles only. A round of water levels were also measured and included from all of the site wells on October 13, 2008 and October 14, 2008.

## **2.0 METHODOLOGIES**

### **2.1 Water Level Measurements**

Static water level from the one (1) groundwater well was measured from the top of the well casing/riser, with a weighted electronic water level indicator (QED). Well bottoms were sounded with a weighted tape measure. All measurements were recorded to the nearest hundredth of a foot (0.01 feet). The length of the measuring device, which contacted the water, was cleaned between wells with liquinox, deionized water rinse and paper towel wipe. The data for the well sampled is presented on the Field Observation Forms.

### **2.2 Well Evacuation**

The well was evacuated using a continuous running dedicated pump.

## **3.0 SAMPLING**

### **3.1 Monitoring Wells**

The well was sampled using a dedicated PVC bailer. When using the dedicated PVC bailer for sampling, the bailer was slowly lowered into the water volume, to minimize agitation and devolatilization. Sample containers were then filled directly from the bailer.

An additional sample was collected from this well in order to facilitate the measurement of field parameters.

## **4.0 FIELD MEASUREMENT**

On site field measurements include pH, specific conductivity, temperature, eH, and turbidity. This data is presented on the Field Observation Forms.

All instruments, which contacted groundwater and surface water, were cleaned after each measurement by rinsing with deionized water and wiping dry with paper towels.

## **5.0 EQUIPMENT CALIBRATION**

Prior to mobilization, all field equipment and instrumentation were checked for condition. In field calibrations were done before field measurements were facilitated. A calibration check was performed at the start of the day and a recalibration of the field instruments was performed if necessary.

- pH / eH meters were two-point calibrated with 7.00 S.U. and 10.00 S.U. buffer solutions.
- Conductivity meters were three-point calibrated with 180, 1000 and 18000 umhos/cm buffer solutions.
- Turbidity meters were two-point calibrated with 1.0 NTU and 5.0 NTU standards.

## **6.0 SAMPLE CONTAINER PREPARATION**

All containers used in the collection of samples for this project were provided new and clean from Test America Labs, Inc. These bottles were stored in a clean environment at ES&S prior to their use.

## **7.0 SAMPLE CONTROL AND CHAIN OF CUSTODY**

A chain of custody manifest was initiated at the time of sample collection and accompanied the samples through delivery to Test America Labs in Amherst, New York.

**BUFFALO BUS. PARK WATER LEVELS****OCTOBER 13, 2008**

<b>WELL NUMBER</b>	<b>RISER ELEVATION</b>	<b>DEPTH TO WATER</b>	<b>WATER LEVEL ELEVATION</b>
<b>MW-1 BR</b>	624.44	7.45	<b>616.99</b>
<b>MW-2 BR</b>	625.04	6.59	<b>618.45</b>
<b>MW-3 BR</b>	623.99	9.20	<b>614.79</b>
<b>MW-4 BR</b>	622.79	13.21	<b>609.58</b>
<b>MW-5 BR</b>	622.42	7.68	<b>614.74</b>
<b>MW-6 BR</b>	623.57	10.30	<b>613.27</b>
<b>MW-7 BR</b>	623.34	7.91	<b>615.43</b>
<b>MW-8 BR</b>	625.87	7.82	<b>618.05</b>

**\* WATER LEVELS TAKEN WITH PUMP TURNED ON \***

**BUFFALO BUS. PARK WATER LEVELS****OCTOBER 14, 2008**

<b>WELL NUMBER</b>	<b>RISER ELEVATION</b>	<b>DEPTH TO WATER</b>	<b>WATER LEVEL ELEVATION</b>
<b>MW-1 BR</b>	624.44	7.44	<b>617.00</b>
<b>MW-2 BR</b>	625.04	6.54	<b>618.50</b>
<b>MW-3 BR</b>	623.99	6.64	<b>617.35</b>
<b>MW-4 BR</b>	622.79	4.40	<b>618.39</b>
<b>MW-5 BR</b>	622.42	5.30	<b>617.12</b>
<b>MW-6 BR</b>	623.57	10.24	<b>613.33</b>
<b>MW-7 BR</b>	623.34	6.07	<b>617.27</b>
<b>MW-8 BR</b>	625.87	7.45	<b>618.42</b>

**\* WATER LEVELS TAKEN WITH PUMP TURNED OFF \***

# FIELD INFORMATION LOG

SITE NAME: BUFFALO BUSINESS PARK

POINT ID: MW-4 BR

LOCATION: BUFFALO, NEW YORK

FIELD REPRESENTATIVE: E S & S - R.CH ODO

SAMPLE MATRIX: GROUNDWATER

LAB SAMPLE / PROJECT #: NA

**EVACUATION INFORMATION**

INITIAL WATER LEVEL (FEET) NA

DEPTH TO BOTTOM (FEET) 28.70

ELEVATION, MEAS.PT.(MSL): NA

ELEVATION, G/W (MSL): NA

DATE 10 - 13 - 08

TIME: START/FINISH /

**METHOD OF EVACUATION:**

( ) PVC BAILER ( ) WELL WIZARD ( ) OTHER-12V PUMP  
 ( ) S.S. BAILER (X) GRUNDFOS PUMP

**EVACUATION EQUIPMENT DEDICATED:**

( ) YES (X) NO

WELL RISER DIAMETER (IN.): ( ) 2 (X) 3 ( ) 4 ( ) 6 ( ) OTHER       

ONE (1) RISER VOLUME (GAL) NA

WAS WELL PURGED TO DRYNESS ( ) YES (X) NO

TOTAL VOLUME EVACUATED (GAL) NA

WATER LEVEL AFTER PURGE (FT.) NA

TURBIDITY OF PURGINGS: START NA

FINISH NA

**EVACUATION STABILIZATION DATA**

TIME	PURGE RATE (gpm/htz)	CUMULATIVE VOLUME	TEMP. (C)	pH (Std.Units)	SPECIFIC CONDUCT. (umhos/cm)	TURBIDITY (NTU)	OTHER [ eh (mV) ]

**SAMPLING INFORMATION**

DATE / TIME 10 - 13 - 08 / 10:15

WATER LEVEL PRIOR TO SAMLING (FT.) 8.99

**METHOD OF SAMPLING:**

(X) PVC BAILER ( ) WELL WIZARD ( ) OTHER  
 ( ) S.S. BAILER ( ) GRUNDFOS PUMP

**SAMPLING EQUIPMENT DEDICATED:**

(X) YES  
 ( ) NO

**SAMPLING FIELD MEASUREMENT DATA**

TIME	pH (Std.Units)	SPEC. CONDUCT. (umhos/cm)	TEMP. (C)	TURBIDITY (NTU)	eH (mV)	DISS. OXY. (PPM)	OTHER ( )
10:18	7.82	1012	18.1	5.36	-51.6	NA	NA

**GENERAL INFORMATION**

WEATHER CONDITIONS AT TIME OF SAMPLING: SUNNY, 65 F

SAMPLE CHARACTERISTICS: CLEAR

COMMENTS: CONTINUOUS PUMPING WELL

SAMPLED FOR VOA ONLY

**FIELD REPORT**

**SAMPLING OF GROUNDWATER  
MONITORING WELLS  
BUFFALO BUSINESS PARK  
BUFFALO, NEW YORK**

**APRIL 2009**

**PREPARED FOR:**

**LTP SERVICES, INC.  
P.O. BOX 117  
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**PREPARED BY:**

**ENVIRONMENTAL SAMPLING & SERVICES, INC.  
7183 BALLA DRIVE  
NORTH TONAWANDA, NEW YORK 14120**

## 1.0 INTRODUCTION

This report describes the sampling of eight (8) groundwater monitoring wells at the Buffalo Business Park, located in Buffalo, New York. Sampling was performed on April 13, 2009 by Environmental Sampling & Services, Inc. (ES&S) personnel. Samples were collected for volatiles only. A round of water levels were also measured and included from all of the site wells on April 13, 2009.

## 2.0 METHODOLOGIES

### 2.1 Water Level Measurements

Static water levels of all eight (8) groundwater wells were measured from the top of the well casing/riser, with a weighted electronic water level indicator (QED). Well bottoms were sounded with a weighted tape measure. All measurements were recorded to the nearest hundredth of a foot (0.01 feet). The length of the measuring device, which contacted the water, was cleaned between wells with liquinox, deionized water rinse and paper towel wipe. The data for the wells sampled is presented on the Field Observation Forms.

### 2.2 Well Evacuation

Prior to evacuation, the volume of standing water was calculated by subtracting the depth to groundwater from the bottom of the well depth and multiplying that number by a constant for the corresponding size well.  $V=H (.16) - 2$  inch well,  $V=H (.36) - 3$  inch well,  $V=H (.65) - 4$  inch well, where H is the height of the water column and .16, .36, and .65 are volumetric constants.

Prior to sampling, three (3) times the standing water volume was purged from each well which exhibited a moderate to high recharge. Wells, which exhibited a low recharge rate, were evacuated to dryness.

The wells were evacuated using dedicated pvc bailers, non-dedicated or dedicated pumps. Data pertaining to each evacuation is presented on the Field Observation Forms.

## 3.0 SAMPLING

### 3.1 Monitoring Wells

After well purging, a second depth to water level measurement was taken at each well to insure there was sufficient recharge.

Wells were sampled using the dedicated PVC bailers. When using the dedicated PVC bailers for sampling, the bailer was slowly lowered into the water volume, to minimize agitation and devolatilization. Sample containers were then filled directly from the bailer.

An additional sample was collected from each well in order to facilitate the measurement of field parameters.

#### **4.0 FIELD MEASUREMENT**

On site field measurements include pH, specific conductivity, temperature, eH, and turbidity. This data is presented on the Field Observation Forms.

All instruments, which contacted groundwater and surface water, were cleaned after each measurement by rinsing with deionized water and wiping dry with paper towels.

#### **5.0 EQUIPMENT CALIBRATION**

Prior to mobilization, all field equipment and instrumentation were checked for condition. In field calibrations were done before field measurements were facilitated. A calibration check was performed at the start of the day and a recalibration of the field instruments was performed if necessary.

- pH / eH meters were two-point calibrated with 7.00 S.U. and 10.00 S.U. buffer solutions.
- Conductivity meters were three-point calibrated with 180, 1000 and 18000 umhos/cm buffer solutions.
- Turbidity meters were two-point calibrated with 1.0 NTU and 5.0 NTU standards.

#### **6.0 SAMPLE CONTAINER PREPARATION**

All containers used in the collection of samples for this project were provided new and clean from Test America Labs, Inc. These bottles were stored in a clean environment at ES&S prior to their use.

## **7.0 QUALITY ASSURANCE / QUALITY CONTROL**

### **7.1 Field Duplicate**

A field duplicate was collected at a frequency of one (1) per sampling event. The field duplicate consisted of a set of appropriate parameters and was obtained at the same time a well.

### **7.2 Trip Blank**

Trip blanks were collected at a frequency of one (1) per sampling event. The trip blank was analyzed for volatiles only. The sample containers were filled at Test America Labs with deionized water and transported to the site, stored with field-collected samples, and submitted to Test America Labs for analysis.

### **7.3 Matrix Spike / Matrix Spike Duplicate**

A matrix spike / matrix spike duplicate was collected at a frequency of one (1) per sampling event. It consisted of a set of all parameters for each and was obtained at the same time a well was being sampled.

## **8.0 SAMPLE CONTROL AND CHAIN OF CUSTODY**

Sample containers were labeled with the following information:

- Project Number
- Sample Location
- Initials of Individual Collecting Samples
- Date / Time

A chain of custody manifest was initiated at the time of sample collection and accompanied the samples through delivery to Test America Labs in Amherst, New York.

**BUFFALO BUS. PARK WATER LEVELS****APRIL 13, 2009**

WELL NUMBER	RISER ELEVATION	DEPTH TO WATER	WATER LEVEL ELEVATION
MW-1 BR	624.44	5.71	618.73
MW-2 BR	625.04	6.62	618.42
MW-3 BR	623.99	8.06	615.93
MW-4 BR	622.79	15.68	607.11
MW-5 BR	622.42	7.44	614.98
MW-6 BR	623.57	10.14	613.43
MW-7 BR	623.34	7.42	615.92
MW-8 BR	625.87	8.19	617.68
OS-1	621.43	8.56	612.87
OS-2	621.22	10.48	610.74
OS-3	624.10	8.86	615.24

**\* WATER LEVELS TAKEN WITH PUMP TURNED ON \***

**MW-4 BR TOTALIZER - 120300 GALS. @ 11:20**

TABLE I

## BUFFALO BUSINESS PARK

## FIELD INFORMATION

SAMPLE ID #	PURGE DATE	DEPTH TO WATER (FT.) *	DEPTH TO BOTTOM (FT.) *	SAMPLE DATE	pH (S.U.)	SPEC. CONDUCT. (umhos/cm)	TEMP. (C)	TURB. (NTU)	eH (ppm)
MW - 1 BR	4/13/09	5.71	28.82	4/13/09	7.72	893	11.1	23.90	-40.5
MW - 2 BR	4/13/09	6.62	28.98	4/13/09	7.76	1931	12.2	20.20	-42.6
MW - 3 BR	4/13/09	8.06	62.60	1/28/00	7.02	1644	9.2	6.45	-7.6
MW - 4 BR	4/13/09	15.68	27.75	4/13/09	7.07	1478	9.9	57.20	-10
MW - 5 BR	4/13/09	7.44	26.70	4/13/09	6.93	1441	10.3	0.49	-3.3
MW - 6 BR	4/13/09	10.14	27.81	4/13/09	7.00	1528	12.3	2.59	-6.6
MW - 7 BR	4/13/09	7.42	27.48	4/13/09	7.14	2110	9.5	166.60	-13.4
MW - 8 BR	4/13/09	8.19	31.77	4/13/09	7.45	1506	10.3	1.51	-27.9

\* FROM THE TOP OF RISER

# FIELD INFORMATION LOG

SITE NAME: BUFFALO BUSINESS PARK

POINT ID: TRIP BLANK

LOCATION: BUFFALO, NEW YORK

FIELD REPRESENTATIVE: E S & S - R. CHIODO

SAMPLE MATRIX: DEIONIZED WATER

LAB SAMPLE / PROJECT #: NA

**EVACUATION INFORMATION**

INITIAL WATER LEVEL (FEET) \_\_\_\_\_

DEPTH TO BOTTOM (FEET) \_\_\_\_\_

ELEVATION, MEAS.PT.(MSL): \_\_\_\_\_

ELEVATION, G/W (MSL): \_\_\_\_\_

DATE \_\_\_\_\_

TIME: START/FINISH \_\_\_\_\_ / \_\_\_\_\_

**METHOD OF EVACUATION:**

- ( ) PVC BAILER    ( ) S.S. BAILER    ( ) GRUNDFOS PUMP  
 ( ) S.S. BAILER    ( ) WELL WIZARD    ( ) OTHER

**EVACUATION EQUIPMENT DEDICATED:**

- ( ) YES    ( ) NO

WELL RISER DIAMETER (IN.): ( ) 2 ( ) 3 ( ) 4 ( ) 6 ( ) OTHER \_\_\_\_\_

ONE (1) RISER VOLUME (GAL) \_\_\_\_\_

WAS WELL PURGED TO DRYNESS ( ) YES ( ) NO

TOTAL VOLUME EVACUATED (GAL) \_\_\_\_\_

WATER LEVEL AFTER PURGE (FT.) \_\_\_\_\_

TURBIDITY OF PURGINGS: START \_\_\_\_\_

FINISH \_\_\_\_\_

**EVACUATION STABILIZATION DATA**

TIME	PURGE RATE (gpm/htz)	CUMULATIVE VOLUME	TEMP. (C)	pH (Std.Units)	SPEC. CONDUCTANCE (umhos/cm)	TURBIDITY (NTU)	OTHER [ eh (mV) ]

**SAMPLING INFORMATION**

DATE / TIME 4-13-09 / 11:20

WATER LEVEL PRIOR TO SAMLING (FT.) NA

**METHOD OF SAMPLING:**

- ( ) PVC BAILER    ( ) S.S. BAILER    ( ) GRUNDFOS PUMP  
 ( ) S.S. BAILER    ( ) WELL WIZARD    (X) OTHER

**SAMPLING EQUIPMENT DEDICATED:**

- ( ) YES  
(X) NO

**SAMPLING FIELD MEASUREMENT DATA**

TIME	pH (Std.Units)	SPEC. CONDUCT. (umhos/cm)	TEMP. (C)	TURBIDITY (NTU)	eH (mV)	DISS. OXY. (PPM)	OTHER ( )
NA	NA	NA	NA	NA	NA	NA	NA

**GENERAL INFORMATION**

WEATHER CONDITIONS AT TIME OF SAMPLING: Sunny, 45°F

SAMPLE CHARACTERISTICS: CLEAR

COMMENTS: TCL VOLATILES ONLY

SAMPLE COLLECTION NUMBER 1

# FIELD INFORMATION LOG

SITE NAME: BUFFALO BUSINESS PARK

POINT ID: VCA-MW4-BR

LOCATION: BUFFALO, NEW YORK

FIELD REPRESENTATIVE: E S & S - R CHIODO

SAMPLE MATRIX: GROUNDWATER

LAB SAMPLE / PROJECT #: NA

**EVACUATION INFORMATION**

INITIAL WATER LEVEL (FEET) 15.68

DEPTH TO BOTTOM (FEET) 27.75

ELEVATION, MEAS. PT. (MSL): 622.79

ELEVATION, GW (MSL) 607.11

DATE 4-13-09

TIME START/FINISH 9:16 / NA

**METHOD OF EVACUATION:**

( ) PVC BAILER ( ) WELL WIZARD ( ) OTHER-12V PUMP  
 ( ) S.S. BAILER (X) GRUNDFOS PUMP

**EVACUATION EQUIPMENT DEDICATED:**

( ) YES (X) NO

WELL RISER DIAMETER (IN.): ( ) 2 (X) 3 ( ) 4 ( ) 6 ( ) OTHER \_\_\_\_\_

ONE (1) RISER VOLUME (GAL) NA

WAS WELL PURGED TO DRYNESS ( ) YES (X) NO

TOTAL VOLUME EVACUATED (GAL) NA

WATER LEVEL AFTER PURGE (FT.) NA

TURBIDITY OF PURGINGS: START NA

FINISH NA

**EVACUATION STABILIZATION DATA**

TIME	PURGE RATE (gpm/htz)	CUMULATIVE VOLUME	TEMP. (C)	pH (Std Units)	SPECIFIC CONDUCT. (umhos/cm)	TURBIDITY (NTU)	OTHER [ eh (mV) ]

**SAMPLING INFORMATION**

DATE / TIME 4-13-09 / 11:24 + 11:26 WATER LEVEL PRIOR TO SAMLING (FT.) 15.68

**METHOD OF SAMPLING:**

(X) PVC BAILER ( ) WELL WIZARD ( ) OTHER  
 ( ) S.S. BAILER ( ) GRUNDFOS PUMP

**SAMPLING EQUIPMENT DEDICATED:**

(X) YES  
 ( ) NO

**SAMPLING FIELD MEASUREMENT DATA**

TIME	pH (Std.Units)	SPEC. CONDUCT. (umhos/cm)	TEMP (C)	TURBIDITY (NTU)	eH (mV)	DISS OXY. (PPM)	OTHER ( )
<u>11:28</u>	<u>7.07</u>	<u>1478</u>	<u>9.9</u>	<u>57.20</u>	<u>-10.0</u>	<u>NA</u>	<u>NA</u>

**GENERAL INFORMATION**

WEATHER CONDITIONS AT TIME OF SAMPLING Sunny, 45<sup>o</sup>F

SAMPLE CHARACTERISTICS CLEAR-TANTINT

COMMENTS: CONTINUOUS PUMPING WELL DUP TAKEN (#3 @ 11:26)

TCL VOLATILES ONLY

SAMPLE COLLECTION NUMBER 2 + 3



# FIELD INFORMATION LOG

SITE NAME: BUFFALO BUSINESS PARK

POINT ID: VCA-MW3-BR

LOCATION: BUFFALO, NEW YORK

FIELD REPRESENTATIVE: E S & S - R CHIDO

SAMPLE MATRIX: GROUNDWATER

LAB SAMPLE / PROJECT #: NA

EVACUATION INFORMATION  
INITIAL WATER LEVEL (FEET) 8.06

DEPTH TO BOTTOM (FEET) 28.60

ELEVATION, MEAS.PT.(MSL): 623.99

ELEVATION, GW (MSL) 615.93

DATE 4-13-09

TIME: START/FINISH 9:01 / 9:32

METHOD OF EVACUATION:

- ( ) PVC BAILER    ( ) WELL WIZARD    (X) OTHER-12V PUMP  
( ) S.S. BAILER    ( ) GRUNDFOS PUMP

EVACUATION EQUIPMENT DEDICATED:

- ( ) YES    (X) NO

WELL RISER DIAMETER (IN.): ( ) 2 ( ) 3 (X) 4 ( ) 6 ( ) OTHER \_\_\_\_\_

ONE (1) RISER VOLUME (GAL) 13.35

WAS WELL PURGED TO DRYNESS ( ) YES (X) NO

TOTAL VOLUME EVACUATED (GAL) 41.00

WATER LEVEL AFTER PURGE (FT.) 14.32

TURBIDITY OF PURGINGS: START TURBID-BLACK

FINISH ~~TURBID-BLACK~~ CLEAR - BLACK TINT

EVACUATION STABILIZATION DATA

PURGE RATE TIME (gpm/htz)	CUMULATIVE VOLUME	TEMP. (C)	pH (Std.Units)	SPECIFIC CONDUCT (umhos/cm)	TURBIDITY (NTU)	OTHER [ eh (mV) ]

SAMPLING INFORMATION

DATE / TIME 4-13-09 / 11:40

WATER LEVEL PRIOR TO SAMLING (FT.) 11.21

METHOD OF SAMPLING:

- (X) PVC BAILER    ( ) WELL WIZARD    ( ) OTHER  
( ) S.S. BAILER    ( ) GRUNDFOS PUMP

SAMPLING EQUIPMENT DEDICATED:

- (X) YES  
( ) NO

SAMPLING FIELD MEASUREMENT DATA

TIME	pH (Std.Units)	SPEC. CONDUCT. (umhos/cm)	TEMP. (C)	TURBIDITY (NTU)	eH (mV)	DISS. OXY. (PPM)	OTHER ( )
11:42	7.02	1644	9.2	6.45	-7.6	NA	NA

GENERAL INFORMATION

WEATHER CONDITIONS AT TIME OF SAMPLING SUNNY, 45°F

SAMPLE CHARACTERISTICS: CLEAR - BLACK TINT

COMMENTS: TCL VOLATILES ONLY

MS/MSD TAKEN

SAMPLE COLLECTION NUMBER 4



# FIELD INFORMATION LOG

SITE NAME: BUFFALO BUSINESS PARK

POINT ID: VCA-MW5-BR

LOCATION: BUFFALO, NEW YORK

FIELD REPRESENTATIVE: E S & S - R CHIODO

SAMPLE MATRIX: GROUNDWATER

LAB SAMPLE / PROJECT #: NA

**EVACUATION INFORMATION**

INITIAL WATER LEVEL (FEET) 7.44

DEPTH TO BOTTOM (FEET) 26.70

ELEVATION, MEAS.PT.(MSL): 622.42

ELEVATION, G/W (MSL): 614.98

DATE 4-13-09

TIME START/FINISH 10:40 / 10:52

METHOD OF EVACUATION:

( ) PVC BAILER ( ) WELL WIZARD ( ) OTHER-12V PUMP  
 ( ) S.S. BAILER (X) GRUNDFOS PUMP

EVACUATION EQUIPMENT DEDICATED:

( ) YES (X) NO

WELL RISER DIAMETER (IN.): (X) 2 ( ) 3 ( ) 4 ( ) 6 ( ) OTHER \_\_\_\_\_

ONE (1) RISER VOLUME (GAL) 3.08

WAS WELL PURGED TO DRYNESS ( ) YES (X) NO

TOTAL VOLUME EVACUATED (GAL) 10.00

WATER LEVEL AFTER PURGE (FT.) 17.32

TURBIDITY OF PURGINGS: START CLEAR

FINISH CLEAR

**EVACUATION STABILIZATION DATA**

TIME	PURGE RATE (gpm/htz)	CUMULATIVE VOLUME	TEMP. (C)	pH (Std Units)	SPECIFIC CONDUCT. (umhos/cm)	TURBIDITY (NTU)	OTHER [ eh (mV) ]

**SAMPLING INFORMATION**

DATE / TIME 4-13-09 / 11:52

WATER LEVEL PRIOR TO SAMLING (FT.) 8.65

METHOD OF SAMPLING:

(X) PVC BAILER ( ) WELL WIZARD ( ) OTHER  
 ( ) S.S. BAILER ( ) GRUNDFOS PUMP

SAMPLING EQUIPMENT DEDICATED:

(X) YES  
 ( ) NO

**SAMPLING FIELD MEASUREMENT DATA**

TIME	pH (Std Units)	SPEC. CONDUCT. (umhos/cm)	TEMP (C)	TURBIDITY (NTU)	eH (mV)	DISS. OXY (PPM)	OTHER ( )
11:54	6.93	1441	10.3	0.49	-3.3	NA	NA

**GENERAL INFORMATION**

WEATHER CONDITIONS AT TIME OF SAMPLING: Sunny, 45°F

SAMPLE CHARACTERISTICS: CLEAR

COMMENTS: TCL VOLATILES ONLY

SAMPLE COLLECTION NUMBER 5

# FIELD INFORMATION LOG

SITE NAME: BUFFALO BUSINESS PARK

POINT ID: VCA-MW8-BR

LOCATION: BUFFALO, NEW YORK

FIELD REPRESENTATIVE: E S & S - R. CHIODO

SAMPLE MATRIX: GROUNDWATER

LAB SAMPLE / PROJECT #: NA

EVACUATION INFORMATION  
INITIAL WATER LEVEL (FEET) 8.19

DEPTH TO BOTTOM (FEET) 31.77

ELEVATION, MEAS. PT. (MSL): 625.87

ELEVATION, G/W (MSL): 617.68

DATE 4-13-09

TIME START/FINISH 9:50 / 10:04

METHOD OF EVACUATION

EVACUATION EQUIPMENT DEDICATED:

( ) PVC BAILER ( ) WELL WIZARD ( ) OTHER-12V PUMP  
( ) S.S. BAILER (X) GRUNDFOS PUMP

( ) YES (X) NO

WELL RISER DIAMETER (IN.): (X) 2 ( ) 3 ( ) 4 ( ) 6 ( ) OTHER \_\_\_\_\_

ONE (1) RISER VOLUME (GAL) 3.77

WAS WELL PURGED TO DRYNESS ( ) YES (X) NO

TOTAL VOLUME EVACUATED (GAL) 12.00

WATER LEVEL AFTER PURGE (FT.) 28.65

TURBIDITY OF PURGINGS: START CLEAR

FINISH S1.TURBIO - GRAY

EVACUATION STABILIZATION DATA

TIME	PURGE RATE (gpm/htz)	CUMULATIVE VOLUME	TEMP. (C)	pH (Std. Units)	SPECIFIC CONDUCT (umhos/cm)	TURBIDITY (NTU)	OTHER [ eh (mV) ]

SAMPLING INFORMATION

DATE / TIME 4-13-09 / 12:07

WATER LEVEL PRIOR TO SAMLING (FT.) 8.20

METHOD OF SAMPLING:

SAMPLING EQUIPMENT DEDICATED:

(X) PVC BAILER ( ) WELL WIZARD ( ) OTHER  
( ) S.S. BAILER ( ) GRUNDFOS PUMP

(X) YES  
( ) NO

SAMPLING FIELD MEASUREMENT DATA

TIME	pH (Std. Units)	SPEC. CONDUCT. (umhos/cm)	TEMP. (C)	TURBIDITY (NTU)	eH (mV)	DISS. OXY. (PPM)	OTHER ( )
<u>12:09</u>	<u>7.45</u>	<u>1506</u>	<u>10.3</u>	<u>1.51</u>	<u>-27.9</u>	NA	NA

GENERAL INFORMATION

WEATHER CONDITIONS AT TIME OF SAMPLING Sunny, 45°F

SAMPLE CHARACTERISTICS: CLEAR

COMMENTS: TCL VOLATILES ONLY

SAMPLE COLLECTION NUMBER 6



# FIELD INFORMATION LOG

SITE NAME: BUFFALO BUSINESS PARK

POINT ID: VCA-MW7-BR

LOCATION: BUFFALO, NEW YORK

FIELD REPRESENTATIVE: E S & S - R CHIODO

SAMPLE MATRIX: GROUNDWATER

LAB SAMPLE / PROJECT #: NA

EVACUATION INFORMATION  
INITIAL WATER LEVEL (FEET) 7.42

DEPTH TO BOTTOM (FEET) 27.48

ELEVATION, MEAS.PT.(MSL): 623.34

ELEVATION, GW (MSL) 615.92

DATE 4-13-09

TIME START/FINISH 10:15 , 10:27

METHOD OF EVACUATION:

EVACUATION EQUIPMENT DEDICATED:

( ) PVC BAILER ( ) WELL WIZARD ( ) OTHER-12V PUMP  
( ) S.S. BAILER (X) GRUNDFOS PUMP

( ) YES (X) NO

WELL RISER DIAMETER (IN.): (X) 2 ( ) 3 ( ) 4 ( ) 6 ( ) OTHER \_\_\_\_\_

ONE (1) RISER VOLUME (GAL) 3.21

WAS WELL PURGED TO DRYNESS ( ) YES ( ) NO

TOTAL VOLUME EVACUATED (GAL) 10.00

WATER LEVEL AFTER PURGE (FT.) 25.90

TURBIDITY OF PURGINGS: START CLEAR - GRAY TINT FINISH CLEAR - GRAY TINT

EVACUATION STABILIZATION DATA

TIME	PURGE RATE (gpm/htz)	CUMULATIVE VOLUME	TEMP. (C)	pH (Std.Units)	SPECIFIC CONDUCT (umhos/cm)	TURBIDITY (NTU)	OTHER [ eh (mV) ]

SAMPLING INFORMATION

DATE / TIME 4-13-09 / 12:21

WATER LEVEL PRIOR TO SAMLING (FT.) 7.46

METHOD OF SAMPLING:

SAMPLING EQUIPMENT DEDICATED:

(X) PVC BAILER ( ) WELL WIZARD ( ) OTHER  
( ) S.S. BAILER ( ) GRUNDFOS PUMP

(X) YES  
( ) NO

SAMPLING FIELD MEASUREMENT DATA

TIME	pH (Std.Units)	SPEC. CONDUCT. (umhos/cm)	TEMP (C)	TURBIDITY (NTU)	eH (mV)	DISS. OXY. (PPM)	OTHER ( )
12:23	7.14	2110	9.5	16.60	-13.4	NA	NA

GENERAL INFORMATION

WEATHER CONDITIONS AT TIME OF SAMPLING: Sunny, 45°f

SAMPLE CHARACTERISTICS: CLEAR - GRAY TINT

COMMENTS: TCL VOLATILES ONLY

SAMPLE COLLECTION NUMBER 7

# FIELD INFORMATION LOG

SITE NAME: BUFFALO BUSINESS PARK

POINT ID: VCA-MW2-BR

LOCATION: BUFFALO, NEW YORK

FIELD REPRESENTATIVE: E S & S - R. CHIDO

SAMPLE MATRIX: GROUNDWATER

LAB SAMPLE / PROJECT #: NA

**EVACUATION INFORMATION**

INITIAL WATER LEVEL (FEET) 6.62

DEPTH TO BOTTOM (FEET) 28.98

ELEVATION, MEAS. PT. (MSL): 625.04

ELEVATION, GW (MSL) 618.42

DATE 4.13-09

TIME: START/FINISH 8:31 / 8:51

**METHOD OF EVACUATION:**

- ( ) PVC BAILER    ( ) WELL WIZARD     OTHER-12V PUMP  
 ( ) S.S. BAILER    ( ) GRUNDFOS PUMP

**EVACUATION EQUIPMENT DEDICATED:**

- ( ) YES    (X) NO

WELL RISER DIAMETER (IN.): ( ) 2 ( ~~\*~~ ) 3  4 ( ) 6 ( ) OTHER \_\_\_\_\_

ONE (1) RISER VOLUME (GAL) 14.53

WAS WELL PURGED TO DRYNESS (X) YES ( ) NO

TOTAL VOLUME EVACUATED (GAL) 16.00 TO DRY

WATER LEVEL AFTER PURGE (FT.) DRY

TURBIDITY OF PURGINGS: START TURBID - BLACK

FINISH TURBID - BLACK

**EVACUATION STABILIZATION DATA**

TIME	PURGE RATE (gpm/htz)	CUMULATIVE VOLUME	TEMP (C)	pH (Std. Units)	SPECIFIC CONDUCT (umhos/cm)	TURBIDITY (NTU)	OTHER [ eh (mV) ]

**SAMPLING INFORMATION**

DATE / TIME 4-13-09 / 12:37

WATER LEVEL PRIOR TO SAMLING (FT.) 17.94

**METHOD OF SAMPLING:**

- (X) PVC BAILER    ( ) WELL WIZARD    ( ) OTHER  
 ( ) S.S. BAILER    ( ) GRUNDFOS PUMP

**SAMPLING EQUIPMENT DEDICATED:**

- (X) YES  
 ( ) NO

**SAMPLING FIELD MEASUREMENT DATA**

TIME	pH (Std. Units)	SPEC. CONDUCT. (umhos/cm)	TEMP. (C)	TURBIDITY (NTU)	eH (mV)	DISS. OXY. (PPM)	OTHER ( )
12:39	7.76	1931	12.2	20.20	-42.6	NA	NA

**GENERAL INFORMATION**

WEATHER CONDITIONS AT TIME OF SAMPLING: SUNNY, 45°f

SAMPLE CHARACTERISTICS: CLEAR - BLACK TINT

COMMENTS: TCL VOLATILES ONLY

SAMPLE COLLECTION NUMBER 8



# FIELD INFORMATION LOG

SITE NAME: BUFFALO BUSINESS PARK

POINT ID: VCA-MW1-BR

LOCATION: BUFFALO, NEW YORK

FIELD REPRESENTATIVE: E S & S - R CHIODO

SAMPLE MATRIX: GROUNDWATER

LAB SAMPLE / PROJECT #: NA

**EVACUATION INFORMATION**

INITIAL WATER LEVEL (FEET) 5.71

DEPTH TO BOTTOM (FEET) 28.82

ELEVATION, MEAS.PT.(MSL): 624.44

ELEVATION, G/W (MSL): 618.73

DATE 4-13-09

TIME START/FINISH 8:10 / 8:18

**METHOD OF EVACUATION:**

- ( ) PVC BAILER    ( ) WELL WIZARD    (X) OTHER-12V PUMP  
 ( ) S.S. BAILER    ( ) GRUNDFOS PUMP

**EVACUATION EQUIPMENT DEDICATED:**

- ( ) YES    (X) NO

WELL RISER DIAMETER (IN.): ( ) 2 ( ) 3 (X) 4 ( ) 6 ( ) OTHER \_\_\_\_\_

ONE (1) RISER VOLUME (GAL) 15.02

WAS WELL PURGED TO DRYNESS (X) YES ( ) NO

TOTAL VOLUME EVACUATED (GAL) 5.00 TO DRY

WATER LEVEL AFTER PURGE (FT.) DRY

TURBIDITY OF PURGINGS: START CLEAR - BLACK TINT

FINISH CLEAR - BLACK TINT

**EVACUATION STABILIZATION DATA**

TIME	PURGE RATE (gpm/htz)	CUMULATIVE VOLUME	TEMP. (C)	pH (Std.Units)	SPECIFIC CONDUCT (umhos/cm)	TURBIDITY (NTU)	OTHER [ eh (mV) ]

**SAMPLING INFORMATION**

DATE / TIME 4.13.09 / 12:52

WATER LEVEL PRIOR TO SAMLING (FT.) 11.75

**METHOD OF SAMPLING:**

- (X) PVC BAILER    ( ) WELL WIZARD    ( ) OTHER  
 ( ) S.S. BAILER    ( ) GRUNDFOS PUMP

**SAMPLING EQUIPMENT DEDICATED:**

- (X) YES  
 ( ) NO

**SAMPLING FIELD MEASUREMENT DATA**

TIME	pH (Std.Units)	SPEC. CONDUCT. (umhos/cm)	TEMP. (C)	TURBIDITY (NTU)	eH (mV)	DISS. OXY. (PPM)	OTHER ( )
<u>12:54</u>	<u>7.72</u>	<u>893</u>	<u>11.1</u>	<u>23.90</u>	<u>-40.5</u>	<u>NA</u>	<u>NA</u>

**GENERAL INFORMATION**

WEATHER CONDITIONS AT TIME OF SAMPLING: Sunny, 45°F

SAMPLE CHARACTERISTICS: CLEAR - BLACK TINT

COMMENTS: WELL / BEDROCK PARTIALLY CAVED IN AT 13' PREVENTING COMPLETE PURGING

TCL VOLATILES ONLY

SAMPLE COLLECTION NUMBER 9



## FIELD INFORMATION LOG

SITE NAME: BUFFALO BUSINESS PARK POINT ID: VCA-MW6-BR

LOCATION: BUFFALO, NEW YORK FIELD REPRESENTATIVE: E S & S - R CHIODO

SAMPLE MATRIX: GROUNDWATER LAB SAMPLE / PROJECT #: NA

**EVACUATION INFORMATION**

INITIAL WATER LEVEL (FEET) 10.14 DEPTH TO BOTTOM (FEET) 22.67

ELEVATION, MEAS.PT.(MSL) 623.57 ELEVATION, G/W (MSL) 613.43

DATE 4-13-09 TIME: START/FINISH 9:30 / 9:39

**METHOD OF EVACUATION:**

PVC BAILER ( ) WELL WIZARD ( ) OTHER-12V PUMP  
 S.S. BAILER ( ) GRUNDFOS PUMP

**EVACUATION EQUIPMENT DEDICATED:**

YES  NO

WELL RISER DIAMETER (IN.): (X) 2 ( ) 3 ( ) 4 ( ) 6 ( ) OTHER \_\_\_\_\_

ONE (1) RISER VOLUME (GAL) 2.00 WAS WELL PURGED TO DRYNESS  YES ( ) NO

TOTAL VOLUME EVACUATED (GAL) 3.00 To Dry WATER LEVEL AFTER PURGE (FT.) DRY

TURBIDITY OF PURGINGS: START CLEAR FINISH TURBID - GRAY

**EVACUATION STABILIZATION DATA**

TIME	PURGE RATE (gpm/htz)	CUMULATIVE VOLUME	TEMP (C)	pH (Std Units)	SPECIFIC CONDUCT (umhos/cm)	TURBIDITY (NTU)	OTHER [ eh (mV) ]

**SAMPLING INFORMATION**

DATE / TIME 4-13-09 / 13:08 WATER LEVEL PRIOR TO SAMLING (FT.) 14.03

**METHOD OF SAMPLING:**

PVC BAILER ( ) WELL WIZARD ( ) OTHER  
 S.S. BAILER ( ) GRUNDFOS PUMP

**SAMPLING EQUIPMENT DEDICATED:**

YES  
 NO

**SAMPLING FIELD MEASUREMENT DATA**

TIME	pH (Std.Units)	SPEC. CONDUCT. (umhos/cm)	TEMP (C)	TURBIDITY (NTU)	eH (mV)	DISS. OXY. (PPM)	OTHER ( )
<u>13:10</u>	<u>7.00</u>	<u>1528</u>	<u>12.3</u>	<u>2.59</u>	<u>-6.6</u>	<u>NA</u>	<u>NA</u>

**GENERAL INFORMATION**

WEATHER CONDITIONS AT TIME OF SAMPLING: Sunny, 45<sup>oF</sup>

SAMPLE CHARACTERISTICS CLEAR

COMMENTS: TCL VOLATILES ONLY

SAMPLE COLLECTION NUMBER 10