



# Glenn Springs Holdings, Inc.

A subsidiary of Occidental Petroleum

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March 31, 2014

Reference No. 001069

Ms. Gloria M. Sosa  
United States Environmental Protection Agency  
Region II, Site Investigation & Compliance Branch  
290 Broadway, 20th Floor  
New York, NY 10007-1866

Mr. Brian Sadowski  
New York State Department of Conservation  
270 Michigan Avenue  
Buffalo, NY 14203-2999

Dear Ms. Sosa and Mr. Sadowski:

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Re:     Hyde Park Remedial Program  
         Annual Site Remedial Performance Evaluation Report  
January 1, 2013 to December 31, 2013

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On behalf of Glenn Springs Holdings, Inc. (GSH), Conestoga-Rovers & Associates (CRA), in accordance with the July 2006 "Performance Monitoring Plan" (PMP), is presenting the following Annual Site Remedial Performance Evaluation Report (SRPE Report) for the Hyde Park Remedial Program for the period January 1, 2013 to December 31, 2013.

Beginning October 1, 2008, GSH contracted CRA to perform operation, maintenance, monitoring, and reporting activities for the Hyde Park Landfill (Site) under direct management of GSH.

In July 2011, the New York State Department of Environmental Conservation (NYSDEC) reclassified the Site on the Registry of Inactive Hazardous Waste Disposal Sites (Registry) to a Class 4 site, indicating that it no longer presents a significant threat to public health and/or the environment.

Effective October 23, 2013, the United States Environmental Protection Agency (USEPA) deleted the Site from the National Priorities List. As published in the Federal Register, Vol. 78, No. 205, Pg. 63099, "The EPA and the State of New York, through the Department of Environmental Conservation, have determined that all appropriate response actions under CERCLA, other than operation, maintenance, and five-year reviews, have been completed."

## **Introduction and Background**

Site monitoring and reporting requirements are defined in the 2006 PMP. The objective of this SRPE Report is to present the data collected during 2013, provide an evaluation of the overall remedial performance, and, if appropriate, recommend any changes to the PMP.

The PMP requires annual assessment of the following three monitoring programs:

- Overburden Monitoring Program
- Bedrock Monitoring Program
- Community Monitoring Program

Although not required by the PMP, the SRPE Report also includes an assessment of the Treatment System Monitoring Program. Table 1 presents a summary of the monitoring tasks, by programs, which are to be performed each year along with a completion checklist for each item. All of the tasks outlined in Table 1 were completed in 2013. The monitoring programs are described below.

### **Overburden Monitoring Program**

The Overburden Monitoring program involves the monitoring of the Source Control (SC) Wells and the Overburden Collection System. The SC Wells are a series of production wells installed within the Landfill to recover non-aqueous phase liquid (NAPL), while the Overburden Collection System is comprised of a pair of French-drain systems designed to control the lateral migration of dissolved phase constituents and NAPL in the overburden.

The 2013 performance monitoring data for the overburden systems is presented as follows:

SC System Well Locations	Figure 1
2013 SC Well Pumping Summary	Table 2
Overburden and Existing Barrier Collection Systems Locations	Figure 2
2013 Overburden Quarterly Groundwater Elevation Summary	Table 3
2013 Overburden NAPL Presence Monitoring	Table 4
2013 Overburden Collection Systems Monthly Average Flow Summary	Table 5

### **Bedrock Monitoring Program**

The Bedrock Monitoring program includes the Lockport Bedrock aqueous phase liquid (APL) and NAPL Plume Containment Systems and the Bloody Run Creek Monitoring Program. The Lockport Bedrock APL and NAPL Plume Containment Systems consist of 19 purge wells that control lateral migration of dissolved phase constituents and NAPL in the bedrock, while the Bloody Run Creek Monitoring Program ensures that Site-related parameters are not adversely impacting groundwater in the upper bedrock subsequent to the remediation of Bloody Run Creek.

The 2013 performance monitoring data for the bedrock systems is presented as follows:

Bedrock Purge and Monitoring Well Locations	Figure 3
2013 Bedrock Quarterly Water Level Elevation Summary - Piezometers	Table 6

2013 Bedrock Purge Well Monthly Flow Rate Summary

Table 7

Analytical Results Summary – Quarterly Group B Bedrock Piezometer Sampling

Tables 8A-8D

### **Community Monitoring Program**

The Community Monitoring program was developed to ensure that the public is not being adversely exposed to Site-related parameters. The Community Monitoring program includes the Gorge Face Seep Program, the APL Flux Monitoring Program, and the Residential Community Monitoring Program. The Gorge Face Seep Program involves biennial inspections of the Niagara River Gorge to ensure that Site-specific parameters are not discharging to a publicly accessible area. The APL Flux Monitoring Program ensures that the mass loading via groundwater discharged to the Niagara River Gorge is less than the defined Flux Action Level. The Residential Community Monitoring Program ensures that residents in the area are not adversely exposed to Site-related constituents in the groundwater or from soil vapors above the groundwater.

The 2013 performance monitoring data for the community monitoring is presented as follows:

APL Flux Well Locations	Figure 4
2013 Analytical Results Summary – Annual AFW Composite	Table 10
Community Monitoring Locations	Figure 5
2013 Quarterly Hydraulic Gradient Summary	Table 11
2013 Community Monitoring Well Soil Vapor Monitoring	Table 12

### **Treatment System Monitoring and Maintenance Inspections**

Maintaining the Site remedial elements is critical to the remedial performance. Therefore, daily, weekly, and monthly inspections of the monitoring points (wells and piezometers), the Landfill cap, and the security fence surrounding the landfill have been included in the PMP.

Although not a requirement of the SRPE Report, the monitoring program for the Site groundwater treatment system is discussed briefly in this report.

Analytical results from the treatment system monitoring program have been presented previously in the 2013 Quarterly Operations Reports. These include the following:

- Daily treated effluent total water flows
- Weekly treated effluent APL sampling
- Quarterly treated effluent APL sampling

The following treatment system monitoring was also conducted in 2013:

2013 Quarterly NAPL Decanter Volume Monitoring	Table 13
2013 Weekly Carbon Interstage APL Sampling	Table 14
2013 Quarterly Leachate Feed APL Sampling	Table 15
2013 Quarterly Sac Bed Interstage APL Sampling	Table 16
Summary of Source Control Well Pumping 2009 - Present	Table 17

### **Assessment and Evaluation of Results**

The following subsections present assessments and evaluations of the data collected for each of the monitoring systems.

#### **Overburden Monitoring Program**

The 2013 SC well pumping data is presented in Table 2. The 2013 pumping data indicate that the majority of material removed from the wells is APL, with NAPL accounting for only 16.7% of the total volume purged.

The overburden groundwater elevation data, presented in Table 3, were used to generate groundwater potentiometric surface maps that were presented previously in the 2013 Quarterly Operations Reports. The overburden potentiometric surface maps for each quarter of 2013 indicated containment.

NAPL presence checks are to be completed annually in the Overburden Barrier Collection System (OBCS) Overburden Monitoring Wells (OMWs) and the OBCS manholes. The NAPL presence monitoring data from the OMW wells and manholes, presented in Table 4, indicate that NAPL was present in 5 of the 17 manholes monitored (MH-29, MH-30, MH-31, MH-32, and MH-33). These manholes are located at the southwest corner of the landfill. Table 4 indicates that NAPL is not present in any of the overburden groundwater monitoring wells. These wells are located outside of the OBCS, to the south, west, and northwest of the 5 manholes with NAPL present (see Figure 2). The lack of NAPL presence in these OMW wells indicate that overburden NAPL is contained within the boundaries of the OBCS and is not bypassing the OBCS.

The OBCS and Existing Barrier Collection System (EBCS) monthly average flow rates, presented in Table 5, indicate seasonal fluctuations in flow rates with the highest average flow rates occurring during the winter and spring months.

Based on the overburden data collected in 2013, shown in Tables 2 through 5, the overburden monitoring systems are operating as designed, and overburden containment is being achieved.

**Deviations from Overburden Monitoring Program**

There were no deviations from the overburden monitoring program during 2013.

**Bedrock Monitoring Program**

The bedrock flow zone groundwater elevation data, presented in Table 6, were used to generate groundwater potentiometric surface maps for each of the monitored flow zones. These maps have been presented previously in the 2013 Quarterly Operations Reports. The potentiometric surface maps for each monitored flow zone during each quarter of 2013 indicated containment.

The 2013 bedrock purge well monthly average flow rate data, presented in Table 7, is consistent with historic flow rates.

The purge well operating water level elevations have been presented previously in the Quarterly Operations Reports. A review of those reports indicates that, with the exception of normal maintenance issues and the exceptions noted in the following "2013 PW-5UR Repairs" and "2013 PW-1U Repairs" sections presented later in this document, the water levels were maintained within target setpoint ranges at each of the purge wells throughout 2013.

In addition to maintaining water levels within target setpoint ranges in the purge wells, the water level in flow zone FZ-09 in the area between the landfill and the APL purge wells (APW-1 and APW-2) is to be maintained at an elevation of 526 feet above mean sea level (AMSL) or lower. This level ensures that the FZ-09 outcrop along the New York Power Authority (NYPA) access road remains unsaturated. Piezometer PMW-1M-09 is used to monitor flow zone FZ-09 water level elevation in this area. A pressure transducer/recorder was installed in PMW-1M-09 in December 2006. The data logger has been programmed to collect water level data at 1-hour intervals. These continuous water level elevation data were reported in the 2013 Quarterly Operation Reports. Based on the hourly data from this pressure transducer, the water level elevation in this area of FZ-09 was maintained at an average elevation of 517.39 feet AMSL throughout 2013, with a maximum elevation observed of 522.07 feet AMSL, below the 526 feet AMSL action elevation setpoint. These data are corroborated by the quarterly hand water level measurements of PMW-1M-09 presented in Table 6, which show an average water level of 517.08 feet AMSL in 2013.

Groundwater samples were collected quarterly during 2013 and included the Group "B" Bedrock piezometers. The sampling results are presented in Tables 8A through 8D. Samples were analyzed for the Site-specific list of organic acids. Site-specific screening levels presented in the PMP have been added to these tables, and exceedances of these values have been highlighted.

A review of the 2013 data for the quarterly Group "B" Bedrock piezometer sampling event indicated that samples from a number of locations exhibited concentrations that exceeded Site-specific screening levels, as summarized below:

<b>Site Organic Indicators</b>	<b>Location Exceeding Site-Specific Screening Level</b>
Chlorendic Acid	AGW-1M-07, AGW-1M-09, AGW-1U-06, B2L-11, D1M-09, D1U-04, D1U-05, F2U-02, F2U-04, G6-04, H2U-02, H5-09

The above exceedances are generally consistent with results from the quarterly Group "B" sampling events conducted in previous years.

The 5<sup>th</sup> quarter sampling event for the Group "A" Bedrock piezometers was not scheduled for 2013, however it will be conducted in 2014 and the results presented in the 2014 SRPE.

The Bloody Run Creek Monitoring of four monitoring wells is required to be conducted every 5 years. The next sampling event is scheduled to be conducted in 2016.

Additional monitoring associated with Bloody Run Creek was performed in accordance with the PMP in 2013. The annual NAPL presence check at the open catch basin on the north side of the Greif Bros. building was conducted on March 18, 2013. NAPL was not present in the catch basin at that time. The annual collection of an APL sample from the open catch basin was performed on October 1, 2013. The sample was analyzed for organic acids. The data are presented in Table 9. All organic acid parameters were non-detect. Therefore, there were no exceedances of the Site-specific screening levels.

The bedrock groundwater data collected in 2013 demonstrate that the APL and NAPL purge well systems are operating properly, and containment is being maintained in each of the flow zones. No changes to the bedrock purge or monitoring systems are recommended at this time.

### **2013 PW-1U Repairs**

As reported in the 2012 SRPE Report, this well showed decreasing flows in October 2012 due to possible silt infiltration into the well. This open interval of this well spans two flow zones: Flow Zones 5 and 6. Investigation and packer testing showed that the main source of water for the well was Flow Zone 5. It also concluded that this zone was the likely source of silt. Since sealing off the major source of water to the well was not feasible, the well was instead redeveloped and the pump cleaned in November 2012. Flow rates improved but began decreasing again in February 2013, and the pump was again pulled, cleaned, and replaced. The pump has maintained a water level in the well within the target setpoint range and flows remained stable for the remainder of 2013.

### **2013 PW-5UR Repairs**

This pumping well is located on the Tam Ceramics Property located to the south of the Site. Water level and pumping issues due to infiltration into the well and well chamber from an outside source continued to persist in 2013. The persistent infiltration causes the pump to become clogged with fines, which reduces the pumping capacity and leads to the pump burning out prematurely. After being replaced three times in the first quarter of 2013, a larger pump and motor were installed on June 18, 2013. The

new pump in this well operated consistently for the remainder of 2013, maintaining a water level within the target setpoint range. GSH is in discussions with Tam Ceramics regarding the source of water infiltrating into the well chamber.

### **Deviations from Bedrock Monitoring Program**

There were no deviations from the bedrock monitoring program during 2013.

### **Community Monitoring Program**

#### **APL Plume Flux Sampling**

The APL plume flux composite sampling results are presented in Table 10. None of the APL plume flux parameters were detected above their respective reporting levels. As a result, calculation of the flux to the Niagara River Gorge was not required.

#### **Quarterly Hydraulic Gradient Summary**

Table 11 presents a summary of water level elevations and vertical hydraulic gradients at the paired community monitoring wells for each quarter of 2013. Downward vertical hydraulic gradients were maintained at each of the well pairs throughout the year.

#### **Soil Vapor Monitoring**

Results of soil vapor monitoring are presented in Table 12. There were no exceedances (greater than 0.050 parts per billion by volume [ppbv] above background) of total VOCs at any of the soil vapor monitoring locations during 2013.

#### **Gorge Face Seep Survey**

The biennial Gorge Face Seep Survey was conducted in May 30, 2013 and the results are presented in Attachment 1. The next Gorge Face Seep Survey will be conducted during the summer of 2015.

### **Deviations from Community Monitoring Program**

There were no deviations from the Community Monitoring Program during 2013.

### **Treatment System Monitoring and Maintenance Inspections**

The treatment system is monitored on a daily, weekly, and quarterly basis to ensure compliance with the discharge requirements. The 2013 NAPL decanter volume monitoring data are presented in Table 13. The volume of NAPL for each quarter is based on the percentage of NAPL in each decanter. The weekly carbon interstage APL sampling results are presented in Table 14. The 2013 quarterly

leachate feed APL sampling results are presented in Table 15. The quarterly sac bed interstage APL sampling results are presented in Table 16.

An annual inspection of the active monitoring wells and piezometers is conducted to ensure that the casings and caps are secure and in good condition. Well depths are also monitored for possible infilling. The annual well inspections were conducted from March 5 to March 18, 2013.

Maintaining the Landfill cap minimizes the potential for a breach of the cap and ensures a long operational life. The cap is routinely inspected during field sampling events. This is an informal inspection and is conducted once per year. Records of the cap inspection are maintained at the Site.

The Landfill fence was inspected informally every weekday by a walkover or drive-by inspection and the results are included on the daily Site inspection sheet which are maintained at the Site.

### **Deviations from Treatment System Monitoring Program And Maintenance Inspections**

There were no deviations from the treatment system monitoring and maintenance inspections in 2013.

### **Recommendations**

The 2010, 2011, and 2012 SRPEs recommended that monthly purging of the SC wells and subsequent water level and NAPL thickness measurements be discontinued. USEPA and NYSDEC have yet to approved this recommendation. GSH has reviewed this recommendation based on data collected in 2013 as discussed below.

From 2009 to 2013 monthly water level and NAPL thickness measurements were obtained, and the total gallons purged per month were recorded. A summary of the SC well pumping from 2009 through 2013 is presented in Table 17. An annual summary of the APL and/or NAPL gallons removed during the monthly purging of the SC wells from 2006 through 2013 is as follows:

<b>Year</b>	<b>Gallons Purged from SC Wells</b>
2006	799
2007	287
2008	236
2009	173
2010	155
2011	262
2012	339
2013	316

The above purge data show that since the implementation of the 2006 PMP, the amount of APL and/or NAPL purged from the SC wells has declined and stabilized. Monthly SC water level and NAPL thickness data from 2009 through 2013 show that the SC wells do not produce significant amounts of NAPL. In

March 31, 2014

Reference No. 001069

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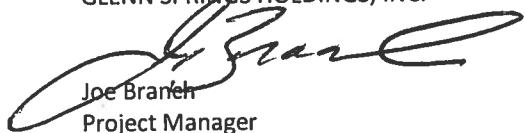
2013, the volume of NAPL observed in the wells was only 16.7% of the total volume of APL/NAPL purged. This equates to 53 gallons of NAPL.

Based on the above, GSH believes that monthly purging of the SC wells and subsequent water level and NAPL thickness measurements should still be discontinued; however, it is recommended that the frequency be changed to quarterly for one year. After one year, the original recommendation to discontinue will be reevaluated.

An electronic copy of this report is included on the attached CD as an Adobe® Acrobat® file. If you have any questions, please feel free to contact me at 231-670-6809 or Jane Polovich at 716-297-6150.

Very truly yours,

GLENN SPRINGS HOLDINGS, INC.



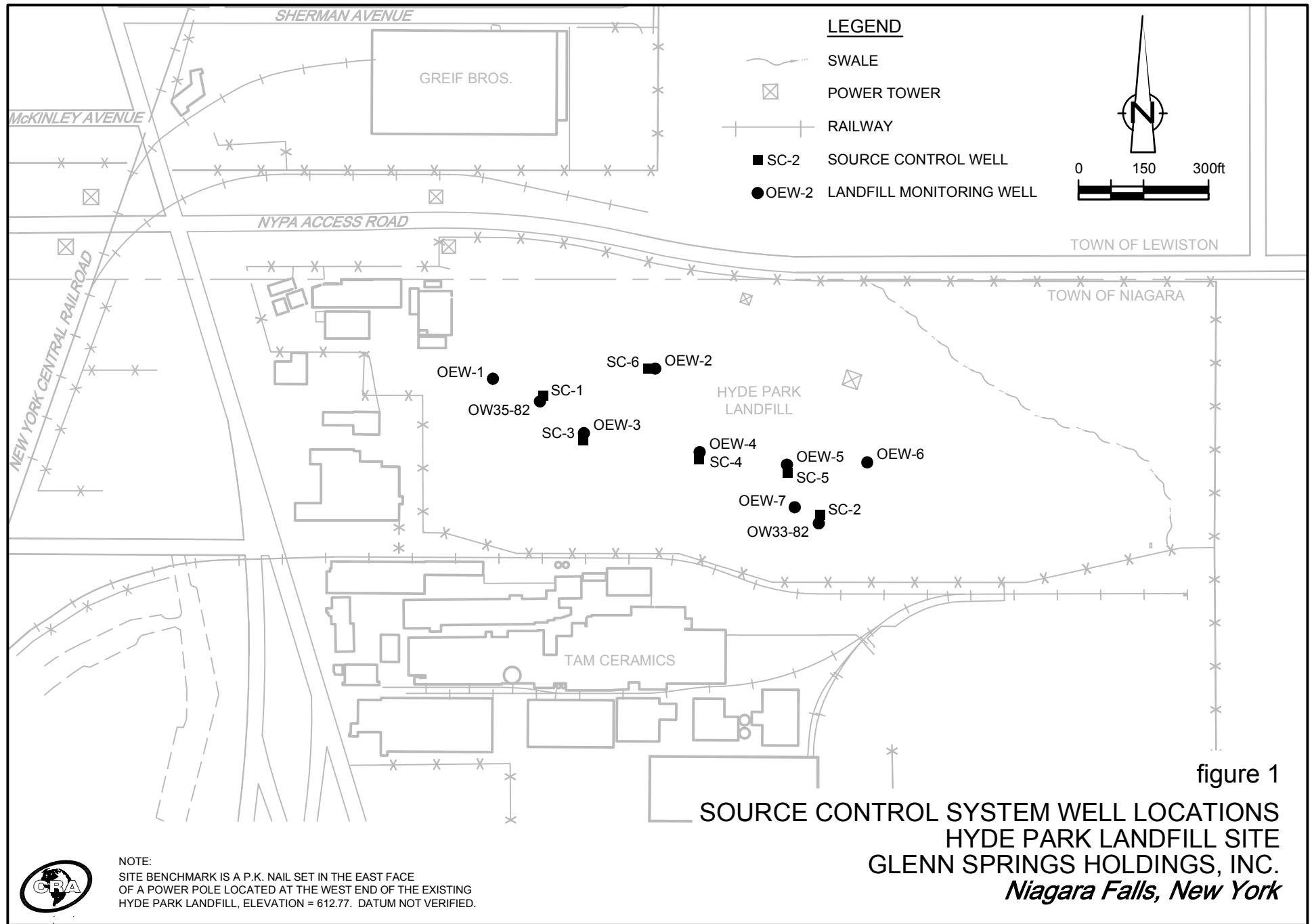
Joe Branch  
Project Manager  
231-670-6809 Cell

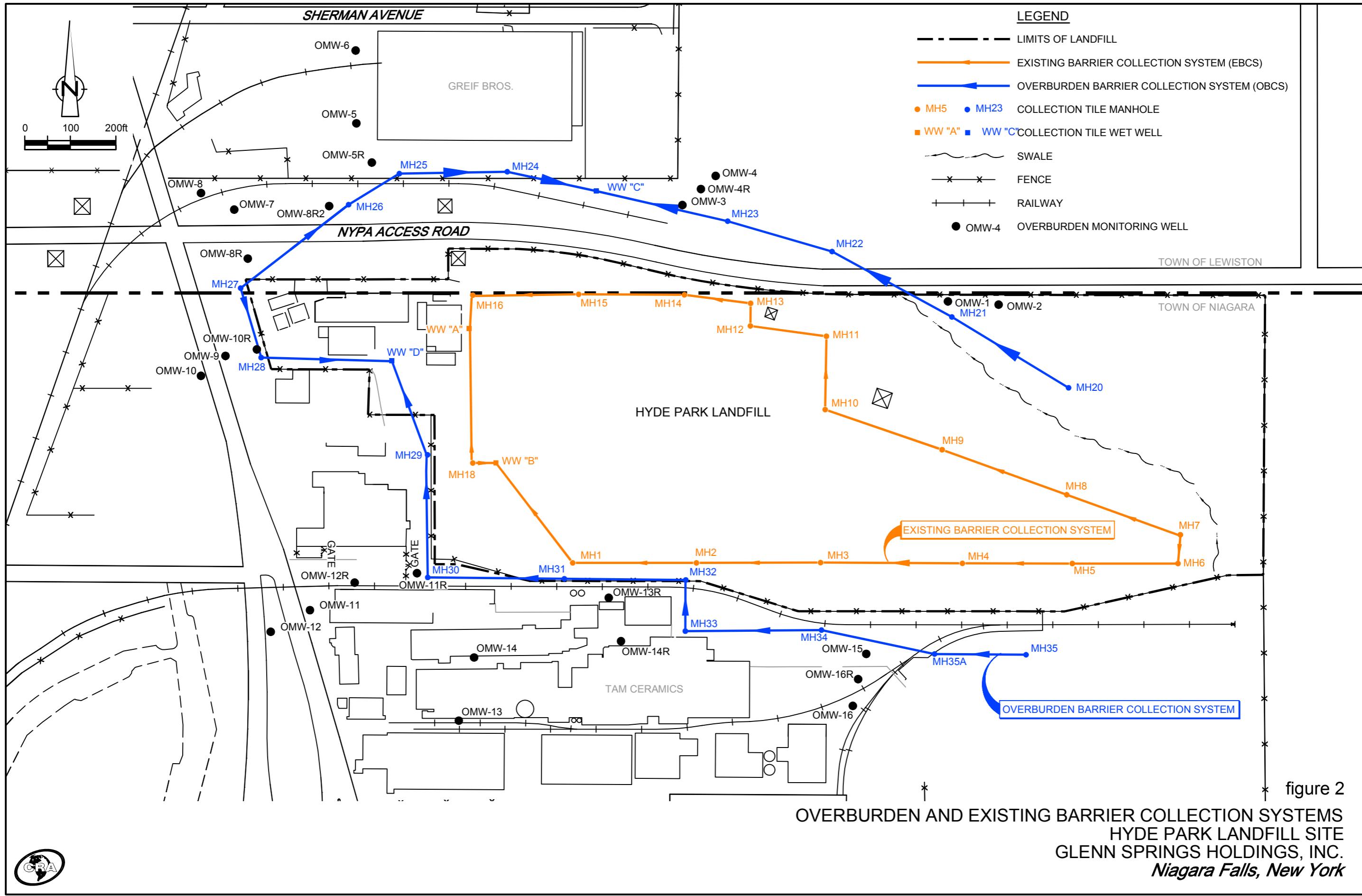
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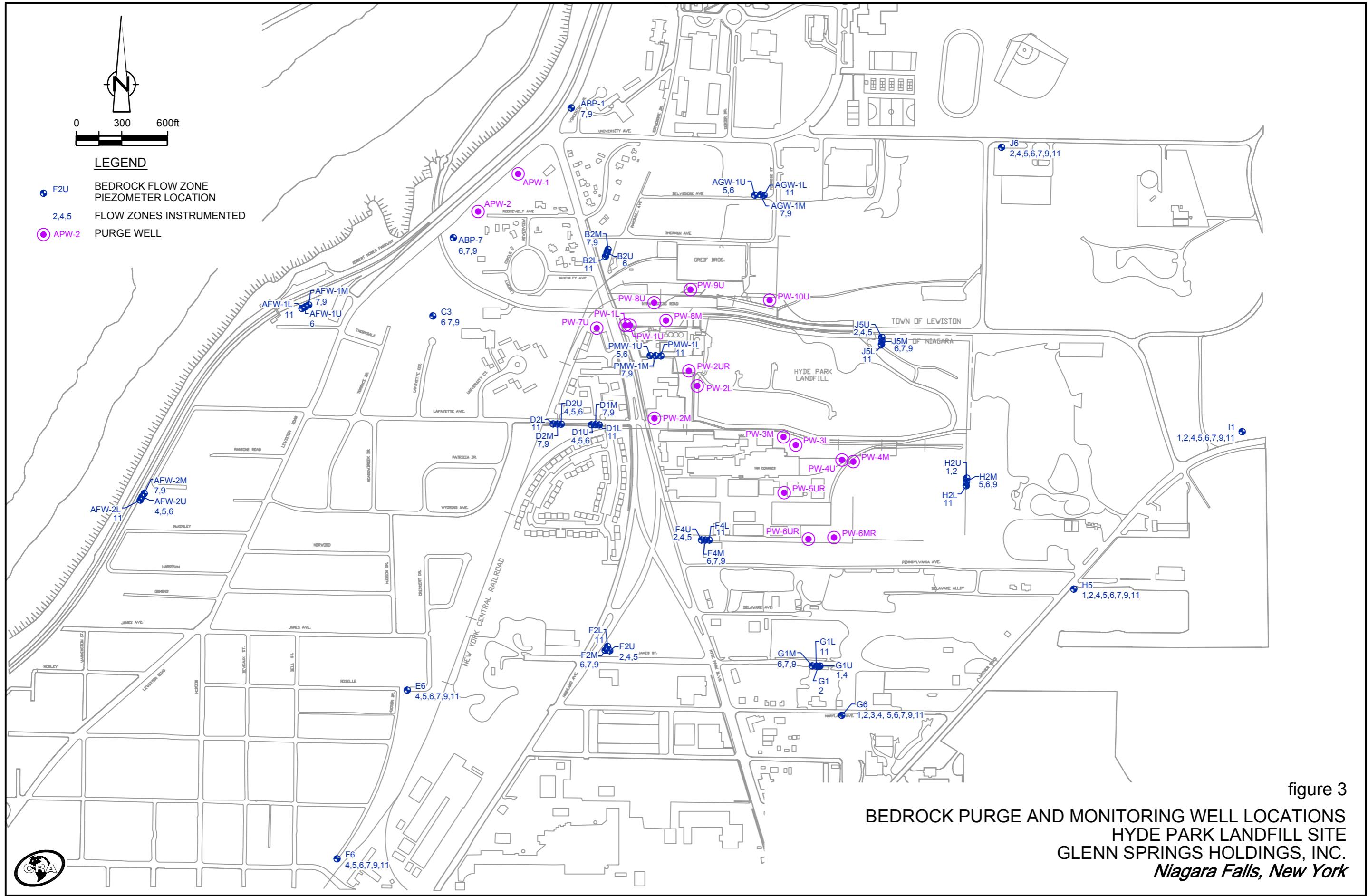
c.c.:	M. Anderson, GSH (1)	J. Polovich, CRA (email)	C. Babcock, GSH (1)
	B. Sadowski, NYSDEC (CD Only)	M. Forcucci, NYSDOH (1*)	G. Sosa, USEPA (4*)
		J. Pentilchuk, CRA (email)	

\*Includes one copy on CD

## **Figures**







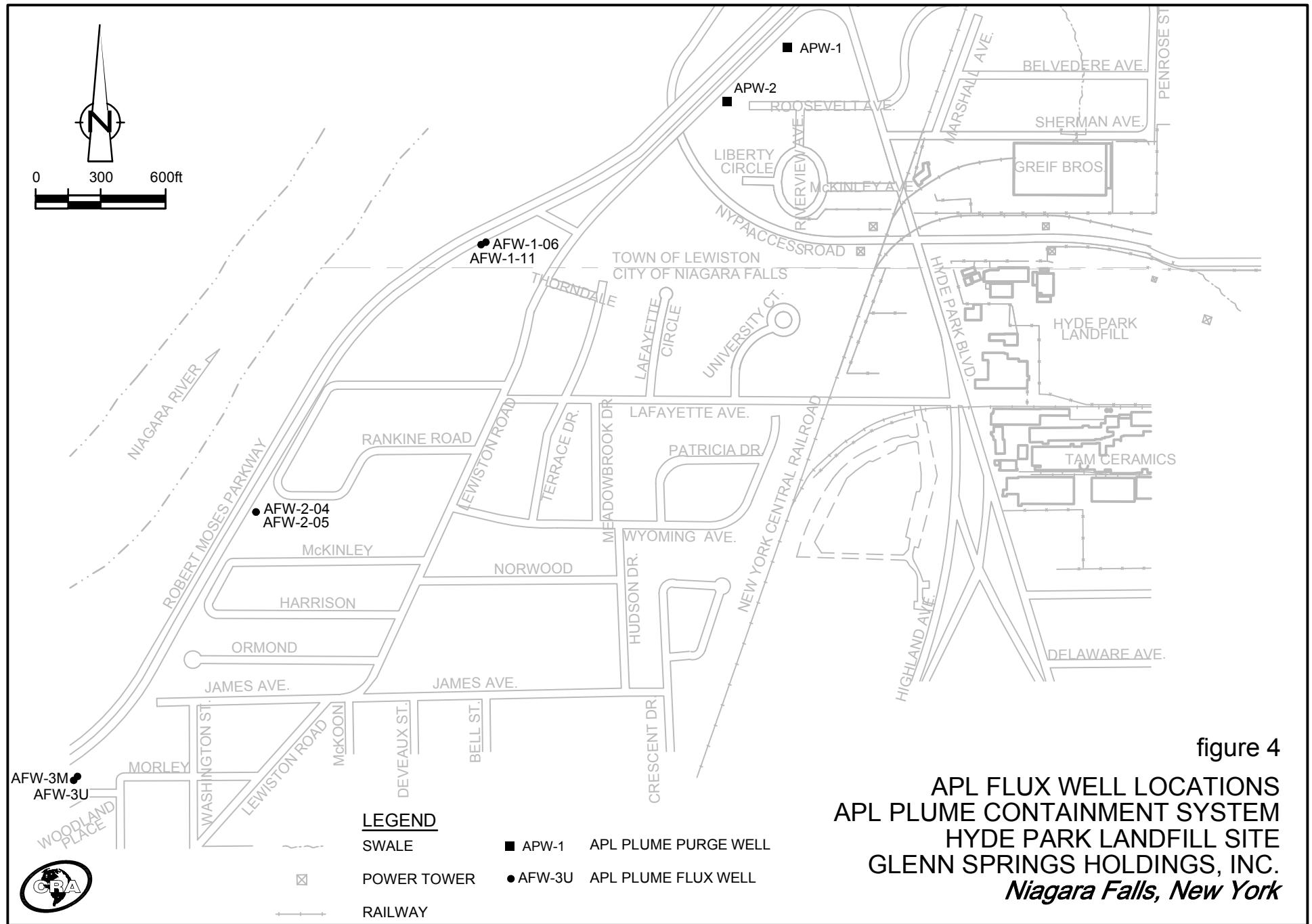
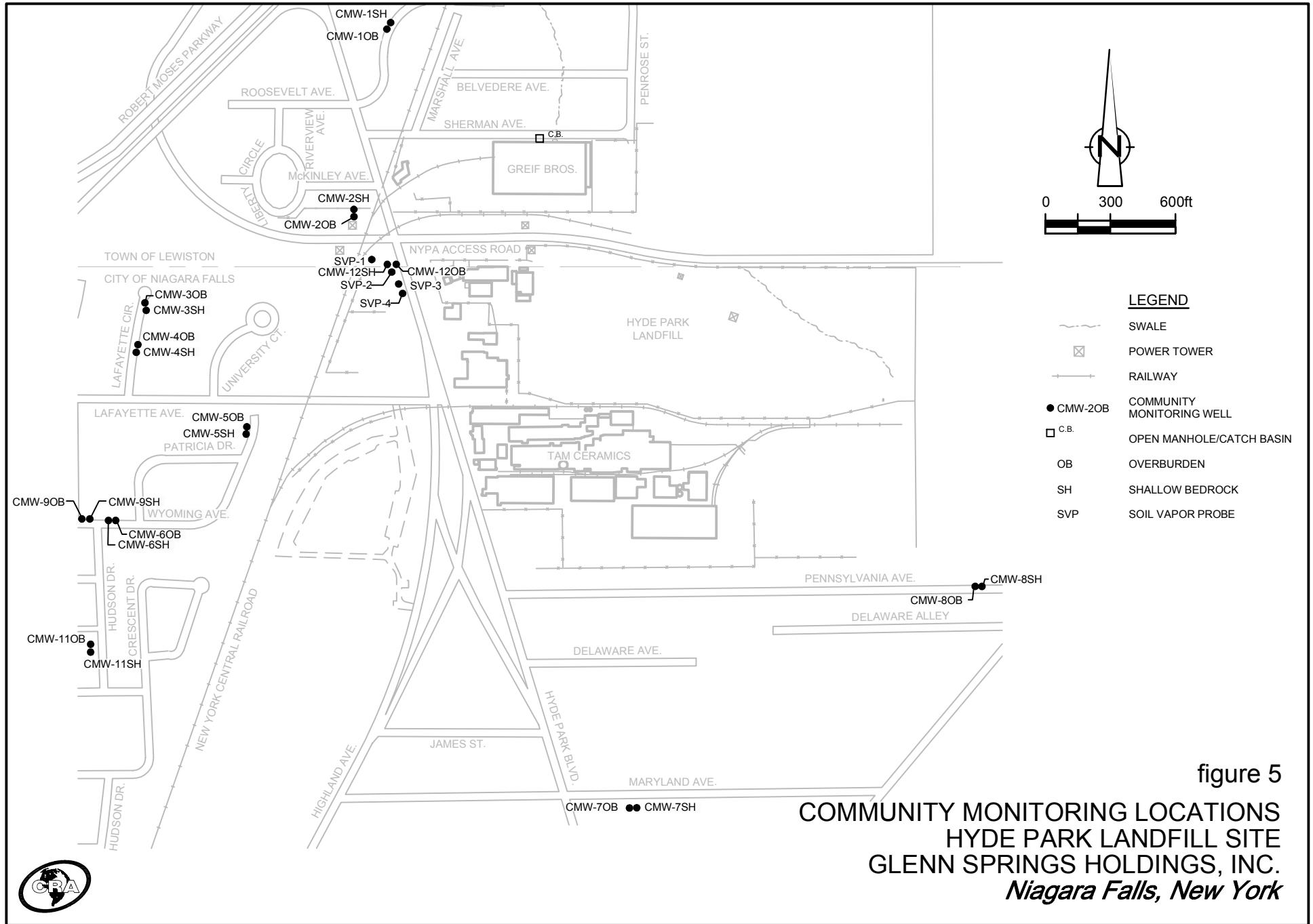


figure 4

APL FLUX WELL LOCATIONS  
APL PLUME CONTAINMENT SYSTEM  
HYDE PARK LANDFILL SITE  
GLENN SPRINGS HOLDINGS, INC.  
*Niagara Falls, New York*



## Tables

TABLE 1

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**PMP MONITORING TASKS - 2013**  
**HYDE PARK LANDFILL SITE**  
**TOWN OF NIAGARA, NEW YORK**

<b>Program</b>	<b>Frequency</b>	<b>Activity</b>	<b>Location/Description</b>	<b>PMP Table Reference</b>	<b>SRPE Report Reference</b>	<b>Completed (Yes/No)</b>	<b>Comment</b>
<b><u>Overburden</u></b>							
	Continuous	Water Level Measurement	Wet Wells	--	--	Yes	
	Daily	Total Water Flow	Decanters	--	--	Yes	
	Monthly	Purge NAPL Water Level Measurement NAPL Thickness	Source Control NAPL Recovery Wells Source Control NAPL Recovery Wells Source Control NAPL Recovery Wells	Table 3.3 Table 3.3 Table 3.3	Table 2 Table 2 Table 2	Yes Yes Yes	
	Quarterly	Hand Water Level Measurement Hand Water Level Measurement Hand Water Level Measurement NAPL Thickness	Manholes OBCS Overburden Monitoring Wells Source Control Monitoring Wells Source Control Monitoring Wells	Table 3.2 Table 3.2 Table 3.3 Table 3.3	Table 3 Table 3 Table 3 --	Yes Yes Yes Yes	
	Annual	NAPL Presence NAPL Presence	Manholes OBCS Overburden Monitoring Wells	Table 3.2 Table 3.2	Table 4 Table 4	Yes Yes	
<b><u>Bedrock</u></b>							
	Continuous	Water Level Measurement	NAPL and APL Purge Wells	Table 4.1	--	Yes	
	Hourly	Water Level Measurement	Bedrock Piezometer PMW-1M-09	--	--	Yes	See quarterly reports.
	Daily	Total Water Flow	Decanters	--	--	Yes	
	Monthly	Total Water Flow	Bedrock Purge Wells	--	Table 7	Yes	
	Quarterly	Hand Water Level Measurement APL Sampling	All Bedrock Piezometers Group B Bedrock Piezometers	-- Table 4.2	Table 6 Tables 8 a-d	Yes Yes	
	Every 5th Quarter	APL Sampling	Group A Bedrock Piezometers	Table 4.2	--	--	None in 2013.
	Annual	APL Sampling NAPL Presence	Open Catch Basin Open Catch Basin	-- --	Table 9	Yes Yes	None present.
	Five-Year	APL Sampling APL Sampling	Bloody Run Monitoring Wells Operating APL and NAPL Purge Wells	Table 7.1 Table 7.1	-- --	-- --	Due 2016 Due 2016

TABLE 1

Page 2 of 2

**PMP MONITORING TASKS - 2013**  
**HYDE PARK LANDFILL SITE**  
**TOWN OF NIAGARA, NEW YORK**

<b>Program</b>	<b>Frequency</b>	<b>Activity</b>	<b>Location/Description</b>	<b>PMP Table Reference</b>	<b>SRPE Report Reference</b>	<b>Completed (Yes/No)</b>	<b>Comment</b>
<b><u>Community</u></b>							
	Quarterly	Hand Water Level Measurement Hand Water Level Measurement	Bedrock Monitoring Wells Overburden Monitoring Wells	Table 5.4 Table 5.4	Table 11 Table 6	Yes Yes	
	Annual	APL Plume Flux Composite Sample Vapor Monitoring	APL Flux Piezometers and Purge Wells (APWs and AFWs) Overburden Monitoring Wells	Table 5.3/App D Table 5.4	Table 10 Table 12	Yes Yes	
	Biennial	Gorge Face Seep Inspection	Seeps	Table 5.2	Att 1	Yes	
<b><u>Treatment</u></b>							
	Continuous	APL Sampling Total Water Flow	Treated Effluent Treated Effluent	Table 6.1 Table 6.1	-- --	Yes Yes	See quarterly reports. See quarterly reports.
	Weekly	APL Sampling APL Sampling	Carbon Interstage Treated Effluent	Table 6.1 Table 6.1	Table 14 --	Yes Yes	See quarterly reports.
	Quarterly	NAPL Volumes APL Sampling APL Sampling APL Sampling	Decanters Leachate Feed Sac Bed Interstage Treated Effluent	-- Table 6.1 Table 6.1 Table 6.1	Table 13 Table 15 Table 16 --	Yes Yes Yes Yes	See quarterly reports.
<b><u>Maintenance</u></b>							
	Weekly	Fence Inspections	--	App A	--	Yes	
	Annual	Well Inspections Cap Inspection	-- --	App A App A	-- --	Yes Yes	
<b><u>Site-Wide</u></b>							
	Quarterly	Report	--	--	--	Yes	
	Annual	Report	--	--	--	Yes	
	Five-Year	Report	--	--	--	--	Due 2016

Notes:

APL = Aqueous phase liquid.

NAPL = Non-aqueous phase liquid.

OBCS = Overburden Barrier Collection System.

PMP = Performance Monitoring Plan.

SRPE = Site Performance Evaluation Report.

-- = Not Applicable.

TABLE 2

Page 1 of 1

**2013 SOURCE CONTROL WELL PUMPING SUMMARY**  
**HYDE PARK LANDFILL SITE**  
**TOWN OF NIAGARA, NEW YORK**

<b>Month</b>	<b>SC-2</b>		<b>SC-3</b>		<b>SC-4</b>		<b>SC-5</b>		<b>SC-6</b>		<b>Total Volume Pumped (gallons)</b>
	<b>NAPL Thickness (feet)</b>	<b>Water Level Elevation (ft. AMSL)</b>	<b>NAPL Thickness (feet)</b>	<b>Water Level Elevation (ft. AMSL)</b>	<b>NAPL Thickness (feet)</b>	<b>Water Level Elevation (ft. AMSL)</b>	<b>NAPL Thickness (feet)</b>	<b>Water Level Elevation (ft. AMSL)</b>	<b>NAPL Thickness (feet)</b>	<b>Water Level Elevation (ft. AMSL)</b>	
January	1.0	602.2	0.0	606.1	0.8	613.7	0.9	608.9	0.0	615.1	52
February	1.0	603.2	0.0	606.3	1.0	613.9	0.8	609.1	0.0	615.2	39
March	1.7	603.2	0.0	606.1	1.2	612.9	1.1	607.9	0.0	614.8	22
April	1.7	604.6	0.0	606.4	1.2	612.1	1.0	607.0	0.0	614.1	57
May	2.1	605.6	0.0	608.5	1.0	613.1	1.0	606.9	0.0	614.2	15
June	2.7	606.5	0.0	608.8	0.8	615.1	1.2	607.1	0.0	614.9	77
July	2.5	606.0	0.0	608.4	0.8	613.1	1.3	607.2	0.0	615.1	0
August	2.3	605.4	0.0	607.3	1.0	612.0	1.3	607.1	0.0	613.9	20 <sup>(1)</sup>
September	2.2	598.6	0.0	606.4	1.0	611.9	1.3	607.1	0.0	612.8	20 <sup>(1)</sup>
October	2.2	598.6	0.0	606.4	1.5	603.9	1.3	607.1	0.0	612.1	8
November	2.3	598.6	0.0	606.3	1.3	603.5	1.2	607.7	0.0	611.2	6
December	1.7	601.4	0.0	608.3	1.5	605.2	1.5	607.6	0.0	612.1	0

Notes:

ft. AMSL Feet above mean sea level.

NAPL Non-aqueous phase liquid.

(1) Estimated volume due to totalizer problems.

TABLE 3

Page 1 of 1

**2013 OVERBURDEN QUARTERLY GROUNDWATER ELEVATION SUMMARY**  
**HYDE PARK LANDFILL SITE**  
**TOWN OF NIAGARA, NEW YORK**

<b>Well</b>	<b>Reference Elevation</b>  (ft. AMSL)	<b>Water Level Elevation</b>		<b>Water Level Elevation</b>		<b>Water Level Elevation</b>	
		<b>Quarter 1</b> <b>3/7/2013</b>		<b>Quarter 2</b> <b>6/3/2013</b>		<b>Quarter 3</b> <b>9/3/2013</b>	
		<b>(ft. AMSL)</b>	<b>(ft. AMSL)</b>	<b>(ft. AMSL)</b>	<b>(ft. AMSL)</b>	<b>(ft. AMSL)</b>	<b>(ft. AMSL)</b>
OMW-1	605.28	600.75	601.29	598.06	600.89		
OMW-2	605.99	603.50	603.55	600.20	603.55		
OMW-3	598.63	594.25	592.28	588.01	589.35		
OMW-4R	601.17	590.31	590.08	589.54	590.05		
OMW-5R	591.31	587.10	587.62	584.61	586.24		
OMW-6	587.62	585.50	585.88	585.34	585.49		
OMW-7	592.74	585.29	585.91	584.21	585.37		
OMW-8R2	594.67	586.98	588.06	585.06	586.88		
OMW-9	595.52	587.91	588.67	587.13	587.94		
OMW-10R	595.13	586.91	588.32	586.22	586.52		
OMW-11R	597.52	592.64	592.20	591.40	592.62		
OMW-12R	596.79	592.82	592.88	591.48	592.44		
OMW-13R	601.50	592.34	592.41	592.41	582.32		
OMW-14R	599.64	594.02	593.79	592.91	593.64		
OMW-15	607.48	603.29	602.89	602.02	603.09		
OMW-16R	607.62	603.68	603.62	601.79	603.57		
SC-2	625.61	603.27	603.29	600.03	595.92		
SC-3	638.72	598.54	598.57	598.51	598.58		
SC-4	639.35	597.17	601.06	601.04	601.17		
SC-5	634.07	- <sup>(1)</sup>	- <sup>(1)</sup>	- <sup>(1)</sup>	- <sup>(1)</sup>		
SC-6	631.15	613.60	614.34	611.50	611.06		
MH-20	605.87	601.21	601.21	601.04	NA		
MH-21	599.77	593.68	593.68	593.68	NA		
MH-22	593.37	586.63	586.70	586.47	NA		
MH-23	587.05	575.27	577.17	574.81	NA		
MH-24	582.57	577.40	579.19	575.94	NA		
MH-25	583.82	579.05	580.83	577.60	NA		
MH-26	584.48	578.17	580.00	576.70	NA		
MH-27	586.12	576.49	578.23	575.59	NA		
MH-28	585.23	575.69	577.38	574.32	NA		
MH-29	582.90	592.86	594.60	591.75	NA		
MH-30	588.37	589.48	589.77	589.45	NA		
MH-31	590.10	580.59	580.59	580.53	NA		
MH-32	592.01	582.41	582.44	582.41	NA		
MH-33	592.51	583.87	583.90	583.83	NA		
MH-34	597.64	591.24	591.27	591.25	NA		
MH-35	605.69	599.19	599.20	599.20	NA		
MH-35A	605.69	598.56	598.60	598.58	NA		

## Notes:

- Dry No water present in well.  
 ft. AMSL Feet above mean sea level.  
 - Not available.  
<sup>(1)</sup> Well obstructed, could not get measurement tape past 20.50 feet.

TABLE 4

Page 1 of 1

**2013 OVERBURDEN NAPL PRESENCE MONITORING  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK**

<i>Well I.D.</i>	<i>March 7 - 18, 2013</i> <i>(Yes/No)</i>
OMW-1	No
OMW-2	No
OMW-3	No
OMW-4R	No
OMW-5R	No
OMW-6	No
OMW-7	No
OMW-8R2	No
OMW-9	No
OMW-10R	No
OMW-11	No
OMW-12R	No
OMW-13R	No
OMW-14R	No
OMW-15	No
OMW-16R	No
MH-20	No
MH-21	No
MH-22	No
MH-23	No
MH-24	No
MH-25	No
MH-26	No
MH-27	No
MH-28	No
MH-29	Yes
MH-30	Yes
MH-31	Yes
MH-32	Yes
MH-33	Yes
MH-34	No
MH-35	No
MH-35A	No
Wet Well C	No
Wet Well D	Yes
Bedrock Open Catch Basin	No

TABLE 5

Page 1 of 1

**2013 OVERBURDEN COLLECTION SYSTEMS MONTHLY AVERAGE FLOW (GPM) SUMMARY**  
**HYDE PARK LANDFILL SITE**  
**TOWN OF NIAGARA, NEW YORK**

<i>Month</i>	<i>EBCS WET WELL A</i>	<i>OBCS WET WELL C</i>	<i>OBCS WET WELL D</i>	<i>Total EBCS</i>	<i>Total OBCS</i>
January	0.3	20.8	16.0	0.3	36.8
February	0.6	26.4	26.9	0.6	53.3
March	1.2	21.1	20.9	1.2	42.0
April	1.1	18.6	16.8	1.1	35.4
May	0.3	7.6	5.9	0.3	13.5
June	1.1	20.3	22.8	1.1	43.0
July	0.8	13.2	12.1	0.8	25.3
August	0.3	6.0	2.4	0.3	8.4
September	0.0	3.1	1.8	0.0	4.9
October	0.0	14.8	1.1	0.0	16.0
November	0.7	24.9	3.7	0.7	28.7
December	1.6	21.8	20.0	1.6	41.8
Annual Average	0.7	16.6	12.5	0.7	29.1

Notes:

- GPM      Gallons per minute.
- EBCS    Existing barrier collection system.
- OBCS    Overburden barrier collection system.

TABLE 6

Page 1 of 3

**2013 BEDROCK QUARTERLY WATER LEVEL ELEVATION SUMMARY - PIEZOMETERS**  
**HYDE PARK LANDFILL SITE**  
**TOWN OF NIAGARA, NEW YORK**

<b>Well</b>	<b>Reference Elevation</b>	<b>Water Level Elevation</b>	<b>Water Level Elevation</b>	<b>Water Level Elevation</b>	<b>Water Level Elevation</b>
		<b>Quarter 1</b> <b>3/7/2013</b>	<b>Quarter 2</b> <b>6/3/2013</b>	<b>Quarter 3</b> <b>9/3/2013</b>	<b>Quarter 4</b> <b>12/4/2013</b>
	<b>(ft. AMSL)</b>	<b>(ft. AMSL)</b>	<b>(ft. AMSL)</b>	<b>(ft. AMSL)</b>	<b>(ft. AMSL)</b>
<b>Flow Zone 1</b>					
G1U-01	617.08	604.79	605.19	601.23	602.57
G6-01	609.24	604.74	605.05	601.41	602.83
H2U-01	620.92	613.81	614.07	609.25	611.95
H5-01	617.61	595.61	595.42	593.87	595.39
I1-01	625.58	602.95	601.30	599.03	599.49
<b>Flow Zone 2</b>					
F2U-02	599.89	576.30	576.58	574.56	575.85
F4U-02	602.32	587.48	587.20	585.58	587.18
G1-02	616.86	592.76	593.14	591.37	592.57
G6-02	608.65	592.24	592.50	590.84	591.83
H2U-02	620.88	595.30	595.09	593.27	594.62
H5-02	617.47	595.02	594.79	593.20	594.35
I1-02	625.47	593.51	588.09	586.79	589.34
J2U-02	609.66	599.66	599.69	592.37	599.10
JSU-02	606.21	599.96	599.30	593.02	598.79
J6-02	609.23	600.71	599.94	592.75	599.42
<b>Flow Zone 4</b>					
AFW-2U-04	593.48	577.67	576.90	575.70	576.72
D1U-04	593.77	583.02	583.16	579.70	582.53
D2U-04	590.65	582.48	582.88	578.42	580.98
E6-04	578.23	565.59	565.92	564.54	565.14
F2U-04	599.76	579.03	579.14	577.01	578.51
F4U-04	602.19	587.48	586.73	585.47	586.96
F6-04	588.06	570.31	570.68	570.06	570.37
G1U-04	616.96	592.54	592.53	590.59	592.13
G6-04	609.15	592.59	592.83	591.20	592.18
H5-04	617.40	594.89	594.72	593.14	594.26
I1-04	625.30	588.90	586.51	582.55	586.24
J2U-04	609.42	596.71	596.55	590.38	595.84
JSU-04	606.05	589.58	588.32	584.86	587.71
J6-04	609.12	583.60	582.97	578.44	581.93
<b>Flow Zone 5</b>					
AFW-2U-05	593.33	577.51	577.00	575.40	576.49
AGW-1U-05	591.80	588.07	588.32	580.58	587.17
D1U-05	593.51	581.36	581.12	578.61	580.90
D2U-05	590.56	581.26	581.07	578.81	580.75
E6-05	578.04	567.33	568.25	566.04	566.84
F2U-05	599.64	579.33	579.29	577.28	578.93
F4U-05	602.06	586.48	585.87	584.06	585.98
F6-05	587.85	570.20	570.57	569.95	570.26
G6-05	609.13	591.69	591.87	590.25	591.24
H2M-05	621.59	595.23	593.90	592.59	593.53
H5-05	617.31	594.11	593.56	592.01	593.01
I1-05	625.25	556.52	557.43	556.46	553.66
J2U-05	609.30	581.98	581.42	576.77	580.22
JSU-05	605.87	581.99	581.49	576.75	580.20
J6-05	609.02	583.08	582.49	577.99	581.48
PMW-1U-05	598.00	579.02	577.79	576.52	577.96

TABLE 6

Page 2 of 3

**2013 BEDROCK QUARTERLY WATER LEVEL ELEVATION SUMMARY - PIEZOMETERS**  
**HYDE PARK LANDFILL SITE**  
**TOWN OF NIAGARA, NEW YORK**

<b>Well</b>	<b>Reference Elevation</b>	<b>Water Level Elevation</b>	<b>Water Level Elevation</b>	<b>Water Level Elevation</b>	<b>Water Level Elevation</b>
		<b>Quarter 1</b> <b>3/7/2013</b> <b>(ft. AMSL)</b>	<b>Quarter 2</b> <b>6/3/2013</b> <b>(ft. AMSL)</b>	<b>Quarter 3</b> <b>9/3/2013</b> <b>(ft. AMSL)</b>	<b>Quarter 4</b> <b>12/4/2013</b> <b>(ft. AMSL)</b>
<b>Flow Zone 6</b>					
ABP-7-06	575.78	Dry	-	-	-
AFW-1U-06	571.83	557.81	557.45	556.94	557.52
AFW-2U-06	593.22	545.20	545.20	545.20	545.16
AGW-1U-06	591.66	554.05	554.28	552.64	552.35
B2U-06	589.29	554.50	554.75	553.36	552.93
C3-06	585.78	548.54	Dry	-	-
D1U-06	593.25	547.78	547.38	547.05	546.88
D2U-06	590.38	548.43	547.86	548.12	547.77
E6-06	577.99	573.87	574.21	572.69	573.37
F2M-06	599.06	559.47	559.46	559.34	558.83
F4M-06	602.05	552.12	551.85	552.46	553.05
F6-06	587.84	573.88	574.23	572.73	573.37
G1M-06	616.75	574.03	574.34	572.83	573.45
G6-06	609.09	575.77	575.92	574.87	575.19
H2M-06	621.42	558.54	560.07	560.92	561.64
H5-06	617.17	587.55	588.25	588.65	588.36
I1-06	625.15	552.42	553.23	553.65	553.13
J2M-06	608.94	555.56	555.44	555.25	555.05
J5M-06	606.22	547.84	547.18	546.80	546.55
J6-06	608.93	556.57	557.16	556.70	555.76
PMW-1U-06	597.92	547.60	547.90	548.00	547.11
<b>Flow Zone 7</b>					
ABP-1-07	576.44	548.32	547.86	547.56	547.83
ABP-7-07	575.73	535.37	535.50	533.45	535.12
AFW-1M-07	571.41	Dry	-	-	-
AFW-2M-07	593.44	526.67	526.69	526.67	526.64
AGW-1M-07	592.91	554.28	558.03	555.58	550.95
B2M-07	589.52	545.71	544.91	540.65	540.01
C3-07	585.62	544.99	544.44	541.00	542.89
D1M-07	594.15	529.85	530.07	529.71	529.51
D2M-07	590.77	524.37	524.01	522.58	522.53
E6-07	577.91	554.44	554.61	554.53	554.32
F2M-07	598.91	518.54	518.24	517.15	517.69
F4M-07	601.91	531.33	531.60	530.97	530.44
F6-07	587.68	567.46	567.42	567.48	567.29
G1M-07	616.68	583.85	583.98	580.38	582.38
G6-07	609.06	582.79	583.13	579.82	581.61
H5-07	617.05	555.92	556.64	557.12	556.56
I1-07	625.14	553.22	556.04	553.50	550.87
J5M-07	606.07	554.66	557.29	554.45	551.41
J6-07	608.85	554.91	556.32	553.16	551.31
PMW-1M-07	598.50	533.17	532.69	532.82	533.07
<b>Flow Zone 9</b>					
ABP-1-09	575.49	534.89	534.87	534.56	534.85
ABP-7-09	575.67	535.54	535.51	531.88	534.91
AFW-1M-09	571.12	529.88	525.64	525.03	524.74
AFW-2M-09	593.32	521.18	521.24	521.27	521.20
AGW-1M-09	592.75	554.21	557.65	555.03	551.40
B2M-09	589.34	520.62	520.78	520.74	520.68
C3-09	585.00	542.67	541.81	539.65	540.61

TABLE 6

Page 3 of 3

**2013 BEDROCK QUARTERLY WATER LEVEL ELEVATION SUMMARY - PIEZOMETERS**  
**HYDE PARK LANDFILL SITE**  
**TOWN OF NIAGARA, NEW YORK**

<b>Well</b>	<b>Reference Elevation</b>	<b>Water Level Elevation</b>	<b>Water Level Elevation</b>	<b>Water Level Elevation</b>	<b>Water Level Elevation</b>
		<b>Quarter 1</b> <b>3/7/2013</b> <b>(ft. AMSL)</b>	<b>Quarter 2</b> <b>6/3/2013</b> <b>(ft. AMSL)</b>	<b>Quarter 3</b> <b>9/3/2013</b> <b>(ft. AMSL)</b>	<b>Quarter 4</b> <b>12/4/2013</b> <b>(ft. AMSL)</b>
<b><i>Flow Zone 9 cont'd.</i></b>					
D1M-09	594.02	519.70	517.82	516.63	517.23
D2M-09	590.66	518.08	517.77	516.60	517.16
E6-09	577.82	553.27	553.77	553.85	553.69
F2M-09	598.71	517.88	517.57	516.37	516.96
F4M-09	601.79	517.78	517.46	516.28	516.87
F6-09	587.53	583.52	577.71	575.54	576.17
G1M-09	616.58	580.32	579.96	579.16	579.50
G6-09	608.98	584.30	584.55	580.97	582.89
H2M-09	621.32	553.03	554.98	552.99	550.51
H5-09	616.93	553.99	555.50	552.39	551.09
I1-09	624.91	563.11	564.62	561.62	562.24
J2M-09	608.77	554.84	556.08	552.75	551.64
J5M-09	605.82	554.63	556.87	553.73	551.71
J6-09	608.76	570.81	569.45	566.43	567.62
PMW-1M-09	598.34	518.04	516.71	516.50	517.07
<b><i>Flow Zone 11</i></b>					
AFW-1L-11	572.10	512.03	511.93	505.92	508.62
AFW-2L-11	593.43	497.15	496.80	495.55	496.31
AGW-1L-11	592.71	578.78	578.88	578.59	578.35
B2L-11	589.65	498.47	498.86	499.19	499.07
D1L-11	593.80	504.70	504.50	503.32	504.85
D2L-11	590.21	518.99	519.29	518.48	519.19
E6-11	577.72	534.50	533.31	538.71	539.62
F2L-11	598.94	557.07	558.70	559.13	559.06
F4L-11	602.22	584.60	580.33	579.62	579.13
F6-11	587.40	528.77	528.52	531.54	533.31
G1L-11	616.84	563.62	565.05	564.56	562.31
G6-11	608.89	567.16	568.05	567.29	564.42
H2L-11	620.73	563.10	562.74	562.46	561.60
H5-11	616.81	550.78	551.75	550.87	549.35
I1-11	624.75	548.44	549.10	549.56	549.47
J5L-11	607.20	550.84	551.04	549.96	547.78
J6-11	608.68	586.14	586.20	586.20	586.65
PMW-1L-11	598.84	510.71	510.83	511.25	511.26

**Notes:**

Dry            No water present in well.  
 ft. AMSL      Feet above mean sea level.  
 -            Not available.

TABLE 7

Page 1 of 1

**2013 BEDROCK PURGE WELL MONTHLY FLOW RATE (GPM) SUMMARY**  
**HYDE PARK LANDFILL SITE**  
**TOWN OF NIAGARA, NEW YORK**

<b>Month</b>	<b>PW-1U</b>	<b>PW-1L</b>	<b>PW-2UR</b>	<b>PW-2M</b>	<b>PW-2L</b>	<b>PW-3M</b>	<b>PW-3L</b>	<b>PW-4U</b>	<b>PW-4M <sup>(1)</sup></b>	<b>PW-5UR</b>	<b>PW-6UR</b>	<b>PW-6MR</b>
January	0.27	1.10	1.50	12.07	0.43	0.07	2.64	0.15	0.00	3.58	0.81	4.01
February	0.27	1.75	0.47	13.39	0.51	0.07	2.73	0.13	0.00	3.52	0.90	3.98
March	0.24	1.86	0.93	13.71	0.39	0.09	2.66	0.12	0.00	2.74	0.94	4.11
April	0.41	1.19	1.20	13.07	0.37	0.08	2.06	0.11	0.00	1.97	0.72	4.01
May	0.35	1.57	1.16	13.63	0.28	0.07	0.19	0.12	0.00	4.38	0.14	3.57
June	0.35	1.92	1.24	14.23	0.42	0.07	3.08	0.14	0.00	3.45	0.84	3.10
July	0.30	2.18	1.09	11.96	0.34	0.07	2.06	0.14	0.00	3.65	0.72	3.84
August	0.29	1.32	1.17	12.29	0.22	0.06	2.50	0.12	0.00	4.15	0.71	4.13
September	0.20	0.85	0.97	10.38	0.13	0.06	2.27	0.08	0.00	3.95	0.63	3.44
October	0.22	0.92	0.97	11.62	0.23	0.07	2.27	0.10	0.00	4.31	0.62	2.69
November	0.58	1.03	0.96	12.46	0.35	0.06	2.43	0.13	0.00	4.83	0.69	2.89
December	1.64	1.52	0.70	12.51	0.51	0.04	2.40	0.15	0.00	5.01	0.74	2.92
Annual Average	0.43	1.44	1.03	12.61	0.35	0.07	2.27	0.12	0.00	3.80	0.70	3.56
<b>Month</b>	<b>PW-7U</b>	<b>PW-8M <sup>(1)</sup></b>	<b>PW-8U</b>	<b>PW-9U</b>	<b>PW-10U</b>	<b>APW-1</b>	<b>APW-2</b>					
January	0.40	0.00	0.84	0.87	4.08	1.06	0.24					
February	0.48	0.08	1.17	1.00	3.11	1.31	0.24					
March	0.42	0.12	1.13	1.01	2.98	1.05	0.28					
April	0.43	0.10	1.31	0.89	2.85	1.24	0.45					
May	0.23	0.00	0.98	0.88	2.53	0.76	0.25					
June	0.46	0.12	1.10	0.72	2.77	1.31	0.41					
July	0.39	0.19	0.83	1.13	2.10	0.90	0.28					
August	0.38	0.05	0.92	0.82	2.21	0.68	0.20					
September	0.35	0.00	0.87	0.93	2.55	0.62	0.18					
October	0.37	0.00	0.82	0.89	2.52	0.74	0.27					
November	0.38	0.00	0.83	0.98	2.54	0.82	0.33					
December	0.59	0.57	1.43	1.09	2.45	1.31	0.35					
Annual Average	0.41	0.10	1.02	0.93	2.72	0.98	0.29					

Notes:

GPM

Gallons per minute.

(1)

Water elevations in PW-4M and PW-8M are typically within the target set point range and therefore, pumping is infrequent.

TABLE 8A

**ANALYTICAL RESULTS SUMMARY  
QUARTERLY GROUP B BEDROCK PIEZOMETER SAMPLING  
FIRST QUARTER 2013  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK**

<b>Sample Location:</b>	<b>ABP-7-09</b>	<b>AGW-1M-07</b>	<b>AGW-1M-09</b>	<b>AGW-1U-06</b>	<b>B2L-11</b>
<b>Sample ID:</b>	<b>ABP-7-09-0213</b>	<b>AGW-1M-07-0213</b>	<b>AGW-1M-09-0213</b>	<b>AGW-1U-06-0213</b>	<b>B2L-11-0213</b>
<b>Sample Date:</b>	<b>2/21/2013</b>	<b>2/21/2013</b>	<b>2/21/2013</b>	<b>2/22/2013</b>	<b>2/21/2013</b>
<b>Parameters</b>	<b>Units</b>	<b>Screening Level</b>			
<b>Organic Acids</b>					
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	21 J
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U
Chlorendic acid	µg/L	50	21 J	<b>150 J</b>	<b>110 J</b>
				<b>210 J</b>	<b>230 J</b>
<b>Sample Location:</b>	<b>C3-07</b>	<b>C3-09</b>	<b>D1M-09</b>	<b>D1U-04</b>	<b>D1U-05</b>
<b>Sample ID:</b>	<b>C3-07-0213</b>	<b>C3-09-0213</b>	<b>D1M-09-0213</b>	<b>D1U-04-0213</b>	<b>D1U-05-0213</b>
<b>Sample Date:</b>	<b>2/20/2013</b>	<b>2/20/2013</b>	<b>2/21/2013</b>	<b>2/21/2013</b>	<b>2/21/2013</b>
<b>Organic Acids</b>					
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	7.3 J	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	<b>230 J</b>	<b>93 J</b>
					<b>70 J</b>
<b>Sample Location:</b>	<b>F2M-09</b>	<b>F2U-02</b>	<b>F2U-04</b>	<b>F2U-04</b>	<b>G1U-01</b>
<b>Sample ID:</b>	<b>F2M-09-0213</b>	<b>F2U-02-0213</b>	<b>F2U-04-0213</b>	<b>W7-10-0213</b>	<b>G1U-01-0213</b>
<b>Sample Date:</b>	<b>2/20/2013</b>	<b>2/20/2013</b>	<b>2/20/2013</b>	<b>2/20/2013</b>	<b>2/21/2013</b>
<b>(Duplicate)</b>					
<b>Organic Acids</b>					
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U
Chlorendic acid	µg/L	50	17 J	<b>220 J</b>	<b>430</b>
					250 U
<b>Sample Location:</b>	<b>G6-01</b>	<b>G6-04</b>	<b>G6-06</b>	<b>H2U-02</b>	<b>H5-09</b>
<b>Sample ID:</b>	<b>G6-01-0213</b>	<b>G6-04-0213</b>	<b>G6-06-0213</b>	<b>H2U-02-0213</b>	<b>H5-09-0213</b>
<b>Sample Date:</b>	<b>2/20/2013</b>	<b>2/20/2013</b>	<b>2/20/2013</b>	<b>2/22/2013</b>	<b>2/21/2013</b>
<b>Organic Acids</b>					
2-Chlorobenzoic acid	µg/L	7,300	30 U	120	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	830	29 J
4-Chlorobenzoic acid	µg/L	7,300	300 U	150 J	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U
Chlorendic acid	µg/L	50	15 J	<b>58 J</b>	250 U
					<b>130 J</b>
					<b>76 J</b>

Notes:

µg/L Micrograms/liter.

J Estimated.

U Non-detect at associated value.

UJ The analyte was not detected above the sample quantitation limit.

The reported quantitation limit is an estimated quantity.

0.3 Concentration exceeds Screening Level.

R Data rejected.

TABLE 8B

**ANALYTICAL RESULTS SUMMARY  
QUARTERLY GROUP B BEDROCK PIEZOMETER SAMPLING  
SECOND QUARTER 2013  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK**

Sample Location:		ABP-7-09	AGW-1M-07	AGW-1M-09	AGW-1U-06	B2L-11
Sample ID:		ABP-7-09-0513	AGW-1M-07-0513	AGW-1M-09-0513	AGW-1U-06-0513	B2L-11-0513
Sample Date:		5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/29/2013
Parameters	Units	Screening Level				
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	58
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	20 J	180 J	100 J	130 J
						130 J
<b>Sample Location:</b>		C3-07	C3-09	D1M-09	D1U-04	D1U-05
<b>Sample ID:</b>		C3-07-0513	C3-09-513	D1M-09-0513	D1U-04-0513	D1U-05-0513
<b>Sample Date:</b>		5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/29/2013
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	6.8 J	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	21 J	23 J	250	29 J
						63 J
<b>Sample Location:</b>		F2M-09	F2U-02	F2U-04	G1U-01	G1U-01
<b>Sample ID:</b>		F2M-09-0513	F2U-02-0513	F2U-04-0513	G1U-01-0513	W7-10-0513
<b>Sample Date:</b>		5/29/2013	5/29/2013	5/29/2013	5/29/2013	5/29/2013 (Duplicate)
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	16 J	200 J	410	250 U
						250 U
						250 U
<b>Sample Location:</b>		G6-01	G6-04	G6-06	H2U-02	H5-09
<b>Sample ID:</b>		G6-01-0513	G6-04-0513	G6-06-0513	H2U-02-0513	H5-09-0513
<b>Sample Date:</b>		5/29/2013	5/29/2013	5/29/2013	5/30/2013	5/30/2013
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	140	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	1100	30 U	17 J
4-Chlorobenzoic acid	µg/L	7,300	300 U	34 J	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	58 J	250 U	130 J
						74 J

## Notes:

$\mu\text{g/L}$  Micrograms/liter.

J Estimated.

U Non-detect at associated value.

UJ The analyte was not detected above the sample quantitation limit.

The analyte was not detected above the sample quantity.

0.3 The reported quantitation limit is an estimate.  
Concentration exceeds Screening Level.

R Data rejected.

TABLE 8C

**ANALYTICAL RESULTS SUMMARY  
QUARTERLY GROUP B BEDROCK PIEZOMETER SAMPLING  
THIRD QUARTER 2013  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK**

<b>Sample Location:</b>		<b>ABP-7-09</b>	<b>AGW-1M-07</b>	<b>AGW-1M-09</b>	<b>AGW-1U-06</b>	<b>B2L-11</b>
<b>Sample ID:</b>		<b>ABP-7-09-0813</b>	<b>AGW-1M-07-0813</b>	<b>AGW-1M-09-0813</b>	<b>AGW-1U-06-0813</b>	<b>B2L-11-0813</b>
<b>Sample Date:</b>		<b>8/15/2013</b>	<b>8/16/2013</b>	<b>8/16/2013</b>	<b>8/16/2013</b>	<b>8/16/2013</b>
<b>Parameters</b>	<b>Units</b>	<b>Screening Level</b>				
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	71
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	<b>200 J</b>	<b>87 J</b>	<b>120 J</b>
						<b>280</b>
 <b>Sample Location:</b>						
		<b>C3-07</b>	<b>C3-09</b>	<b>D1M-09</b>	<b>D1U-04</b>	<b>D1U-05</b>
<b>Sample ID:</b>		<b>C3-07-0813</b>	<b>C3-09-0813</b>	<b>D1M-09-0813</b>	<b>D1U-04-0813</b>	<b>D1U-05-0813</b>
<b>Sample Date:</b>		<b>8/15/2013</b>	<b>8/15/2013</b>	<b>8/13/2013</b>	<b>8/13/2013</b>	<b>8/13/2013</b>
 Organic Acids						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	5.3 J	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	<b>260</b>	<b>27 J</b>	<b>64 J</b>
 <b>Sample Location:</b>						
		<b>F2M-09</b>	<b>F2U-02</b>	<b>F2U-04</b>	<b>F2U-04</b>	<b>G1U-01</b>
<b>Sample ID:</b>		<b>F2M-09-0813</b>	<b>F2U-02-0813</b>	<b>F2U-04-0813</b>	<b>W7-10-0813</b>	<b>G1U-01-0813</b>
<b>Sample Date:</b>		<b>8/13/2013</b>	<b>8/13/2013</b>	<b>8/13/2013</b>	<b>8/13/2013</b>	<b>8/15/2013</b>
 Organic Acids						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	<b>210 J</b>	<b>380</b>	<b>380</b>
						250 U
 <b>Sample Location:</b>						
		<b>G6-01</b>	<b>G6-04</b>	<b>G6-06</b>	<b>H2U-02</b>	<b>H5-09</b>
<b>Sample ID:</b>		<b>G6-01-0813</b>	<b>G6-04-0813</b>	<b>G6-06-0813</b>	<b>H2U-02-0813</b>	<b>H5-09-0813</b>
<b>Sample Date:</b>		<b>8/13/2013</b>	<b>8/13/2013</b>	<b>8/13/2013</b>	<b>8/16/2013</b>	<b>8/15/2013</b>
 Organic Acids						
2-Chlorobenzoic acid	µg/L	7,300	30 U	200	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	1300	30 U	30 U
4-Chlorobenzoic acid	µg/L	7300	300 U	380	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	<b>62 J</b>	<b>250 U</b>	<b>110 J</b>
						<b>52 J</b>

## Notes:

- µg/L Micrograms/liter.
- J Estimated.
- U Non-detect at associated value.
- UJ The analyte was not detected above the sample quantitation limit. The

**0.3** Concentration exceeds Screening Level.

R Data rejected.

TABLE 8D

**ANALYTICAL RESULTS SUMMARY  
QUARTERLY GROUP B BEDROCK PIEZOMETER SAMPLING  
FOURTH QUARTER 2013  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK**

<b>Sample Location:</b>		<b>ABP-7-09</b>	<b>AGW-1M-07</b>	<b>AGW-1M-09</b>	<b>AGW-1U-06</b>	<b>B2L-11</b>
<b>Sample ID:</b>		<b>ABP-7-09-1113</b>	<b>AGW-1M-07-1113</b>	<b>AGW-1M-09-1113</b>	<b>AGW-1U-06-1113</b>	<b>B2L-11-1113</b>
<b>Sample Date:</b>		<b>11/21/2013</b>	<b>11/19/2013</b>	<b>11/19/2013</b>	<b>11/25/2013</b>	<b>11/25/2013</b>
<b>Parameters</b>	<b>Units</b>	<b>Screening Level</b>				
<b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	37
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	29 J	<b>90 J</b>	<b>98 J</b>	<b>160 J</b>
						<b>130 J</b>
 <b>Sample Location:</b>						
<b>Sample ID:</b>		<b>C3-07</b>	<b>C3-09</b>	<b>D1M-09</b>	<b>D1U-04</b>	<b>D1U-05</b>
<b>Sample Date:</b>		<b>C3-07-1113</b>	<b>C3-09-1113</b>	<b>D1M-09-1113</b>	<b>D1U-04-1113</b>	<b>D1U-05-1113</b>
		<b>11/21/2013</b>	<b>11/21/2013</b>	<b>11/21/2013</b>	<b>11/21/2013</b>	<b>11/21/2013</b>
 <b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	4.5 J	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	21 J	<b>240 J</b>	29 J
						<b>78 J</b>
 <b>Sample Location:</b>						
<b>Sample ID:</b>		<b>F2M-09</b>	<b>F2U-02</b>	<b>F2U-04</b>	<b>G1U-01</b>	<b>G1U-01</b>
<b>Sample Date:</b>		<b>F2M-09-1113</b>	<b>F2U-02-1113</b>	<b>F2U-04-1113</b>	<b>G1U-01-1113</b>	<b>W7-10-1113</b>
		<b>11/19/2013</b>	<b>11/19/2013</b>	<b>11/19/2013</b>	<b>11/21/2013</b>	<b>11/21/2013</b>
 <b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	300 U	300 U	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	14 J	<b>190 J</b>	<b>380</b>	250 U
						250 U
 <b>Sample Location:</b>						
<b>Sample ID:</b>		<b>G6-01</b>	<b>G6-04</b>	<b>G6-06</b>	<b>H2U-02</b>	<b>H5-09</b>
<b>Sample Date:</b>		<b>G6-01-1113</b>	<b>G6-04-1113</b>	<b>G6-06-1113</b>	<b>H2U-02-1113</b>	<b>H5-09-1113</b>
		<b>11/19/2013</b>	<b>11/19/2013</b>	<b>11/19/2013</b>	<b>11/21/2013</b>	<b>11/25/2013</b>
 <b>Organic Acids</b>						
2-Chlorobenzoic acid	µg/L	7,300	30 U	180	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	1100	30 U	26 J
4-Chlorobenzoic acid	µg/L	7,300	300 U	290 J	300 U	300 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	<b>57 J</b>	250 U	<b>100 J</b>
						<b>77 J</b>

Notes:

µg/L Micrograms/liter.

J Estimated.

U Non-detect at associated value.

UJ The analyte was not detected above the sample quantitation limit. The

0.3 Concentration exceeds Screening Level.

R Data rejected.

**TABLE 9**

**ANALYTICAL RESULTS SUMMARY  
ANNUAL OPEN CATCH BASIN SAMPLING  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK**

<i>Sample Location:</i>	<b><i>BR-OpenCatchBasin</i></b>
<i>Sample ID:</i>	<b><i>HPOOPENCB-1013</i></b>
<i>Sample Date:</i>	<b><i>10/1/2013</i></b>

<b><i>Parameters</i></b>	<b><i>Units</i></b>
--------------------------	---------------------

***Semi-volatile Organic Compounds***

2-Chlorobenzoic acid	µg/L	30 U
3-Chlorobenzoic acid	µg/L	30 U
4-Chlorobenzoic acid	µg/L	300 U
Benzoic acid	µg/L	100 U
Chlorendic acid	µg/L	250 U

Notes:

U - Not detected above the associated reporting limit.

TABLE 10

**2013 ANALYTICAL RESULTS SUMMARY**  
**ANNUAL AFW COMPOSITE**  
**HYDE PARK LANDFILL SITE**  
**TOWN OF NIAGARA, NEW YORK**

<i>Parameters</i>	<i>Units</i>	<i>Reporting Level</i>	<i>AFWCOMPOSITE</i>
<b><i>Polychlorinated Biphenyls (PCBs)</i></b>			<b><i>AFW-C-1113</i></b>
Pentachlorobiphenyl	µg/L	1	0.19 U
Tetrachlorobiphenyl	µg/L	1	0.19 U
Trichlorobiphenyl	µg/L	1	0.074 J
Total PCBs	µg/L	--	0.19 U
<b><i>Pesticides</i></b>			
alpha-BHC	µg/L	1	0.047 U
beta-BHC	µg/L	1	0.047 U
delta-BHC	µg/L	1	0.036 J
gamma-Chlordane	µg/L	1	0.047 U
Mirex	µg/L	1	0.047 U
<b><i>Dioxin Furans</i></b>			
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	500	0.402 J

Notes:

- BHC Benzene Hexachloride.
- pg/L picograms per liter.
- µg/L micrograms per liter.
- No reporting level established.
- J Estimated.
- U Non-detect at associated value.

TABLE 11

**2013 QUARTERLY HYDRAULIC GRADIENT SUMMARY  
COMMUNITY MONITORING PROGRAM  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK**

		3/7/2013			6/3/2013			9/3/2013			12/4/2013		
<i>Gradient Pairing</i>		<i>Overburden Elevation</i> (ft. AMSL)	<i>Bedrock Elevation</i> (ft. AMSL)	<i>Gradient</i> (ft./ft.)	<i>Overburden Elevation</i> (ft. AMSL)	<i>Bedrock Elevation</i> (ft. AMSL)	<i>Gradient</i> (ft./ft.)	<i>Overburden Elevation</i> (ft. AMSL)	<i>Bedrock Elevation</i> (ft. AMSL)	<i>Gradient</i> (ft./ft.)	<i>Overburden Elevation</i> (ft. AMSL)	<i>Bedrock Elevation</i> (ft. AMSL)	<i>Gradient</i> (ft./ft.)
CMW-1OB	CMW-1SH	571.62	564.58	0.640	571.59	564.61	0.635	571.31	563.46	0.714	571.52	564.20	0.665
CMW-2OB	CMW-2SH	590.56	572.45	1.266	589.61	571.99	1.232	584.56	570.79	0.963	590.01	572.29	1.239
CMW-3OB	CMW-3SH	576.68	549.49	1.942	575.03	549.50	1.824	574.08	549.33	1.768	576.74	549.32	1.959
CMW-4OB	CMW-4SH	Surcharged	566.66	NA	574.28	567.03	0.614	574.00	566.15	0.665	574.28	567.34	0.588
CMW-5OB	CMW-5SH	Surcharged	577.64	NA	583.43	577.65	0.366	582.34	575.11	0.458	583.43	576.67	0.428
CMW-6OB	CMW-6SH	571.68	562.89	0.916	570.08	563.03	0.734	571.72	561.78	1.035	571.58	562.05	0.993
CMW-7OB	CMW-7SH	Dry	601.35	0.67 <sup>(1)</sup>	Dry	601.37	0.67 <sup>(1)</sup>	Dry	598.85	0.85 <sup>(1)</sup>	606.23	599.48	0.472
CMW-8OB	CMW-8SH	613.06	611.94	0.108	Dry	611.49	0.44 <sup>(2)</sup>	Dry	607.07	0.87 <sup>(2)</sup>	Dry	609.05	0.68 <sup>(2)</sup>
CMW-9OB	CMW-9SH	569.47	560.14	1.794	569.47	560.57	1.712	Dry	559.76	2.31 <sup>(3)</sup>	Dry	560.20	2.22 <sup>(3)</sup>
CMW-11OB	CMW-11SH	570.65	565.12	0.576	570.69	565.31	0.560	568.98	564.92	0.423	570.60	565.12	0.571
CMW-12OB	CMW-12SH	589.83	571.43	0.979	584.76	570.79	0.743	574.56	570.29	0.227	585.83	571.88	0.742

Notes:

ft. AMSL Feet above mean sea level.

Dry No water present in well.

Negative number indicates an upward vertical gradient. Positive number indicates a downward vertical gradient.

Surcharged Well full of water to top of casing.

NA Not available.

<sup>(1)</sup> Well CMW-7OB was recorded as dry during this event. Bottom of well depth (611.0 ft AMSL) was used to calculate gradient.

<sup>(2)</sup> Well CMW-8OB was recorded as dry during this event. Bottom of well depth (616.11 ft AMSL) was used to calculate gradient.

<sup>(3)</sup> Well CMW-9OB was recorded as dry during this event. Bottom of well depth (571.76 ft AMSL) was used to calculate gradient.

TABLE 12

**2013 COMMUNITY MONITORING WELL SOIL VAPOR MONITORING  
COMMUNITY MONITORING PROGRAM  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK**

*September 26, 2013  
Sun, 70, Winds NE 0-5 MPH*

<i>Well I.D.</i>	<i>Time Intervals</i>	<i>Sampling Time (hhmm)</i>	<i>VOC Readings (ppbv)</i>
<b>SVP-1</b>	Background	1311	0.0
	At 1 minute	1312	0.0
	At 2 minutes	1313	0.0
	At 3 minutes	1314	0.0
	At 4 minutes	1315	0.0
	At 5 minutes	1316	0.0
	At 6 minutes	1317	0.0
	At 7 minutes	1318	0.0
	At 8 minutes	1319	0.0
	At 9 minutes	1320	0.0
<b>SVP-2</b>	Background	1326	0.0
	At 1 minute	1327	0.0
	At 2 minutes	1328	0.0
	At 3 minutes	1329	0.0
	At 4 minutes	1330	0.0
	At 5 minutes	1331	0.0
	At 6 minutes	1332	0.0
	At 7 minutes	1333	0.0
	At 8 minutes	1334	0.0
	At 9 minutes	1335	0.0
<b>SVP-3</b>	Background	1340	0.0
	At 1 minute	1341	0.0
	At 2 minutes	1342	0.0
	At 3 minutes	1343	0.0
	At 4 minutes	1344	0.0
	At 5 minutes	1345	0.0
	At 6 minutes	1346	0.0
	At 7 minutes	1347	0.0
	At 8 minutes	1348	0.0
	At 9 minutes	1349	0.0
	At 10 minutes	1350	0.0

TABLE 12

**2013 COMMUNITY MONITORING WELL SOIL VAPOR MONITORING  
COMMUNITY MONITORING PROGRAM  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK**

*September 26, 2013  
Sun, 70, Winds NE 0-5 MPH*

<i>Well I.D.</i>	<i>Time Intervals</i>	<i>Sampling Time (hhmm)</i>	<i>VOC Readings (ppbv)</i>
<b>SVP-4</b>	Background	1354	0.0
	At 1 minute	1355	0.0
	At 2 minutes	1356	0.0
	At 3 minutes	1357	0.0
	At 4 minutes	1358	0.0
	At 5 minutes	1359	0.0
	At 6 minutes	1400	0.0
	At 7 minutes	1401	0.0
	At 8 minutes	1402	0.0
	At 9 minutes	1403	0.0
	At 10 minutes	1404	0.0
<b>CMW-7OB</b>	Background	1250	0.0
	At 1 minute	1251	0.0
	At 2 minutes	1252	0.0
	At 3 minutes	1253	0.0
	At 4 minutes	1254	0.0
	At 5 minutes	1255	0.0
	At 6 minutes	1256	0.0
	At 7 minutes	1257	0.0
	At 8 minutes	1258	0.0
	At 9 minutes	1259	0.0
	At 10 minutes	1300	0.0
<b>CMW-8OB</b>	Background	1229	0.0
	At 1 minute	1230	0.0
	At 2 minutes	1231	0.0
	At 3 minutes	1232	0.0
	At 4 minutes	1233	0.0
	At 5 minutes	1234	0.0
	At 6 minutes	1235	0.0
	At 7 minutes	1236	0.0
	At 8 minutes	1237	0.0
	At 9 minutes	1238	0.0
	At 10 minutes	1239	0.0

Notes:

- ppbv      Parts per billion by volume.  
 VOC      Volatile organic compound.  
 MPH      Miles per hour.

**TABLE 13**

**2013 NAPL DECANTER VOLUME MONITORING**  
**HYDE PARK LANDFILL SITE**  
**TOWN OF NIAGARA, NEW YORK**

	<i>Decanter #1</i>	<i>Decanter #2</i>	<i>Decanter #3</i>
<b><i>First Quarter 2013</i></b>			
March 7, 2013			
Thickness (feet)	7.40	5.35	7.00
Level (%)	0	9	34
Volume <sup>(1)</sup> (gallons)	0.00	1,008.00	3,808.00
<b><i>Second Quarter 2013</i></b>			
June 3, 2013			
Thickness (feet)	0.50	4.70	7.80
Level (%)	21.00	10.00	37.00
Volume <sup>(1)</sup> (gallons)	2,352.00	1,120.00	4,144.00
<b><i>Third Quarter 2013</i></b>			
September 3, 2013			
Thickness (feet)	13.10	5.70	8.25
Level (%)	49	11	34
Volume <sup>(1)</sup> (gallons)	5,488.00	1,232.00	3,808.00
<b><i>Fourth Quarter 2013</i></b>			
December 4, 2013			
Thickness (feet)	15.20	4.00	7.40
Level (%)	50	10	36
Volume <sup>(1)</sup> (gallons)	5,600.00	1,120.00	4,032.00

Notes:

<sup>(1)</sup> Based on level percentage of NAPL in 11,200-gallon decanters.

TABLE 14

2013 WEEKLY CARBON INTERSTAGE APL SAMPLING  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK

<b>Sample Location:</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>
<b>Sample ID:</b>	<b>HP1213INT-D (interstage)</b>	<b>HP1813INT-D (interstage)</b>	<b>HP11613INT-D (interstage)</b>	<b>HP12313INT-D (interstage)</b>	<b>HP13013INT-D (interstage)</b>	<b>HP2613INT-D (interstage)</b>	<b>HP21313 INT-D (interstage)</b>	
<b>Sample Date:</b>	<b>1/2/2013</b>	<b>1/8/2013</b>	<b>1/16/2013</b>	<b>1/23/2013</b>	<b>1/30/2013</b>	<b>2/6/2013</b>	<b>2/13/2013</b>	
<b>Parameters</b>								
	<b>Units</b>							
<b>Volatile Organic Compounds</b>								
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	43	42	37	38	38	29	33
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

## Notes:

- APL Aqueous phase liquid.
- J Estimated concentration.
- U Not present at or above the associated value.
- µg/L micrograms per liter.
- UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

TABLE 14

2013 WEEKLY CARBON INTERSTAGE APL SAMPLING  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK

<b>Sample Location:</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>
<b>Sample ID:</b>	<b>HP22013INT-D (interstage)</b>	<b>HP22713INT-D (interstage)</b>	<b>HP3613 INT-D (interstage)</b>	<b>HP31313 INT-D (interstage)</b>	<b>HP32013INT-D (interstage)</b>	<b>HP32713 INT-D (interstage)</b>	<b>HP4313 INT-D (interstage)</b>
<b>Sample Date:</b>	<b>2/20/2013</b>	<b>2/27/2013</b>	<b>3/6/2013</b>	<b>3/13/2013</b>	<b>3/20/2013</b>	<b>3/27/2013</b>	<b>4/3/2013</b>
<b>Parameters</b>							
<b>Units</b>							
<b>Volatile Organic Compounds</b>							
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	0.26 J	1.0 U	0.25 J	0.28 J	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.30 J
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	31	23	28	32	40	41
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Notes:

- APL Aqueous phase liquid.
- J Estimated concentration.
- U Not present at or above the associated value.
- µg/L micrograms per liter.
- UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

TABLE 14

2013 WEEKLY CARBON INTERSTAGE APL SAMPLING  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK

<b>Sample Location:</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>					
<b>Sample ID:</b>	<b>HP41013 INT-D (interstage)</b>		<b>HP41713 INT-D (interstage)</b>		<b>HP42413 INT-D (interstage)</b>		<b>HP5113 INT-D (interstage)</b>						
<b>Sample Date:</b>	<b>4/10/2013</b>		<b>4/17/2013</b>		<b>4/24/2013</b>		<b>5/1/2013</b>						
<b>Parameters</b>													
<b>Units</b>													
<b>Volatile Organic Compounds</b>													
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	0.32 J	1.0 U	1.0 U					
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Carbon disulfide	µg/L	0.36 J		1.0 U	1.0 U	1.0 U	0.42 J	0.60 J					
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
cis-1,2-Dichloroethene	µg/L	0.28 J	0.34 J	0.39 J	0.30 J	0.36 J	0.37 J	0.37 J					
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U					
Vinyl chloride	µg/L	50	51	51	58	64	67	50					
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U					

Notes:

- APL Aqueous phase liquid.
- J Estimated concentration.
- U Not present at or above the associated value.
- µg/L micrograms per liter.
- UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

TABLE 14

2013 WEEKLY CARBON INTERSTAGE APL SAMPLING  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK

<b>Sample Location:</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>
<b>Sample ID:</b>	<b>HP52913 INT-D (INTERSTAGE)</b>	<b>HP6513INT-D (interstage)</b>	<b>HP61213 INT-D (interstage)</b>	<b>HP61913INT-D (interstage)</b>	<b>HP62613INT-D (interstage)</b>	<b>HP7313INT-D (interstage)</b>	<b>HP71013 INT-D (interstage)</b>	
<b>Sample Date:</b>	<b>5/29/2013</b>	<b>6/5/2013</b>	<b>6/12/2013</b>	<b>6/19/2013</b>	<b>6/26/2013</b>	<b>7/3/2013</b>	<b>7/10/2013</b>	
<b>Parameters</b>								
		<b>Units</b>						
<b>Volatile Organic Compounds</b>								
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	0.29 J	1.0 U	1.0 U	1.0 U	1.0 U	0.29 J	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	0.37 J	0.30 J	0.36 J	0.30 J	0.34 J
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	64	59	40	35	46	40	44
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

## Notes:

- APL Aqueous phase liquid.
- J Estimated concentration.
- U Not present at or above the associated value.
- µg/L micrograms per liter.
- UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

TABLE 14

2013 WEEKLY CARBON INTERSTAGE APL SAMPLING  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK

<b>Sample Location:</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>
<b>Sample ID:</b>	<b>HP71713 INT-D (interstage)</b>	<b>HP72613 INT-D (interstage)</b>	<b>HP73113 INT-D (interstage)</b>	<b>HP8713INT-D (interstage)</b>	<b>HP81413INT-D (interstage)</b>	<b>HP82113 INT-D (interstage)</b>	<b>HP82813 INT-D (interstage)</b>	
<b>Sample Date:</b>	<b>7/17/2013</b>	<b>7/26/2013</b>	<b>7/31/2013</b>	<b>8/7/2013</b>	<b>8/14/2013</b>	<b>8/21/2013</b>	<b>8/28/2013</b>	
<b>Parameters</b>								
	<b>Units</b>							
<b>Volatile Organic Compounds</b>								
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.22 I	5.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Carbon disulfide	µg/L	0.71 J	0.30 J	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	0.38 J	0.56 J	0.38 J	0.41 J	1.0 U	0.53 J	5.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.0
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Vinyl chloride	µg/L	45	65	49	54	54	87	69
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	15 U

## Notes:

- APL Aqueous phase liquid.
- J Estimated concentration.
- U Not present at or above the associated value.
- µg/L micrograms per liter.
- UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

TABLE 14

2013 WEEKLY CARBON INTERSTAGE APL SAMPLING  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK

<b>Sample Location:</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>
<b>Sample ID:</b>	<b>HP9413 INT-D (interstage)</b>	<b>HP91113 INT-D (interstage)</b>	<b>HP91813 INT-D (interstage)</b>	<b>HP92513 INT-D (interstage)</b>	<b>HP10213 INT-D (interstage)</b>	<b>HP10913 INT-D (interstage)</b>	<b>HP101613 INT-D (interstage)</b>	<b>HP101613 INT-D (interstage)</b>
<b>Sample Date:</b>	<b>9/4/2013</b>	<b>9/11/2013</b>	<b>9/18/2013</b>	<b>9/25/2013</b>	<b>10/2/2013</b>	<b>10/9/2013</b>	<b>10/9/2013</b>	<b>10/16/2013</b>
<b>Parameters</b>								
<b>Volatile Organic Compounds</b>								
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U					
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U					
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U					
1,1-Dichloroethane	µg/L	1.0 U	1.0 U					
1,1-Dichloroethene	µg/L	1.0 U	1.0 U					
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U					
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U					
1,2-Dichloroethane	µg/L	1.0 U	0.27 J	0.23 J	1.0 U	1.0 U	0.29 J	0.27 J
1,2-Dichloropropane	µg/L	1.0 U	1.0 U					
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U					
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U					
2-Chlorotoluene	µg/L	1.0 U	1.0 U					
3-Chlorotoluene	µg/L	1.0 U	1.0 U					
4-Chlorotoluene	µg/L	1.0 U	1.0 U					
Benzene	µg/L	1.0 U	1.0 U					
Bromodichloromethane	µg/L	1.0 U	1.0 U					
Bromoform	µg/L	1.0 U	1.0 U					
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U					
Carbon disulfide	µg/L	1.0 U	0.91 J	0.74 J	0.36 J	1.0 U	0.30 J	0.24 J
Carbon tetrachloride	µg/L	1.0 U	1.0 U					
Chlorobenzene	µg/L	1.0 U	1.0 U					
Chloroethane	µg/L	1.0 U	1.0 U					
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	0.17 J	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U					
cis-1,2-Dichloroethene	µg/L	0.57 J	0.65 J	0.66 J	0.70 J	1.0 U	0.71 J	0.63 J
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U					
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U					
Ethylbenzene	µg/L	1.0 U	1.0 U					
Methylene chloride	µg/L	1.0 U	1.0 U					
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U					
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U					
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U					
Styrene	µg/L	1.0 U	1.0 U					
Tetrachloroethene	µg/L	1.0 U	1.0 U					
Toluene	µg/L	1.0 U	1.0 U					
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U					
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U					
Trichloroethene	µg/L	1.0 U	1.0 U					
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U					
Vinyl acetate	µg/L	1.0 U	5.0 U	1.0 U				
Vinyl chloride	µg/L	95	120	160	150	250 J	200	180
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	2.0 U	3.0 U	3.0 U

Notes:

- APL Aqueous phase liquid.
- J Estimated concentration.
- U Not present at or above the associated value.
- µg/L micrograms per liter.
- UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

TABLE 14

2013 WEEKLY CARBON INTERSTAGE APL SAMPLING  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK

<b>Sample Location:</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>
<b>Sample ID:</b>	<b>HP102313 INT-D (interstage)</b>	<b>HP103013 INT-D (interstage)</b>	<b>HP11613 INT-D (interstage)</b>	<b>HP111313 INT-D (interstage)</b>	<b>HP112013INT-D (interstage)</b>	<b>HP112513 INT-D (interstage)</b>	<b>HP12413 INT-D (interstage)</b>	
<b>Sample Date:</b>	<b>10/23/2013</b>	<b>10/30/2013</b>	<b>11/6/2013</b>	<b>11/13/2013</b>	<b>11/20/2013</b>	<b>11/25/2013</b>	<b>12/4/2013</b>	
<b>Parameters</b>								
<b>Units</b>								
<b>Volatile Organic Compounds</b>								
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	0.38 J	1.0 U	
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
cis-1,2-Dichloroethene	µg/L	0.64 J	0.61 J	0.49 J	0.50 J	0.46 J	0.43 J	
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Vinyl chloride	µg/L	160	120	93	100	110	99	
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	

## Notes:

- APL Aqueous phase liquid.
- J Estimated concentration.
- U Not present at or above the associated value.
- µg/L micrograms per liter.
- UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

TABLE 14

**2013 WEEKLY CARBON INTERSTAGE APL SAMPLING  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK**

<b>Sample Location:</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>	<b>HP-INTER-D-01</b>
<b>Sample ID:</b>	<b>HP121113INT-D (interstage)</b>	<b>HP121813 INT-D (interstage)</b>	<b>HP122313 INT-D (interstage)</b>	<b>HPINT-D123013 (interstage)</b>
<b>Sample Date:</b>	<b>12/11/2013</b>	<b>12/18/2013</b>	<b>12/23/2013</b>	<b>12/30/2013</b>
<b>Parameters</b>				
	<b>Units</b>			
<b>Volatile Organic Compounds</b>				
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	0.30 J
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	0.54 J	1.0 U	0.27 J
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	0.38 J
Chloromethane (Methyl chloride)	µg/L	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	0.45 J	0.89 J	0.76 J
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	93	81	69
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U

Notes:

APL Aqueous phase liquid.

J Estimated concentration.

U Not present at or above the associated value.

µg/L micrograms per liter.

UJ The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

TABLE 15

**2013 QUARTERLY LEACHATE FEED APL SAMPLING  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK**

<i>Sample Location:</i>	<i>PMPTKOUTLET</i>	<i>PMPTKOUTLET</i>	<i>PMPTKOUTLET</i>	<i>PMPTKOUTLET</i>
<i>Sample ID:</i>	<i>HP31313 INF</i>	<i>HP61213 INF</i>	<i>HP91813 INF</i>	<i>HP121813 INF</i>
<i>Sample Date:</i>	<i>3/13/2013</i>	<i>6/12/2013</i>	<i>9/18/2013</i>	<i>12/18/2013</i>
<i>Parameters</i>		<i>Units</i>		
<b>Volatile Organic Compounds</b>				
1,1,1-Trichloroethane	µg/L	30 U	30 U	50 U
1,1,2,2-Tetrachloroethane	µg/L	76	50	130
1,1,2-Trichloroethane	µg/L	30 U	30 U	17 J
1,1-Dichloroethane	µg/L	30 U	30 U	50 U
1,1-Dichloroethene	µg/L	30 U	30 U	50 U
1,2,4-Trichlorobenzene	µg/L	170	180	600
1,2-Dichlorobenzene	µg/L	33	41	85
1,2-Dichloroethane	µg/L	13 J	16 J	50 U
1,2-Dichloropropane	µg/L	30 U	30 U	50 U
1,3-Dichlorobenzene	µg/L	9.8 J	12 J	25 J
1,4-Dichlorobenzene	µg/L	48	56	110
2-Chlorotoluene	µg/L	520	480	1000
3-Chlorotoluene	µg/L	30 U	30 U	50 U
4-Chlorotoluene	µg/L	380	370	760
Benzene	µg/L	140	99	350
Bromodichloromethane	µg/L	30 U	30 U	50 U
Bromoform	µg/L	30 U	30 U	50 U
Bromomethane (Methyl bromide)	µg/L	30 U	30 U	50 U
Carbon disulfide	µg/L	30 U	30 U	24 J
Carbon tetrachloride	µg/L	20 J	22 J	39 J
Chlorobenzene	µg/L	340	340	820
Chloroethane	µg/L	30 U	30 U	50 U
Chloroform (Trichloromethane)	µg/L	230	200	580
Chloromethane (Methyl chloride)	µg/L	30 U	30 U	50 U
cis-1,2-Dichloroethene	µg/L	160	170	500
cis-1,3-Dichloropropene	µg/L	30 U	30 U	50 U
Dichlorodifluoromethane (CFC-12)	µg/L	30 U	30 U	50 U
Ethylbenzene	µg/L	110	130	260
Methylene chloride	µg/L	30	36	110
m-Monochlorobenzotrifluoride	µg/L	46	60	110
o-Monochlorobenzotrifluoride	µg/L	120	150	320
p-Monochlorobenzotrifluoride	µg/L	190	240	470
Styrene	µg/L	30 U	30 U	50 U
Tetrachloroethene	µg/L	320	230	440
Toluene	µg/L	640	540	1400
trans-1,2-Dichloroethene	µg/L	6.3 J	5.6 J	50 U
trans-1,3-Dichloropropene	µg/L	30 U	30 U	50 U
Trichloroethene	µg/L	200	370	550
Trichlorofluoromethane (CFC-11)	µg/L	30 U	30 U	50 U
Vinyl acetate	µg/L	30 U	30 U	50 U
Vinyl chloride	µg/L	63	31	140
Xylenes (total)	µg/L	620	700	1500
<b>Semi-volatile Organic Compounds</b>				
2,4,6-Trichlorophenol	µg/L	51 U	190 U	96 U
2,4-Dichlorophenol	µg/L	77	85 J	200
2,4-Dimethylphenol	µg/L	51 U	190 U	96 UJ
2,4-Dinitrophenol	µg/L	250 U	960 U	480 U
2-Chlorobenzoic acid	µg/L	800	740	350
2-Choronaphthalene	µg/L	51 U	190 U	96 U
2-Chlorophenol	µg/L	51 U	190 U	96 U
2-Nitrophenol	µg/L	51 U	190 U	96 U
3-Chlorobenzoic acid	µg/L	1700	1900	780

TABLE 15

**2013 QUARTERLY LEACHATE FEED APL SAMPLING  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK**

<i>Sample Location:</i>	<i>PMPTKOUTLET</i>	<i>PMPTKOUTLET</i>	<i>PMPTKOUTLET</i>	<i>PMPTKOUTLET</i>
<i>Sample ID:</i>	<i>HP31313 INF</i>	<i>HP61213 INF</i>	<i>HP91813 INF</i>	<i>HP121813 INF</i>
<i>Sample Date:</i>	<i>3/13/2013</i>	<i>6/12/2013</i>	<i>9/18/2013</i>	<i>12/18/2013</i>
<b>Parameters</b>				
4,6-Dinitro-2-methylphenol	µg/L	250 U	960 U	480 U
4-Chloro-3-methylphenol	µg/L	51 U	190 U	96 U
4-Chlorobenzoic acid	µg/L	1900	1700	870
4-Nitrophenol	µg/L	250 U	960 U	480 U
Acenaphthene	µg/L	51 U	190 U	96 U
Acenaphthylene	µg/L	51 U	190 U	96 U
Anthracene	µg/L	51 U	190 U	96 U
Benzo(a)anthracene	µg/L	51 U	190 U	96 U
Benzo(a)pyrene	µg/L	51 U	190 U	96 U
Benzo(b)fluoranthene	µg/L	51 U	190 U	96 U
Benzo(g,h,i)perylene	µg/L	51 U	190 U	96 U
Benzoic acid	µg/L	3300	3600	2300
bis(2-Chloroethoxy)methane	µg/L	51 U	190 U	96 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	100 U	380 U	190 U
Butyl benzylphthalate (BBP)	µg/L	51 U	190 U	96 U
Chlorendic acid	µg/L	2400	2400	890
Chrysene	µg/L	51 U	190 U	96 U
Dibenz(a,h)anthracene	µg/L	51 U	190 U	96 U
Diethyl phthalate	µg/L	51 U	190 U	96 U
Dimethyl phthalate	µg/L	51 U	190 U	96 U
Di-n-butylphthalate (DBP)	µg/L	51 U	190 U	96 U
Di-n-octyl phthalate (DnOP)	µg/L	51 U	190 U	96 U
Fluoranthene	µg/L	51 U	190 U	96 U
Fluorene	µg/L	51 U	190 U	96 U
Hexachlorobenzene	µg/L	14 J	190 U	96 U
Hexachlorobutadiene	µg/L	23 J	17 J	21 J
Hexachlorocyclopentadiene	µg/L	250 U	960 U	480 U
Hexachloroethane	µg/L	6.8 J	190 U	12 J
Indeno(1,2,3-cd)pyrene	µg/L	51 U	190 U	96 U
Isophorone	µg/L	51 U	190 U	96 U
Naphthalene	µg/L	51 U	190 U	96 U
Octachlorocyclopentene	µg/L	51 U	190 U	96 U
Pentachlorophenol	µg/L	250 U	960 U	480 U
Phenanthrene	µg/L	51 U	190 U	96 U
Phenol	µg/L	660	13 J	2700
Pyrene	µg/L	51 U	190 U	96 U

## Notes:

APL - Aqueous phase liquid.

J - Estimated concentration.

U - Not present at or above the associated value.

UU - The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.

R - Data rejected.

µg/L - micrograms per liter.

**TABLE 16**

**2013 QUARTERLY SAC BED INTERSTAGE APL SAMPLING  
HYDE PARK LANDFILL SITE  
TOWN OF NIAGARA, NEW YORK**

<i>Sample Location:</i>	<i>SAC INTERSTAGE</i>	<i>SAC INTERSTAGE</i>	<i>SAC INTERSTAGE</i>	<i>SAC INTERSTAGE</i>
<i>Sample ID:</i>	<i>HP SAC 13313</i>	<i>HP SAC 61213</i>	<i>HP SAC 91813</i>	<i>HP SAC 121813</i>
<i>Sample Date:</i>	<i>3/13/2013</i>	<i>6/12/2013</i>	<i>9/18/2013</i>	<i>12/18/2013</i>
<i>Parameters</i>	<i>Units</i>			
<b><i>Polychlorinated Biphenyls (PCBs)</i></b>				
Pentachlorobiphenyl	µg/L	0.014 J	0.19 U	0.19 U
Tetrachlorobiphenyl	µg/L	0.014 J	0.19 U	0.042 J
Trichlorobiphenyl	µg/L	0.096 U	0.32	0.096 U
<b><i>Dioxin Furans</i></b>				
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	485	421	212
				482

Notes:

APL - Aqueous phase liquid.

pg/L - picograms per liter.

µg/L - micrograms per liter.

J- Estimated concentration.

U - Not present at or above the associated value.

- Not analyzed.

TABLE 17

**SUMMARY OF SOURCE CONTROL WELL PUMPING 2009 - PRESENT**  
**HYDE PARK LANDFILL SITE**  
**TOWN OF NIAGARA, NEW YORK**

Month	SC-2		SC-3		SC-4		SC-5		SC-6		Total Volume Pumped (gallons)
	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	NAPL Thickness (feet)	Water Level Elevation (ft. AMSL)	
January-09	2.5	602.41	0.0	598.52	1.3	616.65	0.0	Dry	0.0	611.65	4
February-09	1.8	602.71	0.0	559.82	0.8	617.55	0.0	Dry	0.0	592.65	18
March-09	2.3	602.71	0.0	559.82	0.3	617.55	0.0	Dry	0.0	612.15	16
April-09	1.3	605.51	0.0	602.12	0.3	618.75	0.0	Dry	0.0	613.75	13
May-09	1.2	604.61	0.0	602.12	0.2	618.25	0.0	Dry	0.0	613.05	33
June-09	1.3	605.21	0.0	604.62	0.3	618.45	0.0	Dry	0.0	613.75	2
July-09	0.9	606.31	0.0	604.72	0.5	618.75	0.0	Dry	0.0	613.95	11
August-09	1.1	606.41	0.0	605.12	0.5	619.25	0.0	Dry	0.0	614.15	12
September-09	1.1	606.01	0.0	605.72	0.5	620.25	0.0	Dry	0.0	615.05	14
October-09	1.0	606.41	0.0	608.72	0.5	621.25	0.0	Dry	0.0	614.55	18
November-09	1.0	606.61	0.0	608.7	0.5	621.85	0.0	Trace	0.0	614.95	18
December-09	0.8	607.11	0.0	610.52	0.5	622.25	0.0	Dry	0.0	614.85	14
January-10	1.8	602.91	0.0	598.92	1.0	617.65	0.0	Trace	0.0	612.35	11
February-10	1.5	603.71	0.0	600.02	0.9	618.35	0.0	Dry	0.0	613.95	16
March-10	1.2	605.71	0.0	606.52	1.0	619.55	0.0	Trace	0.0	614.95	18
April-10	1.0	606.41	0.0	605.52	1.0	619.85	0.0	Dry	0.0	614.45	18
May-10	0.7	605.51	0.0	604.52	1.1	619.65	0.0	Dry	0.0	614.05	12
June-10	0.8	606.41	0.0	603.72	1.1	620.25	0.0	Dry	0.0	614.95	8
July-10	0.5	606.71	0.0	604.52	1.0	620.35	0.0	Dry	0.0	614.75	8
August-10	0.5	606.71	0.0	605.02	1.0	620.46	0.0	Dry	0.0	614.52	14
September-10	-	603.24	-	596.97	-	600.92	0.0	Dry	-	613.45	10
October-10	-	-	-	-	-	-	-	-	-	-	16
November-10	-	-	-	-	-	-	-	-	-	-	16
December-10	-	603.16	-	597.22	-	601.23	-	Dry	-	616.43	8
January-11	-	-	-	-	-	-	-	-	-	-	12
February-11	-	-	-	-	-	-	-	-	-	-	21
March-11	8.2	600.5	0.0	604.0	4.0	619.3	0.0	606.8	0.0	600.3	12
April-11	8.0	600.6	0.0	604.5	5.0	619.8	0.0	607.2	0.0	600.6	16
May-11	10.0	603.1	0.0	606.6	6.0	620.8	0.0	608.0	0.0	601.1	78
June-11	1.0	603.5	0.0	606.1	0.5	620.5	0.0	607.5	0.0	600.7	11
July-11	1.0	602.7	0.0	605.8	0.5	620.3	0.0	607.0	0.0	600.4	18
August-11	1.2	603.5	0.0	607.4	0.6	620.3	0.0	607.2	0.0	604.2	25
September-11	1.0	603.5	0.0	598.8	0.5	600.0	0.0	606.0 <sup>(1)</sup>	0.0	611.9	12
October-11	1.0	603.0	0.0	598.6	0.5	599.5	0.0	606.0 <sup>(1)</sup>	0.0	611.9	20
November-11	1.2	605.0	0.0	603.4	>0.5	603.1	0.0	606.0 <sup>(1)</sup>	0.0	614.9	24
December-11	1.2	605.4	0.0	606.4	>0.5	607.3	0.0	606.0 <sup>(1)</sup>	0.0	615.0	13
January-12	1.3	605.7	0.0	606.6	0.7	609.1	0.0	606.0 <sup>(1)</sup>	0.0	617.0	21
February-12	1.3	605.4	0.0	605.7	0.7	608.5	0.0	606.0 <sup>(1)</sup>	0.0	616.1	52
March-12	1.6	601.4	0.0	604.6	0.8	606.3	0.0	606.0 <sup>(1)</sup>	0.0	613.8	41
April-12	1.6	601.8	0.0	605.5	0.8	607.2	0.0	606.0 <sup>(1)</sup>	0.0	614.2	46
May-12	1.7	601.6	0.0	605.9	0.8	606.8	0.0	606.0 <sup>(1)</sup>	0.0	613.8	34
June-12	1.6	601.4	0.0	605.8	0.8	606.6	0.0	606.0 <sup>(1)</sup>	0.0	613.5	34
July-12	1.3	601.3	0.0	605.8	0.7	606.8	0.0	606.0 <sup>(1)</sup>	0.0	613.3	16

TABLE 17

**SUMMARY OF SOURCE CONTROL WELL PUMPING 2009 - PRESENT**  
**HYDE PARK LANDFILL SITE**  
**TOWN OF NIAGARA, NEW YORK**

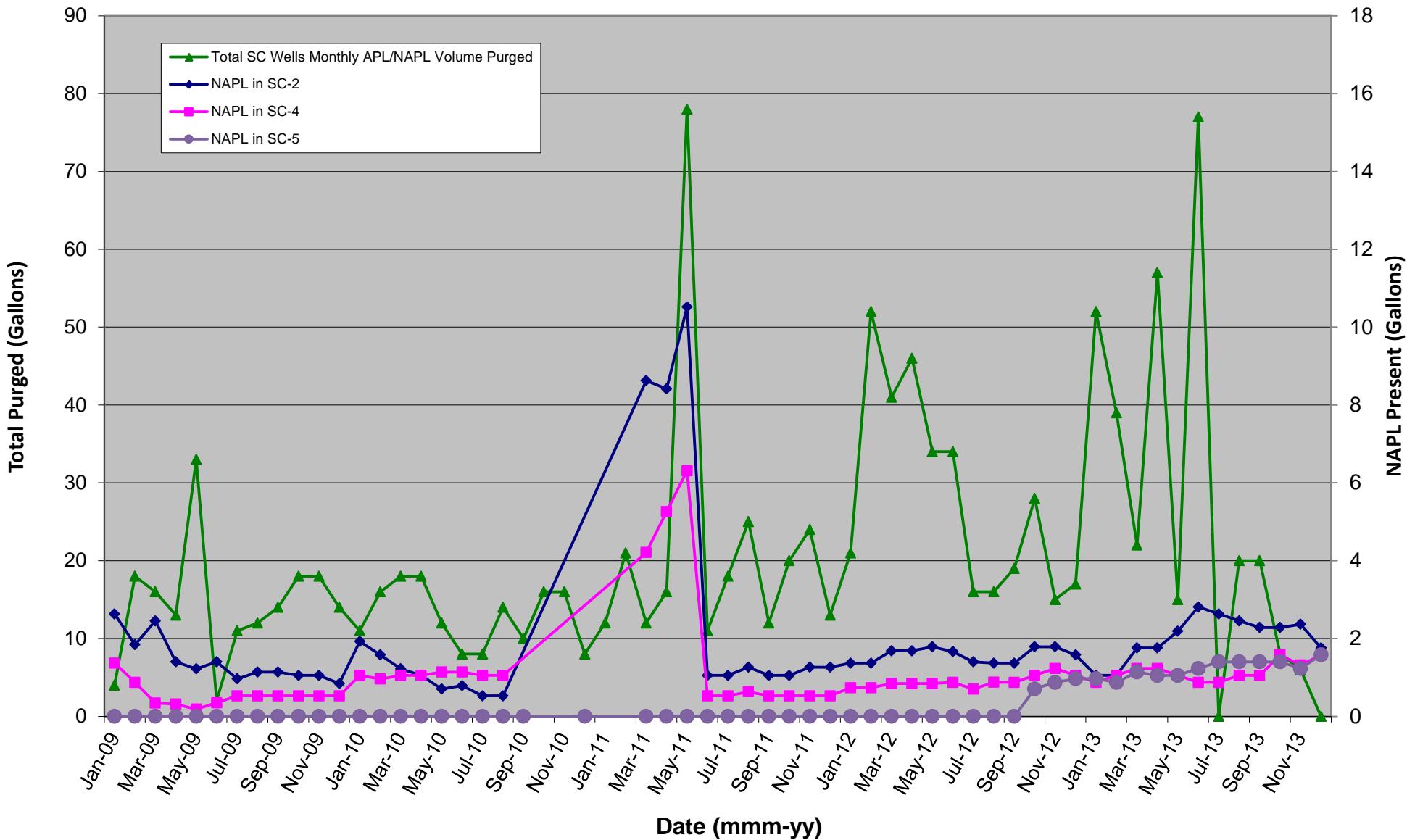
<b>Month</b>	<b>SC-2</b>		<b>SC-3</b>		<b>SC-4</b>		<b>SC-5</b>		<b>SC-6</b>		<b>Total Volume Pumped (gallons)</b>
	<b>NAPL Thickness (feet)</b>	<b>Water Level Elevation (ft. AMSL)</b>	<b>NAPL Thickness (feet)</b>	<b>Water Level Elevation (ft. AMSL)</b>	<b>NAPL Thickness (feet)</b>	<b>Water Level Elevation (ft. AMSL)</b>	<b>NAPL Thickness (feet)</b>	<b>Water Level Elevation (ft. AMSL)</b>	<b>NAPL Thickness (feet)</b>	<b>Water Level Elevation (ft. AMSL)</b>	
August-12	>1.3	601.0	0.0	605.8	0.8	606.5	0.0	606.0 <sup>(1)</sup>	Trace	613.2	16
September-12	>1.3	600.8	0.0	605.8	0.8	607.2	0.0	606.0 <sup>(1)</sup>	Trace	613.8	19
October-12	1.7	601.0	0.0	604.4	1.0	613.1	0.7	607.82	0.0	614.0	28
November-12	1.7	601.0	0.0	604.1	1.2	612.9	0.8	608.02	0.0	614.1	15
December-12	1.5	601.9	0.0	605.0	1.0	613.4	0.9	607.92	0.0	614.2	17
January-13	1.0	602.2	0.0	606.1	0.8	613.7	0.9	608.85	0.0	615.1	52
February-13	1.0	603.2	0.0	606.3	1.0	613.9	0.8	609.06	0.0	615.2	39
March-13	1.7	603.2	0.0	606.1	1.2	612.9	1.1	607.85	0.0	614.8	22
April-13	1.7	604.6	0.0	606.4	1.2	612.1	1.0	606.97	0.0	614.1	57
May-13	2.1	605.6	0.0	608.5	1.0	613.1	1.0	606.93	0.0	614.2	15
June-13	2.7	606.5	0.0	608.8	0.8	615.1	1.2	607.13	0.0	614.9	77
July-13	2.5	606.0	0.0	608.4	0.8	613.1	1.3	607.17	0.0	615.1	0
August-13	2.3	605.4	0.0	607.3	1.0	612.0	1.3	607.06	0.0	613.9	20 <sup>(2)</sup>
September-13	2.2	598.6	0.0	606.4	1.0	611.9	1.3	607.12	0.0	612.8	20 <sup>(2)</sup>
October-13	2.2	598.6	0.0	606.4	1.5	603.9	1.3	607.08	0.0	612.1	8
November-13	2.3	598.6	0.0	606.3	1.3	603.5	1.2	607.65	0.0	611.2	6
December-13	1.7	601.4	0.0	608.3	1.5	605.2	1.5	607.56	0.0	612.1	0

Notes:

- ft. AMSL      Feet above mean sea level.  
 NAPL      Non-aqueous phase liquid.  
 -      Not measured due to miscommunication between Site operator and field technicians.  
 (1)      Well obstructed during water level reading.  
 (2)      Estimated volume due to totalizer problems.

# Chart

**Chart 1**  
**Total SC Wells APL/NAPL Purged, NAPL Presence in SC-2, -4, and -5**



## **Attachment 1**

## ATTACHMENT 1

### A. Gorge Face Seep Survey

The 2013 Biennial Gorge Face Seep Survey of seeps and culverts located along accessible pathways along the Niagara Gorge between the New York Power Authority (NYPA) fence on the Lower Access Road and the Garfield Avenue Outfall Sewer was conducted by Conestoga-Rovers & Associates (CRA), along with representatives from Glenn Springs Holdings, Inc. (GSH), the United States Environmental Protection Agency (USEPA), the New York State Department of Environmental Conservation (NYSDEC), and the New York State Department of Health (NYSDOH). The purpose of the survey is to monitor the status of previously identified seeps/wet areas and to identify new flowing seeps/wet areas. This was the third biennial survey conducted since August 2006. The team of survey members who participated on May 30, 2013 consisted of:

- Jane Polovich – CRA
- John Pentilchuk – CRA
- Jim Thornton - CRA
- Joseph Branch – GSH
- Greg Sutton - NYSDEC
- Brian Sadowski – NYSDEC
- Matt Forcucci – NYSDOH

The weather was warm (~75°F) with clear skies. There was no rainfall during the survey.

#### A.1 Seep Survey Results

During the survey, all of the seep/wet areas identified during previous surveys were reexamined, and a reevaluation of the proposed remedial action was conducted. The seep locations are presented on Figure 4.1. It should be noted that NYPA added slope stability fence fabric along portions of the gorge face in the spring of 2000 to protect the access road.

A total of 24 seep locations and 8 culverts, as well as the Garfield Street Outfall Sewer and the Bloody Run outlet, were visited and inspected for variations in flow and exposed wet areas. Descriptions of the observations from each remaining seep are listed in the following summary of survey results.

Due to vegetation and rock covering large portions of Seep 7, this seep is no longer composed of nine distinct parts (labeled a through i). Therefore, the summary has combined areas of this seep together under common descriptions.

It should be noted that during this inspection, it was decided that odor would only be mentioned if it was present at the time of inspection. However, the inspection found no chemical odors present at any seeps or culverts.

SEEP SURVEY RESULTS		
<i>Seep No.</i>	<i>Description</i>	<i>Notes</i>
1	Dry, normal vegetation, seep basin is clear and dry. No flow.	Seep conditions have not changed since 2000.

**ATTACHMENT 1**

<b>SEEP SURVEY RESULTS</b>		
<b>Seep No.</b>	<b>Description</b>	<b>Notes</b>
2 (Culv. 6)	Damp area 0 to 30 feet north of seep (from Lockport/Rochester contact). Flow, minor green algae and grass on face of Rochester Shale, several wet and dripping areas, seep basin totally full of rock.	Same conditions as noted in 2011.
2 (Ditch line)	No odor, green moss, heavy vegetation. Heavy talus in ditch.	Same conditions as in 2011.
3 (Top)	Heavy phragmites reeds and other vegetation on north and south sides of Bloody Run concrete box culvert. Area too heavily vegetated to safely approach seep. Seep not visible from roadway.	Area fenced. Same conditions as in 2011.
3 (Bottom) Culvert 5	Heavy vegetation. Seep basin is clear. Rocks are wet but no standing water in basin (deepest portion) at Bloody Run Culvert.	Remediated. Same conditions as in 2011.
4	Steady rapid flow (approximately 30 gallons per minute [GPM]). Very heavy vegetation.	Same conditions as in 2011.
5	Damp rock face, occasional dripping.	Remediated. Same as 2011.
6	Moist rock face with slight dripping.	Remediated. Same as 2011.
7 a,b	Covered with local rock. Vegetation. Dry to moist.	Remediated. Same as 2011.
7 c	Dry to moist. Sparse vegetation.	Remediated. Same as 2011.
7 d	Wet and flowing (15 to 20 GPM) over top of Irondequoit (waterfall). Algae on face of rock.	Remediated. Same as 2011.
7 e,f,g,h,i	Audible flowing water beneath rocks. Some vegetation.	No action required. Same as 2011.
8	Approximately 0.5 GPM flow. Some vegetation.	No action required. Same as 2011.
11a	Inlet area at water's edge covered with local rock. Sediment infilling. Light to moderate flow. No sheen.	Remediated. Same as 2011.
11b	Light to moderate flow. No sheen. (south of Bloody Run fence).	Same as 2011.
12	Steady flow out of Culvert from NYPA south tunnel. Flow approximately 10 to 20 GPM. Heavy vegetation.	Same conditions as 2011.
14	Approximately 80 feet to 100 feet south of the south fence line of Seep 3. Moist face on Reynales approximately 30 feet wide. Some moist areas originate from the Irondequoit/Reynales contact.	No action required. Same conditions as 2011.
16	Not located.	No action required.
17a	North – area approximately 150 feet north of the north wall of Seep 2. Slightly moist. No visible flow.	No action required. Same conditions as 2011.
17b	South – dry.	No action required. Same conditions as 2011.

## ATTACHMENT 1

SEEP SURVEY RESULTS		
<b>Seep No.</b>	<b>Description</b>	<b>Notes</b>
18	Seep is 0 to 75 feet north of the north wall of Seep 3. Vegetation on moist rock face (Upper Grimsby). Flow in ditch ~10 GPM.	No action required. Same conditions as 2011.
19	Approximately 120 feet south of the south end of the wing wall. Queenston/Whirlpool rock face damp. No flow. Heavy vegetation.	No action required. Same basic conditions as in 2011.
20	Area 80 feet to 100 feet north of the north fence line of Seep 4 at the base of the Grimsby Sandstone down into the Power Glen Shale. Rock face damp. Minor vegetation.	No action required. Same conditions as in 2011.
21	Area 375 feet south of Seep 7 (Devil's Hole Stairs) by the river. Dry.	Same as 2011.
Bloody Run	Fenced-in area by the river shoreline. No visible flow, no odor, heavy talus. Fence is in place and in good condition.	Same as 2011.

During the seep survey, the following culverts were also inspected and the observed conditions were as follows:

CULVERT SURVEY RESULTS		
<b>Culvert No.</b>	<b>Description</b>	<b>Notes</b>
1	Picks up ditch flow to Drop Inlet at bottom of NYPA access road. Very slight flow. Heavy vegetation.	No action required.
2	Inlet is buried. Outlet has significant vegetation, moderate flow.	No action required. Same as 2011.
3	Cannot find inlet— heavy overgrowth. Outlet is open, very slight flow.	No action required.
4	Inlet is dry. Cannot access inlet due to presence of NYPA fence. Cannot determine if inlet is open. Could not find outlet.	No action required. Same as 2011.
5	Inlet is open. Slightly flowing. Outlet is open and has standing water, visible flow. Heavy vegetation.	No action required. Same as 2011.
6	Cannot locate.	No action required.
7	Cannot find in overgrowth.	No action required.
8	Inlet and outlet clear and dry. Well vegetated.	No action required. Same as 2011.
Garfield Avenue Sewer	Dripping and moist at exposed original outlet, typical sewer odor, continual caving into former archway (Whirlpool Sandstone). No standing water in pipe. Additional washouts since 1998. Parks Department built a pedestrian walkway (with two 36-inch diameter culverts) across the path in the summer of 1999. One culvert inlet completely buried and the other is approximately 95 percent buried. Walkway is broken and deteriorated.	No action required.

## **ATTACHMENT 1**

Figure 4.1 shows the general locations of all the seep/wet areas and culverts discussed in this report. Specific details of Seeps 5 and 6 are shown on Figure 4.2, and details of Seeps 7 and 8 are outlined on Figure 4.3.

### **A.2 Seep Sampling**

Due to the number of non-detect samples at all seeps, it has been decided to suspend sampling at this time. Further sampling will be evaluated at a later date.

### **A.3 Recommendations**

Based upon the results of the 2013 Biennial Gorge Face Seep Survey, no remedial actions are recommended at this time. The next inspection will be scheduled for summer 2015.



#### LEGEND

- SEEP-02 SEEP LOCATION
- CULVERT 8 CULVERT LOCATION

#### SOURCE:

2006 AERIAL IMAGE FOR NIAGARA COUNTY, NEW YORK; STATE PLANE NEW YORK WEST, NAD83. IMAGE PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) AS PART OF THE NORTH AMERICAN IMAGE PROGRAM (NAIP).



01069-D23101(SOSAD013)GN-WA006 FEB 13/2014

**figure 4.1**  
**SEEP LOCATIONS - OVERVIEW**  
**HYDE PARK LANDFILL SITE**  
**GLENN SPRINGS HOLDINGS, INC.**  
*Niagara Falls, New York*

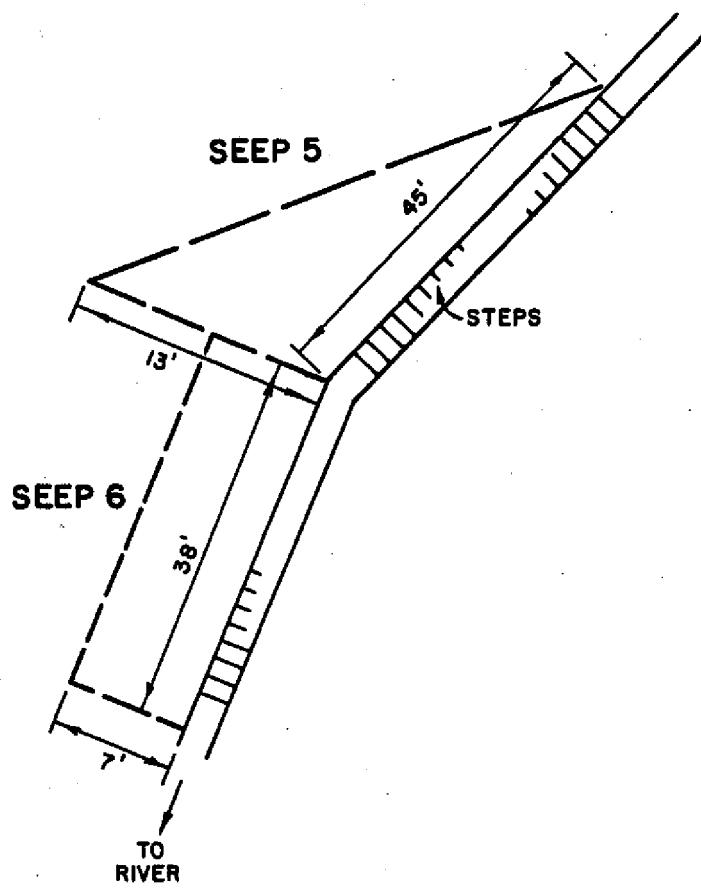


figure 4.2

SEEP LOCATIONS - UPPER DEVIL'S HOLE  
HYDE PARK LANDFILL SITE  
GLENN SPRINGS HOLDINGS, INC.  
*Niagara Falls, New York*



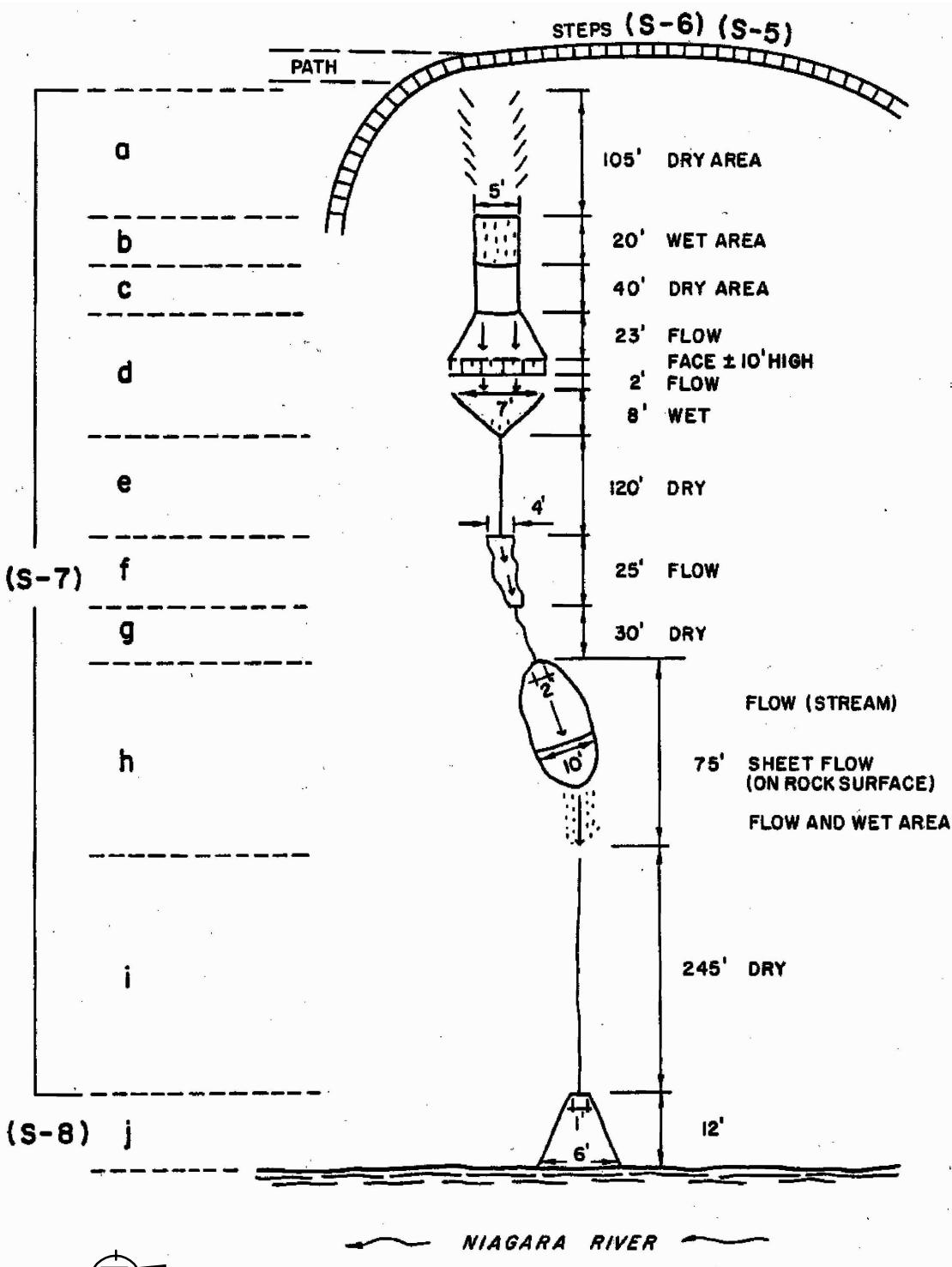


figure 4.3

SEEP LOCATIONS - LOWER DEVIL'S HOLE  
HYDE PARK LANDFILL SITE  
GLENN SPRINGS HOLDINGS, INC.  
*Niagara Falls, New York*