



2022 Annual Periodic Review Report

Hyde Park Landfill
Niagara Falls, New York
NYSDEC Site No. 932021

Glenn Springs Holdings, Inc.

1 May 2023

➔ **The Power of Commitment**

Executive summary

The following report describes the Operation, Maintenance, and Monitoring (OM&M) activities for 2022 at the Hyde Park Landfill Site (Site) located at 4825 Hyde Park Boulevard, Niagara Falls, Town of Niagara, Niagara County, New York. The Site is approximately 30 acres in size and is comprised of two parcels owned by Occidental Chemical Corporation (OCC) and one parcel owned by National Grid (formerly Niagara Mohawk Power Corporation). These parcels contain the landfill (28.1 acres) and the treatment system and associated buildings (1.9 acres). OCC owns another 30 parcels that are located to the west and north of the Site that encompass a total area of approximately 29 acres. These parcels were purchased to act as a buffer to the Site or to facilitate remediation. Management of the Site is performed on behalf of OCC by Glenn Springs Holdings, Inc. (GSH), an affiliate of OCC. Since October 1, 2008, GHD, formerly Conestoga-Rovers & Associates (CRA), has performed OM&M and reporting activities for the Site under contract to and direct management of GSH.

During 2022, the remedial system components at the Site performed as designed. The Source Control (SC), Overburden RRT, and Bedrock RRT Systems removed 21.6 million gallons of groundwater from the Site and surrounding formations. The RRT systems continued to provide containment, and Flow Zone 9 remained dewatered between the Site and the face of the Niagara River Gorge (Gorge). All aqueous phase liquid (APL) analytes were below reporting levels in APL Flux Monitoring, indicating no chemical loading to the Gorge seeps. Non-aqueous phase liquid (NAPL) continues to be contained by the Overburden RRT System, with no NAPL being found in overburden monitoring wells (OMWs) outside of the system. The community continues to be protected by the Site remedial systems. In 2022, 152,146 pounds of NAPL were shipped off Site for disposal.

The 2022 data indicate that there has been no significant change in chemical and hydrogeological conditions at the Site.

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1. Introduction

The following Periodic Review Report (PRR) describes the Operation, Maintenance, and Monitoring (OM&M) activities for 2022 at the Hyde Park Landfill Site (Site) located at 4825 Hyde Park Boulevard, Niagara Falls, Town of Niagara, Niagara County, New York (Figure 1.1). Management of the Site is performed on behalf of Occidental Chemical Corporation (OCC) by Glenn Springs Holdings, Inc. (GSH), an affiliate of OCC. Since October 1, 2008, GHD, formerly Conestoga-Rovers & Associates (CRA), has performed OM&M and reporting activities for the Site under contract to and direct management of GSH.

1.1 Site Location

The Site is located in the northwest corner of the Town of Niagara, New York, adjacent to the Town of Lewiston to the north and the City of Niagara Falls to the west. The location of the Site is shown on Figure 1.1. The Site is bounded by Hyde Park Boulevard to the west, the Power Authority Service Road (a New York Power Authority [NYPA] access road) to the north, Ferro Electronic Materials, Inc. (formerly TAM Ceramics) to the south, and vacant property owned by Armand Cerrone, Inc. to the east. The Site is located approximately 2,000 feet east of the Niagara River Gorge (Gorge).

The Site is approximately 30 acres in size and is comprised of two parcels owned by OCC and one parcel owned by National Grid (formerly Niagara Mohawk Power Corporation). These parcels contain the landfill (28.1 acres) and the treatment system and associated buildings (1.9 acres). OCC owns another 30 parcels that are located to the west and north of the Site that encompass a total area of approximately 29 acres. These parcels were purchased to act as a buffer to the Site or to facilitate remediation.

1.2 Site History

The Site is a closed disposal facility where Hooker Chemical placed liquid, sludge, and solid production waste from 1953 until 1975 when the landfill was closed. In 1978, OCC capped the landfill with clay. In 1981, OCC, the State of New York representing the New York State Department of Environmental Conservation (NYSDEC), and the United States of America representing the United States Environmental Protection Agency (USEPA) entered into a "Stipulation and Judgment Approving Settlement Agreement" (Settlement Agreement). Investigations as part of the approved Settlement Agreement indicated significant chemical migration into the bedrock, including the presence of non-aqueous phase liquid (NAPL). The USEPA added the Site to the National Priorities List in September 1983. Further negotiations among OCC, NYSDEC, and USEPA resulted in a second court agreement; the "Stipulation on Requisite Remedial Technology Program" (November 1985) (RRT Stipulation). In August 2010, OCC issued a "Declaration of Restrictive Covenants and Environmental Easement" (Environmental Easement) granting an easement on the portion of the Site owned by OCC to the Town of Niagara, guaranteeing that the institutional and engineering components of the Remedial Action (RA) will be maintained and transferred with ownership of the property.

In July 2011, NYSDEC reclassified the Site on the Registry of Inactive Hazardous Waste Disposal Sites 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, 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 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) other than operation, maintenance, and 5-year reviews, have been completed".

1.3 Remedial Goals

The original monitoring and remedial performance requirements for the Site were defined in the 1985 RRT Stipulation. Extensive remediation, investigation, and evaluation of the Site have been completed and documented in previous reports to the NYSDEC and USEPA since the RRT Stipulation was approved. The current monitoring and reporting requirements are detailed in the NYSDEC and USEPA-approved 2006 Performance Monitoring Plan (PMP). A checklist of all tasks required by the PMP and subsequent NYSDEC-approved changes in monitoring requirements is provided in Table 1.1. **Action levels** specified in the PMP are shown in the applicable analytical data tables.

1.4 Remedial Components and Monitoring

Site remedial components consist of the following:

- Source Control (SC) System, shown on Figure 1.2
 - Six SC wells installed within the landfill; only five are currently active
- Overburden RRT System, shown on Figure 1.3
 - Existing barrier collection system (EBCS) surrounding the original landfill
 - Overburden barrier collection system (OBCS) outside and to the north, west, and south of the original landfill
- Bedrock RRT System, shown on Figure 1.4
 - NAPL containment system (16 purge wells)
 - Aqueous Phase Liquids (APL) plume containment system (two purge wells)

All groundwater collected by these components is treated in an on-Site granular activated carbon treatment system before discharge to the publicly owned treatment works (POTW) under Niagara Falls Water Board Significant Industrial User (SIU) Permit #49. NAPL decanted from the groundwater is stored on Site until a sufficient quantity is available for transport to an approved hazardous waste disposal facility.

Based on the configuration of the treatment system, it is not possible to determine the quantity of NAPL collected by the individual EBCS and OBCS systems. A discussion of NAPL quantity collected by the SC system is presented in Section 5.1.1. In 2022, 152,146 pounds of NAPL were shipped off Site for disposal.

The PMP requires annual evaluation of the effectiveness of these components using the following three monitoring programs:

- Overburden Monitoring Program (OMP), locations shown on Figure 1.5
- Bedrock Monitoring Program (BMP), locations shown on Figure 1.6
- Community Monitoring Program (CMP), locations shown on Figure 1.7

2. Institutional and Engineering Controls

The required Institutional and Engineering Controls are listed in the completed Institutional and Engineering Controls Certification Form included as Appendix A. Institutional controls include restrictions on uses of Site land, buildings, groundwater, and surface water, and require the implementation of both a Monitoring Plan and an Operation and Maintenance (O&M) Plan. The most recent versions of these documents are the NYSDEC and USEPA approved 2006 PMP and the 2019 Operation and Maintenance Manual (O&M Manual). Engineering controls include groundwater containment through a leachate collection system, collected groundwater treated on Site, a maintained cover system on the landfill, and restricted Site access controlled through perimeter fencing.

3. Site Monitoring Programs and Results

3.1 Overburden Monitoring Program

The OMP involves the monitoring of the SC wells and the Overburden RRT System. The SC wells are a series of production wells installed within the landfill to recover NAPL, while the Overburden RRT System is comprised of two collection systems designed to control the lateral migration of APL and NAPL in the overburden.

The 2022 performance monitoring data for the overburden systems are presented as follows:

SC System Well Locations	Figure 1.2
2022 SC Well NAPL Pumping Summary	Table 3.1
Overburden RRT System	Figure 1.3
2022 Overburden Quarterly Groundwater Elevation Summary	Table 3.2
2022 Overburden NAPL Presence Monitoring	Table 3.3
2022 Overburden Collection Systems Monthly Average Flow Summary	Table 3.4

3.2 Bedrock Monitoring Program

The BMP includes the Lockport Bedrock APL and NAPL Plume Containment Systems and the Bloody Run Creek Monitoring Program. The Lockport Bedrock APL and NAPL Plume Containment Systems consist of 18 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. Piezometers associated with the Lockport Bedrock APL and NAPL Plume Containment Systems are sampled on a routine basis in two groups. The Group A Bedrock Piezometers are sampled every fifth quarter, which occurred in the third quarter of 2022 (rather than the scheduled fourth quarter of 2022) at the request of the NYSDEC to aid in its review of the *Draft Revised Performance Monitoring Plan* dated October 22, 2021. The Group B Bedrock Piezometers are sampled on a quarterly basis. The Bloody Run monitoring wells are sampled every 5 years, which occurred in October 2021, with the next event planned for 2026.

The 2022 performance monitoring data for the bedrock systems are presented as follows:

BMP Locations	Figure 1.6
2022 Bedrock Quarterly Groundwater Elevation Summary - Piezometers	Table 3.5
2022 Bedrock Purge Well Monthly Flow Rate Summary	Table 3.6
Analytical Results Summary: Quarterly Group B Bedrock Piezometer Sampling	Tables 3.7a-d
Analytical Results Summary: Fifth Quarter Group A Bedrock Piezometer Sampling, Third Quarter 2022	Table 3.8
2022 Analytical Results Summary: Annual Bedrock Open Catch Basin	Table 3.9

Due to a regional blizzard in mid-December 2022 that restricted travel and buried many wells, the fourth quarter 2022 quarterly Group B bedrock piezometer sampling event was performed in January 2023.

The PMP also specifies water level setpoints for each of the purge wells in the Bedrock RRT System. Only major issues associated with achieving these setpoints are discussed in this PRR, while the day-to-day maintenance of these setpoints was previously presented in the 2022 Quarterly Operations Reports. As indicated in the 2022 Quarterly Operations Reports, the water levels in several purge wells were out of setpoint range for periods of time awaiting replacement of pumps, motors, and variable frequency drives (VFDs). Delivery lead times for equipment (such as pumps, motors, drives, etc.) increased from several weeks in 2021 to several months (3 to 5 months or longer) in 2022. Although some spares have always been kept on hand, replacement of the spares took significantly

longer in 2022 than anticipated due to global supply chain and delivery issues, which affected repair of the purge wells. Additional spares have been and will continue to be ordered to address this issue.

In addition to maintaining water levels within target setpoint ranges in the purge wells, the groundwater elevation 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 elevation ensures that the FZ-09 outcrop along the NYPA access road remains unsaturated. Piezometer PMW-1M-09 is used to monitor the FZ-09 groundwater elevation in this area. A pressure transducer installed in PMW-1M-09 has been programmed to collect groundwater elevation data at 1-hour intervals. These continuous groundwater elevation data were reported in the 2022 Quarterly Operation Reports.

As indicated in the First Quarter 2022 Quarterly Operations Report, the transducer for the flow zone 9 piezometer PMW-1M-09 was replaced in March 2022. Based on a review of the continuously recorded groundwater elevations following transducer replacement, it was suspected that there had been an error in the new transducer setup. The quarterly groundwater elevation in this piezometer measured manually on March 2, 2022 was 530.41 feet AMSL. This groundwater elevation slightly exceeded 526 feet AMSL. As indicated in the Second Quarter 2022 Quarterly Operations Report, the transducer was reset on April 4, 2022 and the calibration on the transducer was then fine-tuned on June 17, 2022. The continuously recorded groundwater elevations for this piezometer were less than 526 feet AMSL throughout the second quarter following the transducer reset.

As indicated in the Third and Fourth Quarter 2022 Quarterly Operations Reports, all purge wells were turned off on September 13, 2022 and remained offline through October 3, 2022 for APL storage tank cleaning and repair and removal of NAPL from decanters. The wells were returned to operation on October 4, 2022. As a result of this scheduled downtime, groundwater elevations in the flow zone 9 piezometer PMW-1M-09 were above 526 feet AMSL from September 16, 2022 through October 5, 2022.

3.3 Community Monitoring Program

The CMP was developed to ensure that the public is not being adversely exposed to Site-related parameters. The CMP includes the Gorge Face Seep Program, the APL Flux Monitoring Program, and the Residential CMP. The Gorge Face Seep Program involves inspections of the Gorge every five years (refer to Section 5.3.4) to ensure that Site-specific parameters are not discharging to a publicly accessible area. The APL Flux Monitoring Program involves annual sampling and ensures that the mass loading via groundwater discharged to the Gorge is less than the defined Flux Action Level. The Residential CMP involves annual vapor monitoring and 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 2022 performance monitoring data for the community monitoring are presented as follows:

APL Flux Well Locations	Figure 3.1
2022 Analytical Results Summary: Annual AFW Composite	Table 3.10
Community Monitoring Locations	Figure 1.7
2022 Quarterly Hydraulic Gradient Summary	Table 3.11
2022 Community Monitoring Well Soil Vapor Monitoring	Table 3.12

The 2022 annual AFW composite sample was collected on December 22, 2022. Due to a laboratory error, analysis of this sample for polychlorinated biphenyls (PCBs) was inadvertently not performed. As a result, a second AFW composite sample was collected on March 13, 2023, and submitted for PCB analysis.

4. Site Operation and Maintenance

Maintaining the Site remedial elements is critical to the Site's remedial performance. Therefore, inspections of hydraulic and chemical monitoring points, the landfill cap, and the security fence surrounding the landfill have been

included in the PMP and O&M Manual. Although not required by the PMP, the monitoring program for the Site groundwater treatment system is discussed briefly in this report. Full details on Site O&M activities are presented in the 2019 O&M Manual.

Analytical results from the treatment system monitoring program have been presented previously in the 2022 Quarterly Operations Reports. These include the following:

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

The following treatment system monitoring was also conducted in 2022:

Quarterly NAPL Decanter Volume Monitoring	Table 4.1
Weekly Carbon Interstage APL Sampling	Table 4.2
Quarterly Leachate Feed APL Sampling	Table 4.3
Quarterly Sac Bed Interstage APL Sampling	Table 4.4



As indicated in the First Quarter 2022 Quarterly Operations Report, the treatment system was shut down on January 21, 2022 due to frozen leachate line and effluent line piping and resumed operations on February 2, 2022. The system was then shut down again on February 17, 2022 to replace an effluent discharge line and resumed operations on February 22, 2022. As a result, weekly carbon interstage sampling was not performed in late January or February 2022.

The 2006 PMP also requires weekly fence inspections, annual well and piezometer inspections, and annual landfill cap inspections. All of the required inspections were performed in 2022. The inspections did not identify any issues of concern beyond routine maintenance items. Records of these inspections are maintained at the Site and are available upon request, in accordance with the 2006 PMP.

5. Evaluation and Conclusions

5.1 Overburden Monitoring Program

There were no deviations from the OMP in 2022, and monitoring was conducted in accordance with the 2006 PMP. The results of the OMP are discussed below and summarized in Tables 3.1 through 3.4.

5.1.1 Source Control System

The SC wells (SC-2 to SC-6) were historically operated on a monthly basis to pump down the APL/NAPL level to approximately the top of the pump in each well. The 2014 Annual Periodic Review Report recommended that monthly purging of the SC wells and subsequent water level and NAPL thickness measurements be discontinued; however, in order to provide additional data to support discontinuation, it also recommended that the frequency be changed to quarterly for 1 year. After 1 year, the original recommendation to discontinue would be reevaluated. NYSDEC approved the quarterly frequency of SC water level and NAPL thickness measurements in a letter dated May 5, 2015; however, GSH maintained monthly water level and NAPL thickness measurements throughout 2015. Starting in 2016, the SC water levels and NAPL thickness were measured quarterly.

In an effort to further demonstrate that the SC wells do not produce significant amounts of NAPL, monthly manual NAPL removal from SC-6 was implemented in April 2015. The NAPL thickness in SC-6 prior to removal in April 2015 was approximately 10 feet. Approximately 18 gallons of NAPL were removed. In subsequent months, the volume of NAPL removed decreased from 8 gallons in May to 3 gallons in October 2015 when manual removal of NAPL ceased due to cold temperatures. Based on the declining amount of NAPL removed, the frequency was revised to quarterly.

Based on the results of manual NAPL removal from SC-6, quarterly manual NAPL removal was implemented at SC-2, SC-3, SC-4, and SC-5 in October 2016. The volume of NAPL recovered from these wells was 5.5 gallons, 33.25 gallons, 15.25 gallons, and 1.5 gallons, respectively. Based on the volumes of NAPL recovered, it was recommended in the 2016 PRR that quarterly manual NAPL removal from the SC wells continue in 2017 except at SC-3 where removal would be performed on an approximate monthly basis. This change was implemented in 2017.

Based on the low volumes of NAPL recovered each year from SC-5 and SC-6 since 2016, the 2019 PPR recommended that the frequency of manual NAPL recovery at these two wells be changed to semiannual. This recommendation was approved by the NYSDEC in its 2019 PRR acceptance letter dated July 29, 2020. The first semiannual manual NAPL removal event at SC-5 and SC-6 was completed in October 2020. Manual NAPL removal and NAPL thickness measurements have continued on a monthly basis at SC-3, on a quarterly basis at SC-2 and SC-4, and on a semiannual basis at SC-5 and SC-6. Due to a field error, NAPL thickness measurements were performed annually at SC-5 and SC-6 in 2022 instead of semiannually. The amount of NAPL observed in each of these two wells was less than 0.5 feet during this event.

The 2022 SC well NAPL thickness and recovery data are summarized in Table 3.1. No NAPL was recovered in 2022 from SC-2, SC-5, or SC-6. The volumes of NAPL recovered in 2022 from SC-3 and SC-4 were 112.8 gallons and 31.5 gallons, respectively.

The total amount of NAPL recovered in 2022 was 144.3 gallons. The NAPL volumes removed from the SC wells from 2016 through 2022 are as follows:

Year	Gallons Purged from SC-2	Gallons Purged from SC-3	Gallons Purged from SC-4	Gallons Purged from SC-5	Gallons Purged from SC-6	Total Gallons Purged from SC Wells
2016	5.5	33.25	15.25	1.5	10	65.5
2017	2.75	476.5	46.75	0	5.1	531.1
2018	0	390.3	31.0	0	9.0	430.3
2019	6.5	178.3	23.8	0	0	208.6
2020	3.3	165.5	26.0	0	0	194.8
2021	0	110.3	31.0	0	0	141.3
2022	0	112.8	31.5	0	0	144.3

Approximately ten gallons or less of NAPL have been recovered from each of wells SC-2, SC-5, and SC-6 annually since at least 2016. No NAPL has been recovered from SC-5 or SC-6 since 2018 and from SC-2 since 2020. Based on the low volumes of NAPL recovered from these three wells, it is recommended that the frequency of manual NAPL recovery and associated NAPL thickness measurements at these three wells be reduced to annually. It is recommended that the frequency of manual NAPL recovery and associated NAPL thickness measurements at wells SC-3 and SC-4 be continued on a monthly and quarterly basis, respectively.

5.1.2 Overburden Groundwater Elevations

The overburden groundwater elevation data provided in Table 3.2 were used to generate potentiometric surface maps that were presented in the 2022 Quarterly Operations Reports. These potentiometric surface maps indicated hydraulic containment for each quarter of 2022. Measured water levels are recorded electronically and uploaded into a database from the field. As such, gauging logs are not available.

5.1.3 Overburden NAPL Presence Monitoring

NAPL presence checks are to be completed annually in the OBCS, Overburden Monitoring Wells (OMWs), and the OBCS manholes. The NAPL presence monitoring data from the OMWs and manholes are presented in Table 3.3. The data indicate that NAPL was present in 4 of the 17 manholes monitored (MH-29, MH-30, MH-31, and MH-32) and in 1 of the 2 wet wells (Wet Well D). These four manholes are located at the southwest corner of the landfill and all flow

to Wet Well D. The data also indicate that NAPL is not present in any of the OMWs. These wells are located outside of the OBCS to the south, west, and northwest of the four manholes and one wet well where NAPL was present (see Figure 1.3). The lack of NAPL presence in these OMWs indicates that overburden NAPL is contained within the boundaries of the OBCS and is not bypassing the OBCS. The monitoring well NAPL gauging log (well inspection log) is included in Appendix C.

5.1.4 Overburden RRT System Flow Rates

The OBCS and EBCS monthly average flow rates, presented in Table 3.4, indicate seasonal fluctuations in flow rates with the highest average flow rates generally occurring during the spring months of 2022.

5.1.5 Overburden Monitoring Conclusions

Based on the overburden data collected in 2022, as shown in Tables 3.1 through 3.4 and the potentiometric surface maps that were presented in the 2022 Quarterly Operations Reports, the SC and Overburden RRT Systems are operating as designed, and overburden containment is being achieved.

5.2 Bedrock Monitoring Program

There were no deviations from the BMP in 2022, and monitoring was conducted in accordance with the 2006 PMP. The results of the BMP in 2022 are discussed below and summarized in Tables 3.5 through 3.9.

5.2.1 Bedrock Groundwater Elevations

The bedrock flow zone groundwater elevation data, presented in Table 3.5, were used to generate groundwater potentiometric surface maps for each of the monitored flow zones. These maps have been presented previously in the 2022 Quarterly Operations Reports. The potentiometric surface maps for each monitored flow zone during each quarter of 2022 indicated containment. Measured water levels are recorded electronically and uploaded directly into a database from the field. As such, gauging logs are not available.

5.2.2 Bedrock RRT System Flow Rates and Setpoints

The 2022 bedrock purge well monthly average flow rate data is presented in Table 3.6. As indicated in Section 3.2, flow rates were consistent with historical flow rates when purge wells were operational.

Maintenance of operating water level setpoints by each of the purge wells has been discussed in the 2022 Quarterly Operations Reports. As indicated in the 2022 Quarterly Operations Reports, water levels in several purge wells were out of setpoint range for periods of time awaiting replacement of pumps, motors, and VFDs. Delivery lead times for equipment (such as pumps, motors, drives, etc.) increased from several weeks in 2021 to several months (3 to 5 months or longer) in 2022. With the exception of these periods and additional minor operational and setpoint issues which were investigated and resolved, the water levels were maintained within target setpoint ranges at the purge wells in 2022.

Based on the hourly data from the PMW-1M-09 pressure transducer, the groundwater elevation in this area of FZ-09 was maintained at an average elevation of 522.37 feet AMSL throughout 2022, with a maximum elevation observed of 538.51 feet AMSL on October 4, 2022. As indicated in the Third and Fourth Quarter 2022 Quarterly Operations Reports, all purge wells were turned off on September 13, 2022 and remained offline through October 3, 2022 for APL storage tank cleaning and repair and removal of NAPL from decanters. The wells were returned to operation on October 4, 2022. As a result of this scheduled downtime, groundwater elevations in piezometer PMW-1M-09 were above 526 feet AMSL from September 16, 2022 through October 5, 2022.

The average groundwater elevation recorded by the PMW-1M-09 pressure transducer was below the 526 feet AMSL elevation setpoint, which ensures that the FZ-09 outcrop along the NYPA access road remains unsaturated. The data were corroborated by the quarterly groundwater elevations for PMW-1M-09 presented in Table 3.5, based on hand

water level measurements, and show an average groundwater elevation of 524.87 feet AMSL in 2022. The quarterly groundwater elevation for PMW-1M-09 for the first quarter 2022 measured on March 2, 2022 was 530.41 feet AMSL, which slightly exceeded 526 feet AMSL. This slight exceedance was likely due to several purge wells being offline for much of the first quarter awaiting equipment replacements and repairs, as discussed above.

5.2.3 Bedrock Analytical Results

In accordance with the 2006 PMP, quarterly groundwater samples were collected from the Group B Bedrock piezometers in 2022. The quarterly groundwater sampling events were performed during March 2022, June 2022, August/September 2022, and January 2023. The fifth quarter Group A Bedrock piezometer sampling event, as defined in the PMP, was performed during August/September 2022. Refer to Section 3.2 for information regarding the scheduling of these sampling events in 2022. Groundwater sampling logs are included in Appendix C.

The 2022 quarterly Group B Bedrock piezometer sampling results are presented in Tables 3.7a through 3.7d. Samples were analyzed for the Site-specific list of organic acids. Site-specific screening levels (SLs) presented in the PMP have been included in these tables and exceedances of these values have been highlighted.

The fifth quarter sampling results for the Group A Bedrock piezometers are presented in Table 3.8. Analyses included volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), organic acids, and sulfate. The SLs presented in the PMP have been added to this table and exceedances of these values have been highlighted.

The 2022 data for the quarterly Group B Bedrock piezometer and the fifth quarter Group A Bedrock piezometer sampling events indicate that samples from a number of locations exhibited concentrations of Site Organic Indicators (SOIs) that exceeded the SLs, as summarized below:

Site Organic Indicators	Location Exceeding Site-Specific Screening Level
Chlorendic Acid	ABP-7-09, AGW-1M-07, AGW-1M-09, AGW-1U-06, B2L-11, D1M-09, D1U-04, D1U-05, D2M-09, D2U-05, F2U-02, F2U-04, G6-04, G6-05, G6-06, H2U-02, H5-09
Trichloroethene (TCE)	G6-01, G6-02, G6-04, G6-05, G6-06, G6-11, H2M-06
Tetrachloroethene (PCE)	G6-01, G6-02, G6-04
Cis-1,2-Dichloroethene (cis-1,2-DCE)	G6-04, G6-05
1,1,2,2-Tetrachloroethane (1,1,2,2-PCA)	G6-01, G6-02, G6-04, G6-05, G6-06
Bis(2-Ethylhexyl)phthalate	E6-04
Vinyl Chloride	G6-04, G6-05, G6-06, H2M-06
Benzene	AGW-1M-09, D1L-11, E6-09, E6-11, F2L-11, F6-11, G1L-11, G6-04, G6-05, G6-06, G6-11, H2M-09, H5-09, J6-11

The above exceedances are generally consistent with results from the quarterly Group B piezometer and fifth quarter Group A Bedrock piezometer sampling events conducted in previous years.

As described in the 2021 PRR, in 2019 and 2020, a statistical analysis was performed of concentrations of organic compounds detected in the Lockport Bedrock monitoring wells from 2006 through the second quarter of 2019. All of the organic compounds included in the Lockport Bedrock sampling program were included in the analysis, instead of only the nine SOIs. Based on the analysis performed, two organic compounds were detected in the monitoring wells that had been detected at concentrations above the SLs and had exhibited sustained increases in concentration, as follows:

- Benzene in wells D1L-11, E6-11, J6-11, and G6-04. Benzene in flow zone 11 is considered to be naturally occurring due to the presence of natural gas. Benzene concentrations in G6-04 appeared to be stabilizing based on the 2016 through 2019 data.

- Vinyl chloride in wells H2M-06 and G6-04. Concentrations of vinyl chloride appeared to be stabilizing in H2M-06 and had been relatively low in both H2M-06 and G6-04.

Based on the above, it was recommended that concentrations of benzene and vinyl chloride continue to be monitored as part of the current bedrock sampling program, with no modifications in the sampling or reporting requirements. It was also recommended that any continued increasing trends associated with the identified wells and compounds in the next statistical review of chemistry data for the Site be further evaluated at that time.

In 2022, a statistical evaluation of data collected from 2007 through 2021 was performed to supplement the statistical analysis performed in 2019 and 2020. In addition, as required by the PMP, a statistical evaluation of data collected from 2017 through 2021 was also performed. The results of these evaluations were presented in the *Five Year Site Remedial Performance Report – 2017-2021* dated May 2, 2022. Based on the trends identified, it was recommended that VOCs continue to be sampled for at wells H2M-06 and G6-04 every fifth quarter. Furthermore, based on the statistical analyses conducted, the following changes to the Site groundwater sampling programs were recommended:

- Modify the Quarterly Group B Bedrock sampling program to only include sampling of piezometers B2L-11 and D1U-05. The need for continued quarterly sampling of these piezometers will be evaluated in the annual PRRs.
- Modify the Fifth Quarter Group A Bedrock sampling program to consist of sampling for VOCs in all Group A Bedrock piezometers (which includes the Group B bedrock piezometers), but sample for organic acids only in the following four piezometers: G6-04, G6-05, H2M-06, and H2U-02. Discontinue collection of samples for analysis of SVOCs and sulfate.
- Create a new Five-Year Group A Bedrock sampling program which will consist of sampling for organic acids and SVOCs in all Group A Bedrock piezometers every five years, to be performed concurrently with the 5-Year Bloody Run and 5-Year APL/NAPL Purge Well sampling programs.

These recommendations differed slightly from the recommendations presented in the *Draft Revised Performance Monitoring Plan* dated October 22, 2021, based on the updated statistical evaluations. The 2022 quarterly Group B and fifth quarter Group A Bedrock sampling data support these recommendations.

In a letter dated October 24, 2019, NYSDEC indicated that recent increases in concentrations of the SOIs 1,1,2,2-PCA, benzene, vinyl chloride, TCE, and cis-1,2-DCE, along with the non-SOI compounds chloroform, 1,1,2-trichloroethane (1,1,2-TCA), trans-1,2-DCE, and chlorobenzene had been noted for piezometer G6-05, suggesting that the groundwater plume had further migrated from the Site towards G6-05. Based on this, NYSDEC requested that a groundwater evaluation be completed in the area of G6-05. In response, GSH submitted a letter dated January 24, 2020 indicating that there was no evidence found to suggest that the groundwater plume would be expanding toward this well. The increasing concentrations were related to minor changes in groundwater flow patterns and the resulting redistribution of contaminant mass and were not considered evidence of an expanding plume. In addition, groundwater flow in the area of G6-05 had consistently been demonstrated to be towards the Site. GSH recommended continued monitoring and provision of updated graphs of the concentrations of these nine organic compounds detected in G6-05 on an annual basis as an appendix in the PRR. The NYSDEC approved this recommendation in its 2019 PRR acceptance letter dated July 29, 2020. G6-05 is sampled every fifth quarter as part of the Group A Bedrock piezometer sampling event. Figures B.1 and B.2 in Appendix B provide concentrations of these nine organic compounds detected in G6-05 through the third quarter of 2022. With the exception of cis-1,2-DCE, the rate of increase of the remaining SOIs has slowed since 2020, suggesting that concentrations may be once again stabilizing. As indicated above, it is recommended that G6-05 continue to be sampled every fifth quarter for VOCs and organic acids.

The next statistical evaluation of chemistry data generated from the bedrock groundwater quality monitoring programs at the Site will be conducted in 2027 for monitoring results obtained through 2026.

The catch basin on the north side of the Greif Brothers' warehouse is sampled annually for NAPL organic acids. The analytical results for 2022 are presented in Table 3.9.

The bedrock groundwater data collected in 2022 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.

5.2.4 Bedrock Monitoring Conclusions

The bedrock monitoring data collected in 2022 demonstrate that the APL and NAPL purge well systems are operating properly, and bedrock containment is being achieved in each of the flow zones.

5.3 Community Monitoring Program

5.3.1 APL Flux Monitoring Program

The APL plume flux composite sampling results are presented in Table 3.10. None of the APL plume flux parameters were detected above their respective reporting levels. As a result, calculation of the flux to the Gorge is not required. Groundwater sampling logs are included in Appendix C.

5.3.2 Quarterly Hydraulic Gradient Summary

Table 3.11 presents a summary of groundwater elevations and vertical hydraulic gradients at the paired community monitoring wells for each quarter of 2022. Downward vertical hydraulic gradients, as demonstrated by a higher groundwater elevation in the overburden monitoring well than in the corresponding bedrock groundwater monitoring well, were maintained at each of the well pairs throughout the year.

5.3.3 Soil Vapor Monitoring

Results of community monitoring well soil vapor monitoring are presented in Table 3.12. None of the six locations monitored exhibited any recordable concentrations of VOCs during the September 2022 monitoring event. Therefore, in accordance with the field procedure for community well vapor monitoring presented in Appendix B of the 2014 Annual Periodic Review Report, groundwater sampling was not required.

5.3.4 Gorge Face Seep Survey

The Gorge Face Seep Survey was last conducted on November 10, 2021. In over 25 years of performing the Seep Survey (annually then biennially), no issues have been identified that required further action. In the 2019 PRR for the Site, it was recommended to change the frequency of the Gorge Face Seep Survey to every five years to coincide with the USEPA Five-Year review of the Site. In its 2019 PRR approval letter, NYSDEC indicated that this change was acceptable pending approval from the USEPA.

In a letter dated June 30, 2021, the USEPA requested that in order to confirm that Site conditions had not changed since the last sampling of the Gorge Face Seeps in 2001, Seeps 2, 7d, and 12 be sampled for the APL Plume Definition Parameters set forth in the 2001 PRR. The letter indicated that upon receipt and review of the sampling results, the USEPA would make a determination regarding the proposed reduction in frequency of the Seep Survey. The requested seep sampling was conducted during the November 10, 2021 biennial Gorge Face Seep Survey and the results presented in the 2021 PRR. In a letter dated August 18, 2022, the USEPA approved the request to reduce the Gorge Face Seep Survey to once every five years. The next Seep Survey will be conducted in the fall of 2025 for inclusion in the Seventh Five-Year Review Report due in 2026.

5.3.5 Community Monitoring Conclusions

The community monitoring data collected in 2022 demonstrate that the community is being properly protected by Site remedial systems.

5.4 Site Operations and Maintenance

There were no deviations in 2022 from the treatment system monitoring specified in the 2006 PMP. Ongoing O&M issues are discussed in the 2022 Quarterly Operations Reports.

6. Recommendations

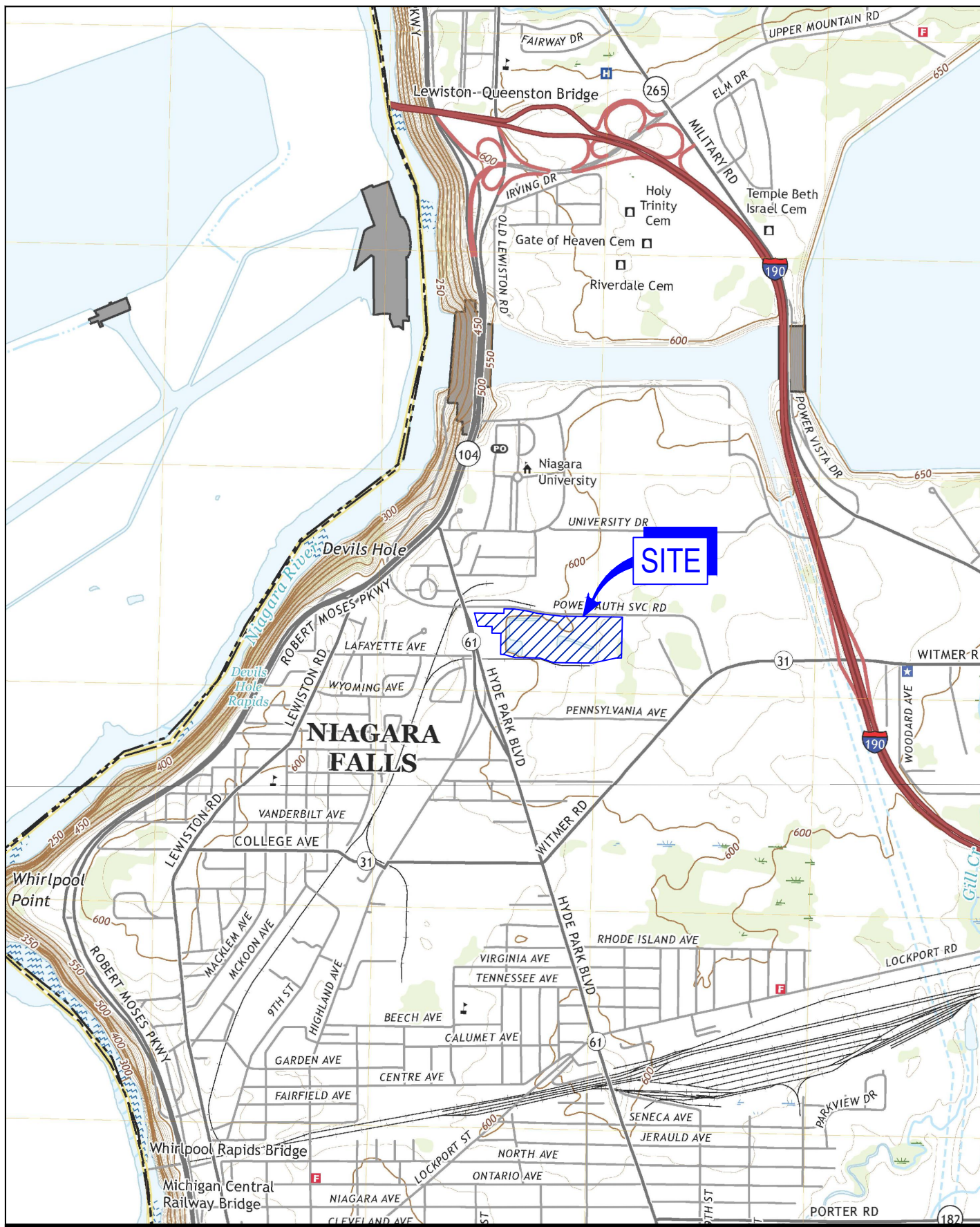
Based on the evaluation of data presented within this PRR, no changes in the OM&M activities for the Site are recommended at this time, except for the following:

- Change the frequency of manual NAPL recovery and associated NAPL thickness measurements at SC-2, SC-5, and SC-6 to annual.

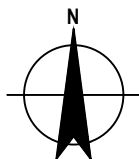
In addition, implement the changes recommended in the *Five Year Site Remedial Performance Report – 2017-2021* dated May 2, 2022, as follows:

- Modify the Quarterly Group B Bedrock sampling program to only include sampling of piezometers B2L-11 and D1U-05. The need for continued quarterly sampling of these piezometers will be evaluated in the annual PRRs.
- Modify the Fifth Quarter Group A Bedrock sampling program to consist of sampling for VOCs in all Group A Bedrock piezometers, but sample for organic acids only in the following four piezometers: G6-04, G6-05, H2M-06, and H2U-02. Discontinue collection of samples for analysis of SVOCs and sulfate.
- Create a new Five-Year Group A Bedrock sampling program which will consist of sampling for organic acids and SVOCs in all Group A Bedrock piezometers every five years, to be performed concurrently with the 5-Year Bloody Run and 5-Year APL/NAPL Purge Well sampling programs.

Figures



0 1000 2000 ft
1" = 2000 ft

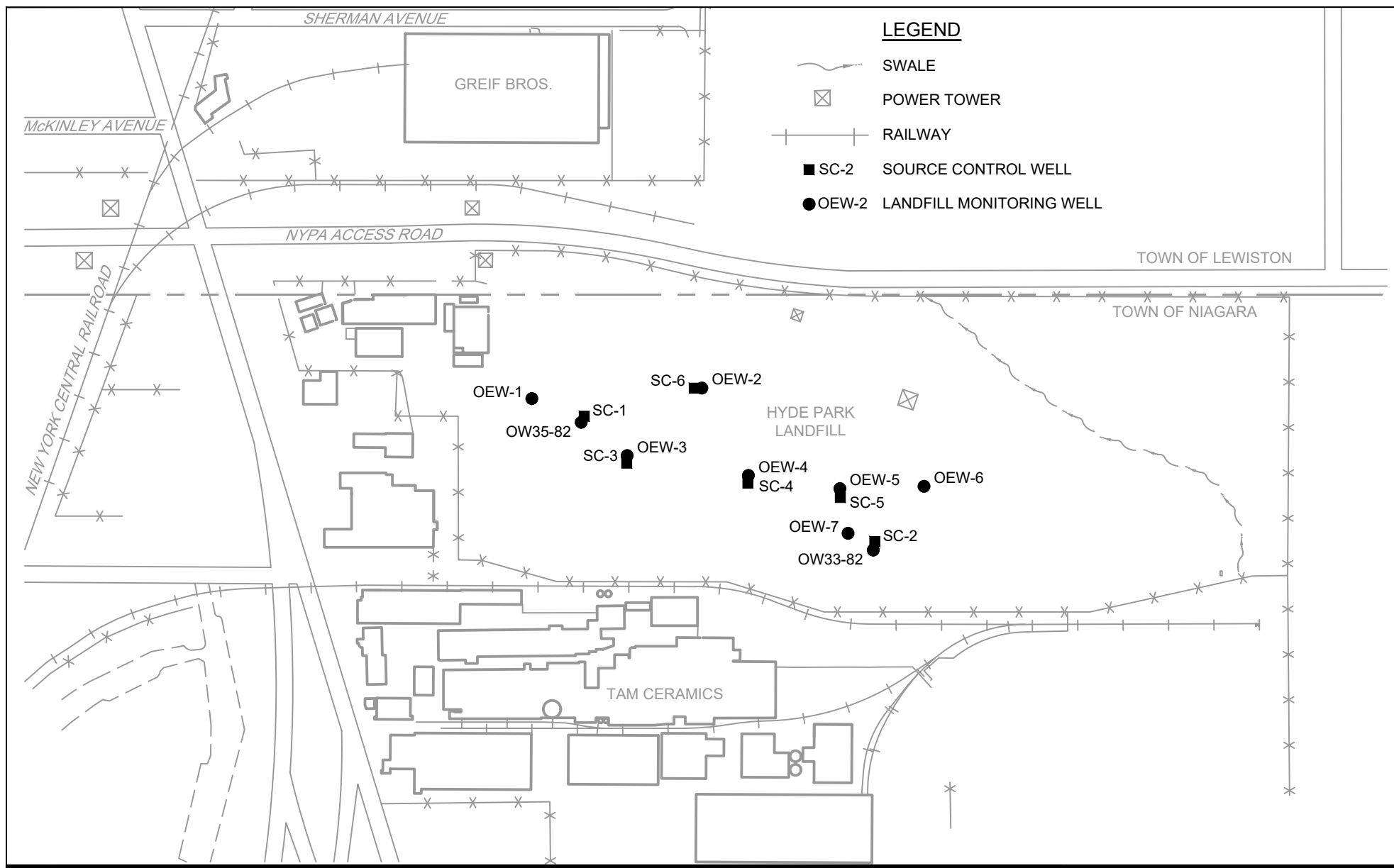


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HYDE PARK LANDFILL SITE
NIAGARA FALLS, NEW YORK

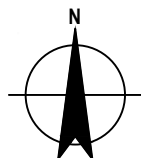
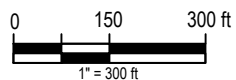
Project No. 11230216
Date March 2023

SITE LOCATION

FIGURE 1.1



NOTE:
SITE BENCHMARK IS A P.K. NAIL SET IN THE EAST FACE OF A POWER POLE LOCATED AT THE WEST END OF THE EXISTING HYDE PARK LANDFILL, ELEVATION = 612.77. DATUM NOT VERIFIED.

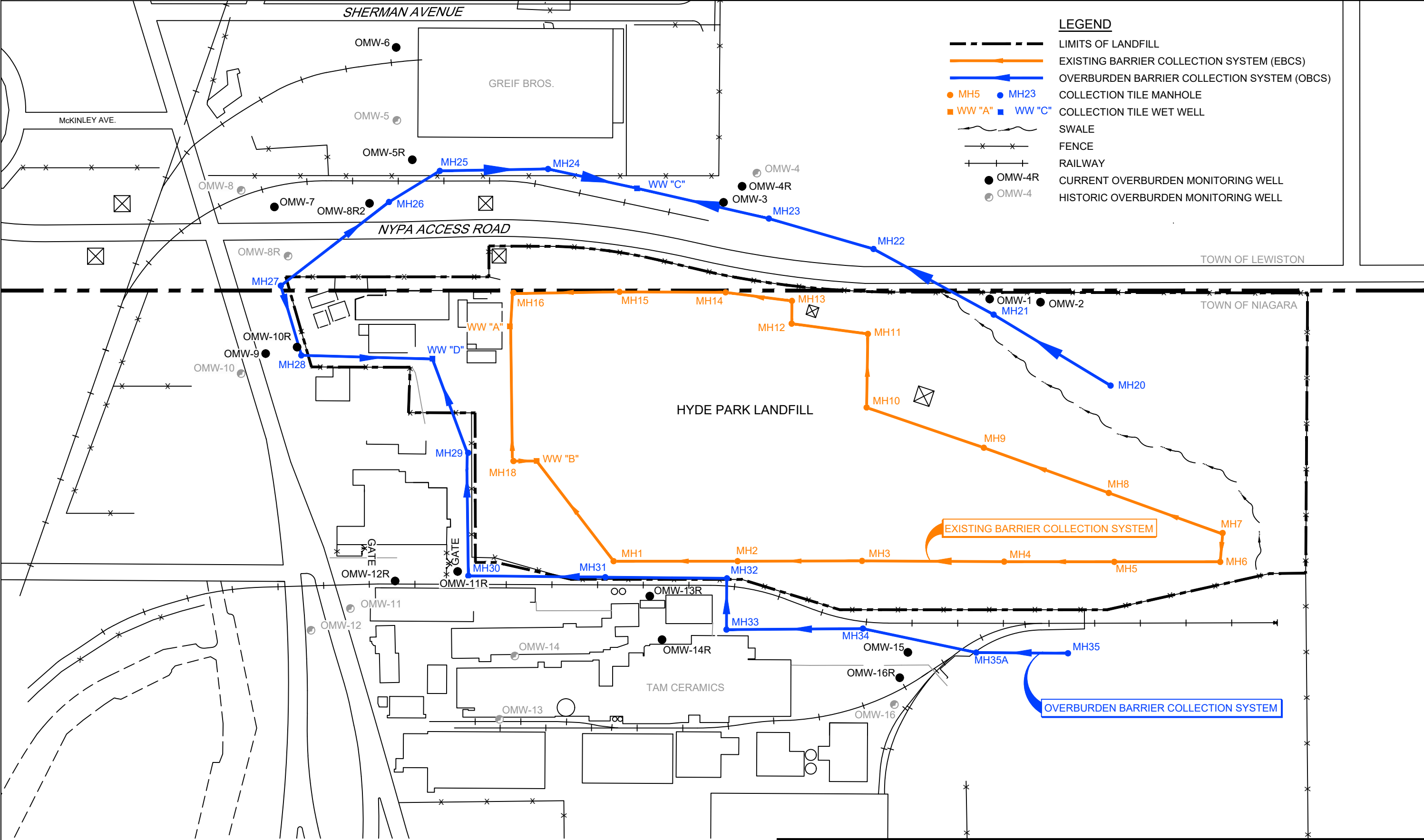


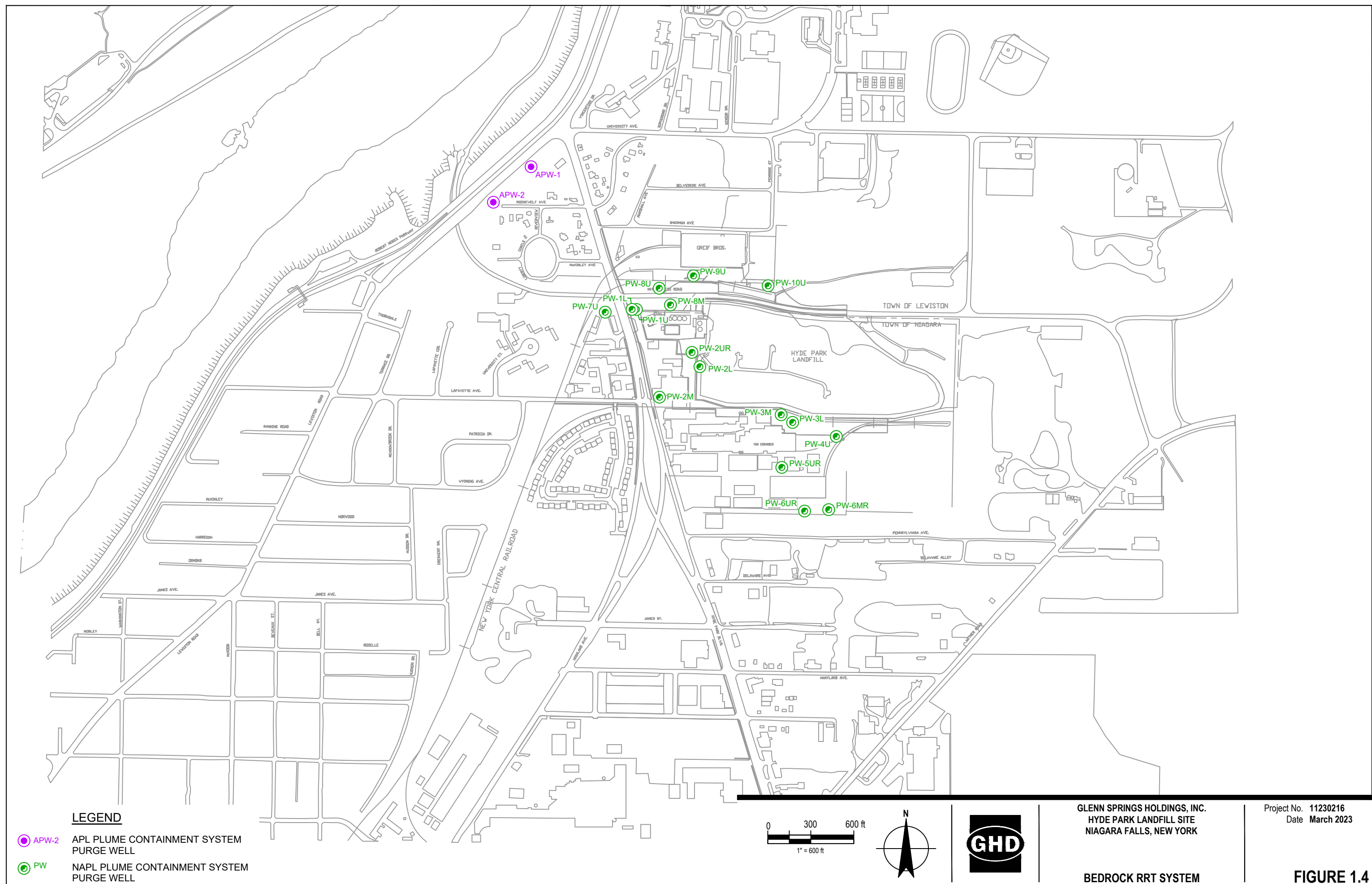
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HYDE PARK LANDFILL SITE
NIAGARA FALLS, NEW YORK

**SOURCE CONTROL SYSTEM WELL
LOCATIONS**

Project No. 11230216
Date March 2023

FIGURE 1.2





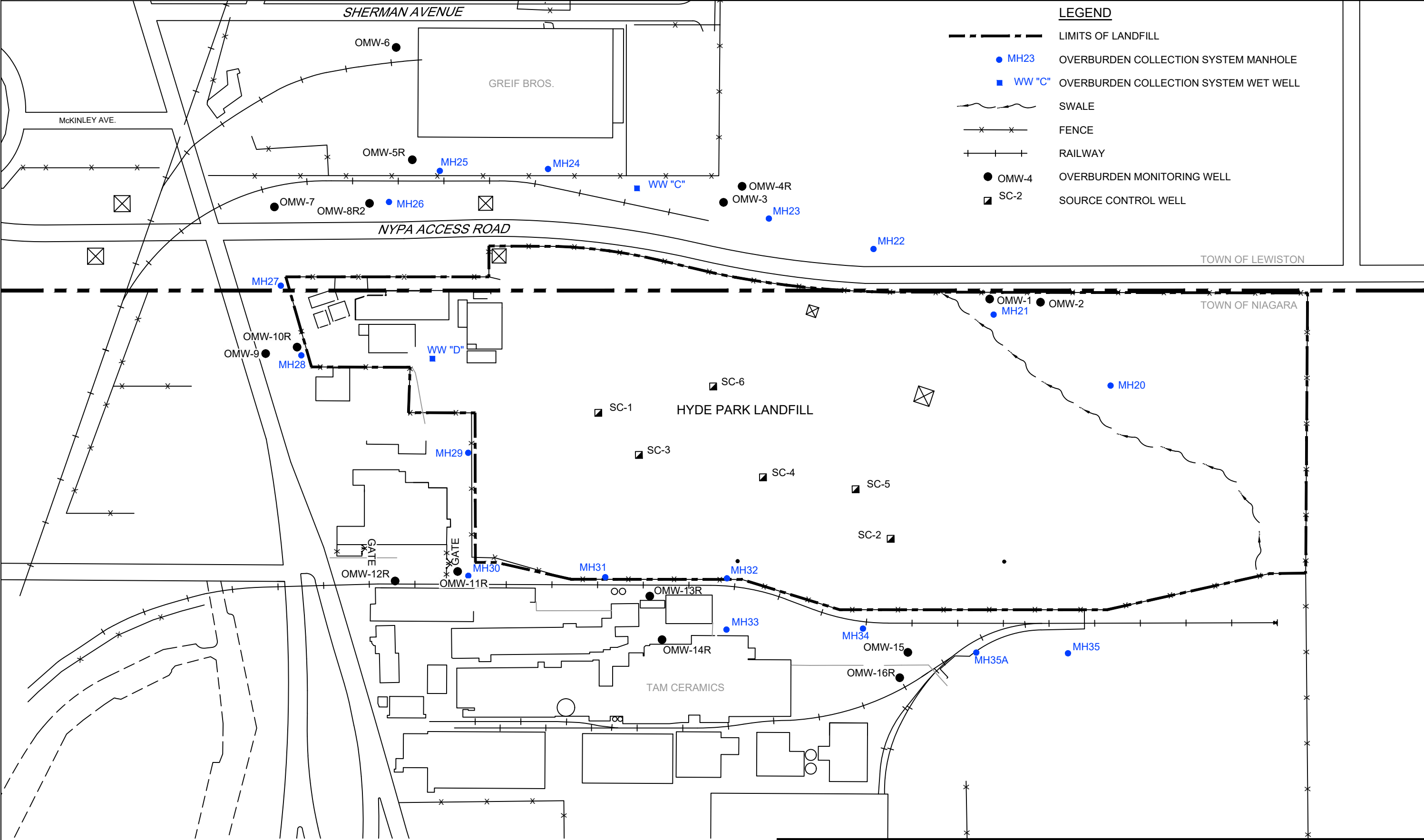
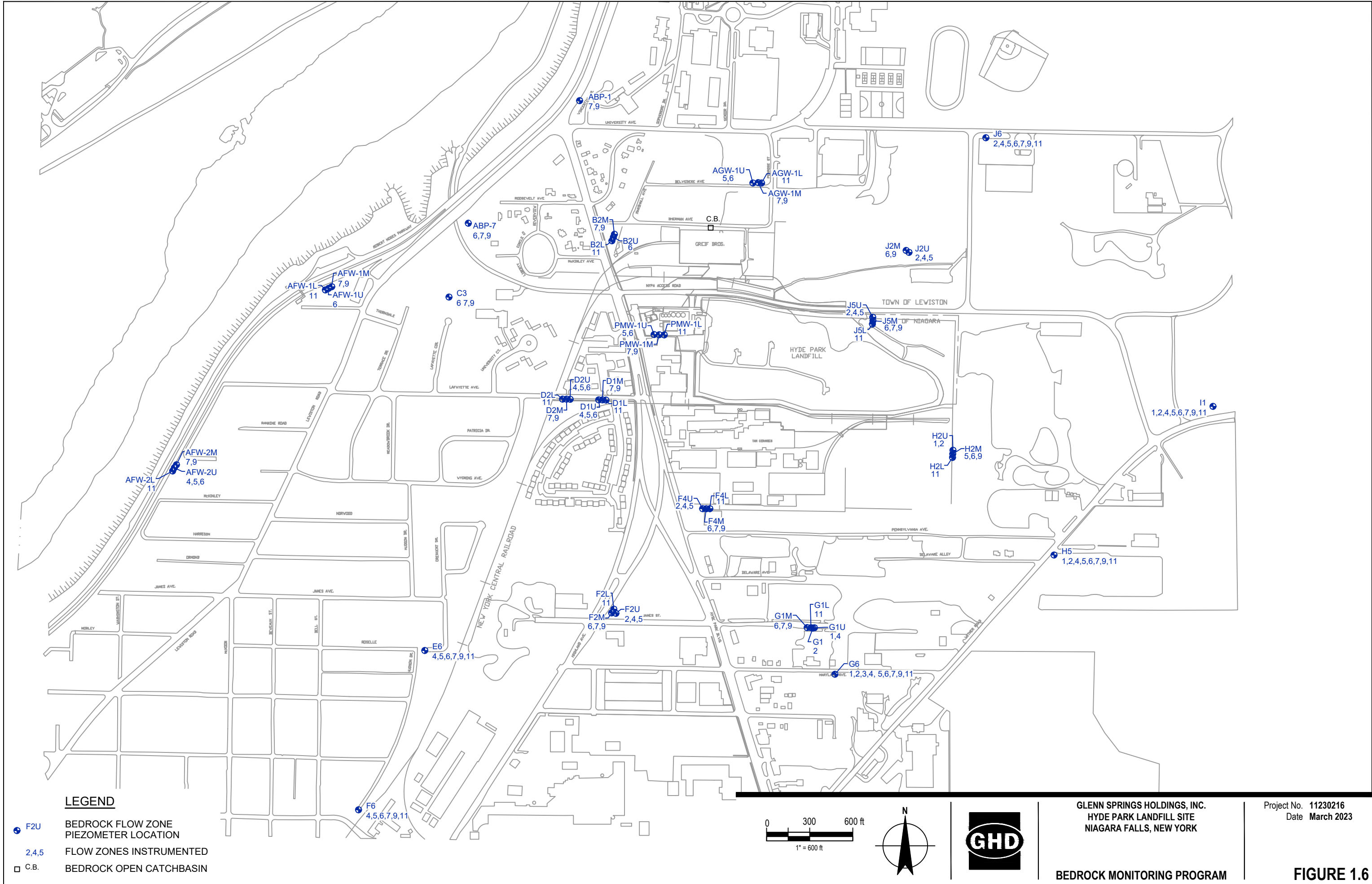
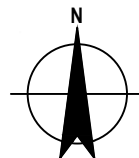
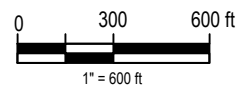
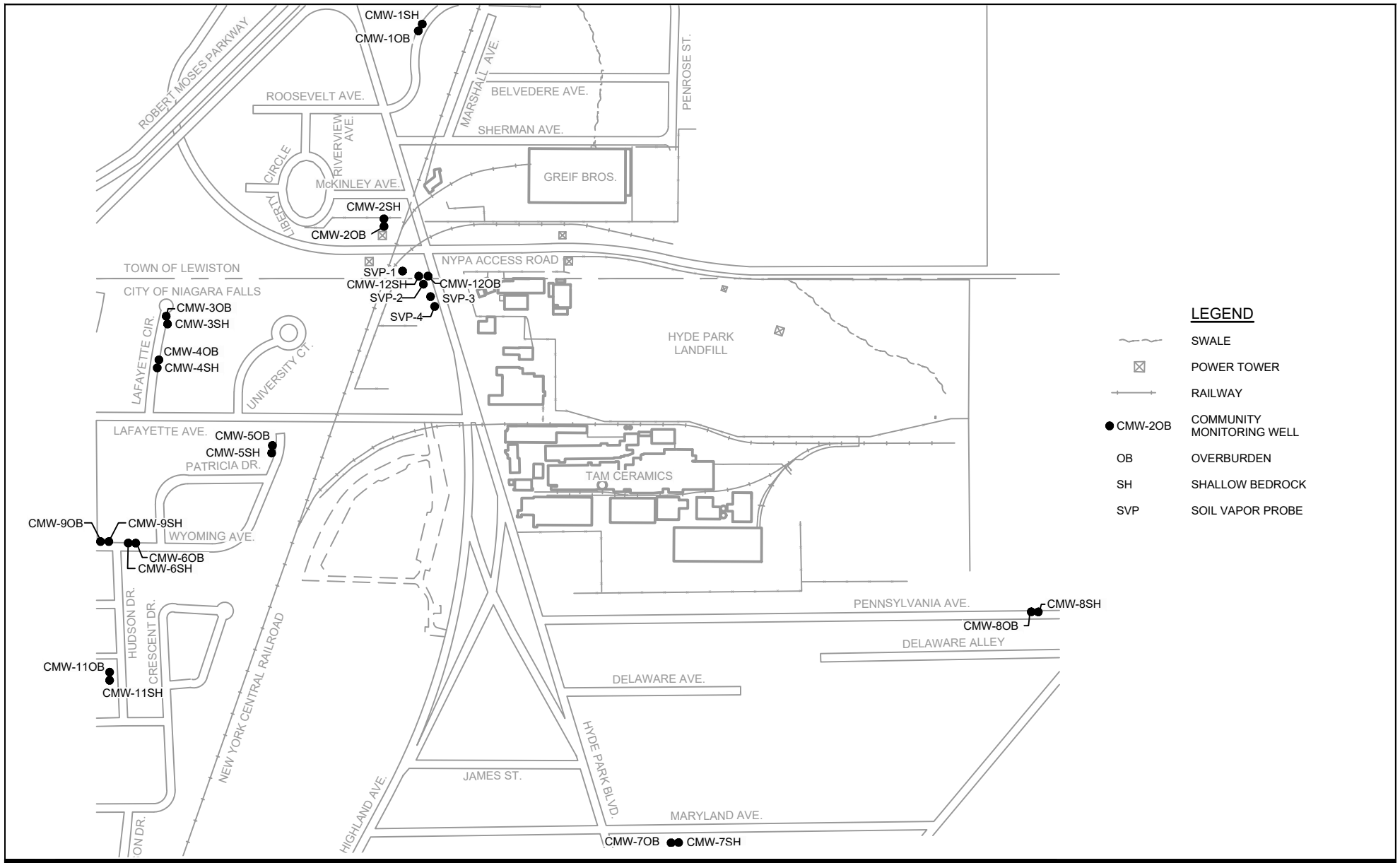


FIGURE 1.5



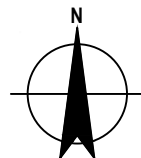
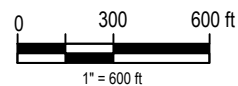
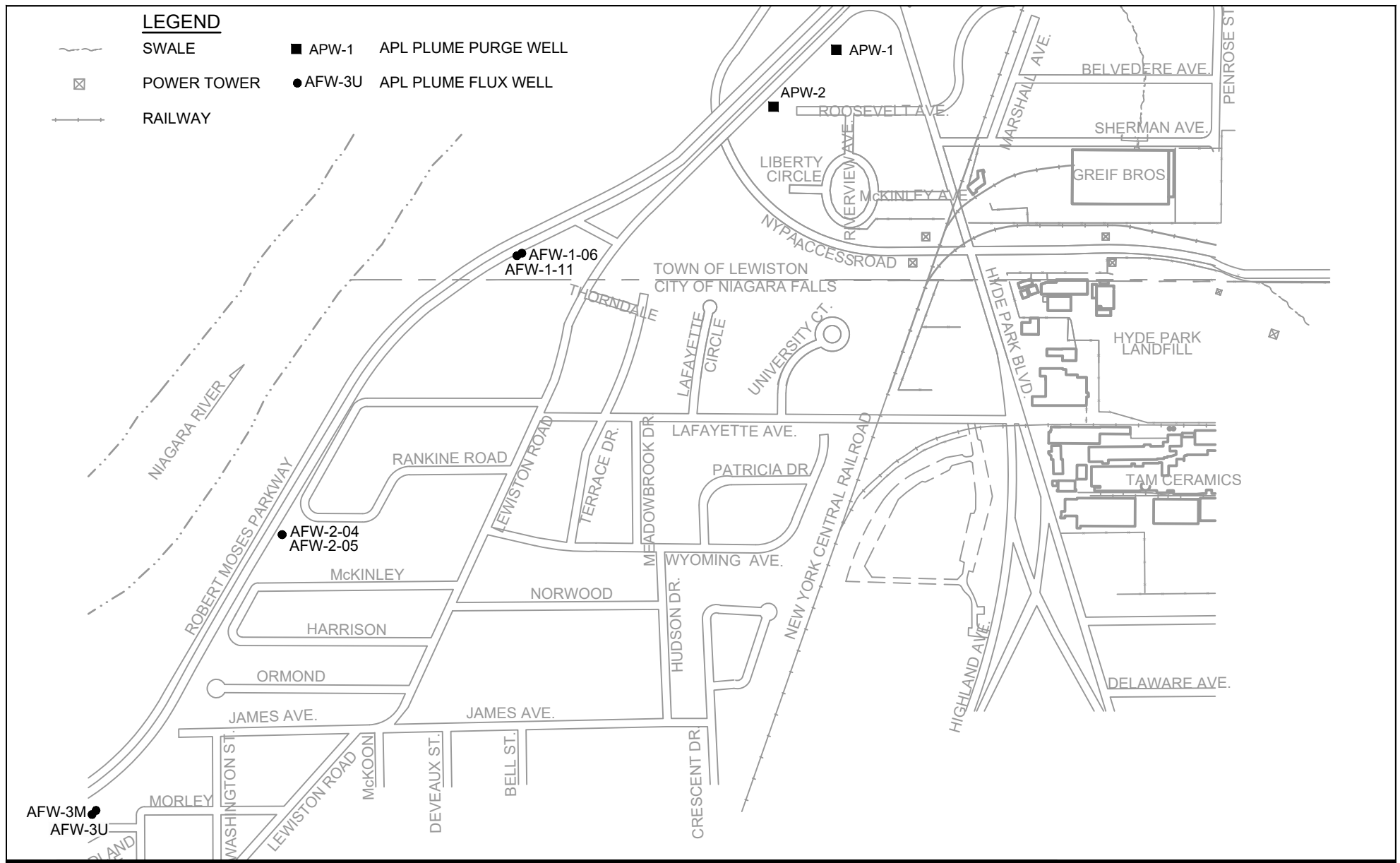


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HYDE PARK LANDFILL SITE
NIAGARA FALLS, NEW YORK

Project No. 11230216
Date March 2023

COMMUNITY MONITORING PROGRAM

FIGURE 1.7



GLENN SPRINGS HOLDINGS, INC.
HYDE PARK LANDFILL SITE
NIAGARA FALLS, NEW YORK

Project No. 11230216
Date April 2023

APL FLUX WELL LOCATIONS
APL PLUME CONTAINMENT SYSTEM

FIGURE 3.1

Tables

Table 1.1

PMP Monitoring Tasks - 2022
Hyde Park Landfill Site
Town of Niagara, New York

Program	Frequency	Activity	Location/Description	PMP Table Reference	PRR Report Reference	Completed (Yes/No)	Comment
Overburden	Continuous	Water Level Measurement	Wet Wells	-	-	Yes	
	Daily	Total Water Flow	Decanters	-	-	Yes	
	Monthly	Purge NAPL NAPL Thickness	Source Control NAPL Recovery Well SC-3	Table 3.3	Table 3.1	Yes	
			Source Control NAPL Recovery Well SC-3	Table 3.3	-	Yes	
	Quarterly	Hand Water Level Measurement	Manholes	Table 3.2	Table 3.2	Yes	
		Hand Water Level Measurement	OBCS Overburden Monitoring Wells	Table 3.2	Table 3.2	Yes	
		Hand Water Level Measurement	Source Control Monitoring Wells	Table 3.3	Table 3.2	Yes	
		NAPL Thickness	Source Control Monitoring Wells	Table 3.3	Table 3.1	Yes	
Semiannual	NAPL Thickness	Source Control Monitoring Wells	Table 3.3	Table 3.1	Yes		
Annual	NAPL Presence	Manholes	Table 3.2	Table 3.3	Yes		
	NAPL Presence	OBCS Overburden Monitoring Wells	Table 3.2	Table 3.3	Yes		
Bedrock	Continuous	Water Level Measurement	NAPL and APL Purge Wells	Table 4.1	-	Yes	See quarterly reports
	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 3.6	Yes	
	Quarterly	Hand Water Level Measurement APL Sampling	All Bedrock Piezometers	-	Table 3.5	Yes	
			Group B Bedrock Piezometers	Table 4.2	Tables 3.7 a-d	Yes	
	Every Fifth Quarter	APL Sampling	Group A Bedrock Piezometers	Table 4.2	Table 3.8	Yes	Completed 3rd Quarter 2022
	Annual	APL Sampling NAPL Presence	Open Catch Basin	-	Table 3.9	Yes	
			Open Catch Basin	-	-	Yes	None present
	Five-Year	APL Sampling APL Sampling	Bloody Run Monitoring Wells	Table 7.1	-	No	Completed in 2021
Operating APL and NAPL Purge Wells			Table 7.1	-	No	Completed in 2021/2022	
Community	Quarterly	Hand Water Level Measurement	Bedrock Monitoring Wells	Table 5.4	Table 3.11	Yes	
		Hand Water Level Measurement	Overburden Monitoring Wells	Table 5.4	Table 3.11	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 3.10 Table 3.12	Yes Yes	
	Five-Year	Gorge Face Seep Inspection	Seeps	Table 5.2	-	No	Completed in 2021

Table 1.1

**PMP Monitoring Tasks - 2022
Hyde Park Landfill Site
Town of Niagara, New York**

Program	Frequency	Activity	Location/Description	PMP Table Reference	PRR Report Reference	Completed (Yes/No)	Comment
Treatment	Continuous	APL Sampling	Treated Effluent	Table 6.1	-	Yes	See quarterly reports
		Total Water Flow	Treated Effluent	Table 6.1	-	Yes	See quarterly reports
	Weekly	APL Sampling	Carbon Interstage	Table 6.1	Table 4.2	Yes	See quarterly reports
		APL Sampling	Treated Effluent	Table 6.1	-	Yes	
	Quarterly	NAPL Volumes	Decanters	-	Table 4.1	Yes	See quarterly reports
		APL Sampling	Leachate Feed	Table 6.1	Table 4.3	Yes	
		APL Sampling	Sac Bed Interstage	Table 6.1	Table 4.4	Yes	
		APL Sampling	Treated Effluent	Table 6.1	-	Yes	
Maintenance	Weekly	Fence Inspections	-	App A	-	Yes	Available upon request
	Annual	Well Inspections	-	App A	-	Yes	Available upon request
		Cap Inspection	-	App A	-	Yes	Available upon request
Site-Wide	Quarterly	Report	-	-	-	Yes	Completed in 2022
	Annual	Report	-	-	-	Yes	Completed in 2022
	Five-Year	Report	-	-	-	No	Completed in 2021

Notes:

- APL - Aqueous Phase Liquid
- NAPL - Non-Aqueous Phase Liquid
- OBCS - Overburden Barrier Collection System
- PMP - Performance Monitoring Plan
- PRR - Annual Periodic Review Report
- - Not applicable

Table 3.1

2022 Source Control Well NAPL Pumping Summary
Hyde Park Landfill Site
Town of Niagara, New York

Month	SC-2			SC-3			SC-4			SC-5			SC-6			Total
	NAPL Thickness (feet)	Groundwater Elevation (ft. AMSL)	NAPL Recovered (gallons)	NAPL Thickness (feet)	Groundwater Elevation (ft. AMSL)	NAPL Recovered (gallons)	NAPL Thickness (feet)	Groundwater Elevation (ft. AMSL)	NAPL Recovered (gallons)	NAPL Thickness (feet)	Groundwater Elevation (ft. AMSL)	NAPL Recovered (gallons)	NAPL Thickness (feet)	Groundwater Elevation (ft. AMSL)	NAPL Recovered (gallons)	NAPL Recovered (gallons)
January - March	0.61	602.93	0.0	2.58	598.70	33.5	2.48	600.02	7.5	NA	602.50	NA	NA	611.98	NA	41.0
April - June	0.90	603.09	0.0	2.53	599.29	26.5	2.35	600.12	7.75	NA	610.30	NA	NA	612.04	NA	34.3
July - September	0.80	602.94	0.0	2.55	599.00	25.8	1.85	599.97	8.75	0.42	602.25	0.0	0.17	611.68	0.0	34.5
October - December	0.90	602.81	0.0	2.50	598.87	27.0	1.90	599.94	7.5	NA	602.32	NA	NA	611.60	NA	34.5
Totals			0.0			112.8			31.5			0.0			0.0	144.3

Notes:

- ft. AMSL - Feet Above Mean Sea Level
- NAPL - Non-Aqueous Phase Liquid
- NAPL Thickness and Groundwater Elevations indicated are quarterly measurements. Monthly NAPL thickness measured at SC-3 is not shown.
- NA - NAPL thickness measurement was performed annually at SC-5 and SC-6 in 2022.

**2022 Overburden Quarterly Groundwater Elevation Summary
Hyde Park Landfill Site
Town of Niagara, New York**

Well	Reference Elevation (ft. AMSL)	Groundwater Elevation	Groundwater Elevation	Groundwater Elevation	Groundwater Elevation
		Quarter 1 3/2/2022 (ft. AMSL)	Quarter 2 6/7/2022 (ft. AMSL)	Quarter 3 9/6/2022 (ft. AMSL)	Quarter 4 12/8/2022 (ft. AMSL)
OMW-1	605.28	600.09	599.00	597.76	599.61
OMW-2	605.99	602.99	601.71	601.38	602.55
OMW-3	598.63	591.62	588.00	585.66	589.33
OMW-4R	601.17	590.48	589.85	588.31	589.56
OMW-5R	591.31	588.38	585.10	584.19	585.38
OMW-6	587.62	585.84	585.94	585.96	585.77
OMW-7	592.74	586.73	586.22	585.73	585.41
OMW-8R2	594.67	588.10	585.56	584.05	585.90
OMW-9	595.52	589.54	587.82	587.88	587.77
OMW-10R	595.13	589.88	586.17	586.34	586.31
OMW-11R	597.52	593.22	592.34	592.26	593.10
OMW-12R	597.20	593.26	592.53	592.43	593.17
OMW-13R	601.50	592.38	592.43	593.18	593.84
OMW-14R	599.64	NM ⁽¹⁾	599.47	599.45	596.61
OMW-15	607.48	603.39	602.69	601.38	602.97
OMW-16R	607.62	603.83	603.83	603.34	603.44
SC-2	625.61	602.93	603.09	602.94	602.81
SC-3	638.72	598.70	599.29	599.00	598.87
SC-4	639.35	600.02	600.12	599.97	599.94
SC-5	634.07	602.50	610.30	602.25	602.32
SC-6	631.15	611.98	612.04	611.68	611.60
MH-20	605.87	601.22	601.21	601.28	601.16
MH-21	599.77	593.68	593.70	593.69	593.74
MH-22	593.37	586.59	586.59	Dry	585.79
MH-23	587.05	578.62	574.76	Dry	574.97
MH-24	582.57	580.75	574.50	573.67	574.15
MH-25	583.82	582.40	576.14	575.90	575.77
MH-26	584.48	581.50	575.56	575.55	575.53
MH-27	586.12	580.00	575.53	575.49	575.49
MH-28	585.23	579.14	568.40	568.83	568.87
MH-29	582.90	596.44	589.82	589.50	Dry
MH-30	588.37	591.49	589.49	589.51	589.28
MH-31	590.10	Dry	580.58	580.54	580.50
MH-32	592.01	582.39	582.29	582.30	582.36
MH-33	592.51	583.82	583.76	583.77	583.55
MH-34	597.64	591.20	591.15	591.15	591.17
MH-35	605.69	599.16	599.11	599.14	599.14
MH-35A	605.69	598.53	598.42	598.16	598.46

Notes:

- Dry - No water present in well
 NM⁽¹⁾ - Not measured due to ice and snow accumulation on top of well
 ft. AMSL - Feet Above Mean Sea Level

Table 3.3

**2022 Overburden NAPL Presence Monitoring
Hyde Park Landfill Site
Town of Niagara, New York**

Well I.D.	March 9 and 31, 2022 (Yes/No)
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	No
MH-34	No
MH-35	No
MH-35A	No
Wet Well C	No
Wet Well D	Yes

Table 3.4

**2022 Overburden Collection Systems Monthly Average Flow (GPM) Summary
Hyde Park Landfill Site
Town of Niagara, New York**

Month	EBCS WET WELL A	OBCS WET WELL C	OBCS WET WELL D	Total EBCS	Total OBCS
January	0.4	20.1	4.7	0.4	24.8
February	0.0	12.8	0.0	0.0	12.8
March	0.0	30.6	4.1	0.0	34.7
April	0.0	26.1	10.2	0.0	36.3
May	0.0	18.5	9.3	0.0	27.8
June	0.0	7.1	4.0	0.0	11.1
July	0.0	4.1	3.1	0.0	7.2
August	0.0	3.4	2.7	0.0	6.1
September	0.0	2.6	1.9	0.0	4.5
October	1.9	8.5	4.8	1.9	13.2
November	2.3	14.6	9.1	2.3	23.7
December	0.8	23.4	12.7	0.8	36.1
Annual Average	0.5	14.3	5.5	0.5	19.9

Notes:

GPM - Gallons per minute
EBCS - Existing Barrier Collection System
OBCS - Overburden Barrier Collection System

Table 3.5

2022 Bedrock Quarterly Groundwater Elevation Summary - Piezometers
Hyde Park Landfill Site
Town of Niagara, New York

Well	Reference Elevation	Groundwater Elevation	Groundwater Elevation	Groundwater Elevation	Groundwater Elevation
		Quarter 1	Quarter 2	Quarter 3	Quarter 4
	(ft. AMSL)	3/2/2022	6/7/2022	9/6/2022	12/8/2022
		(ft. AMSL)	(ft. AMSL)	(ft. AMSL)	(ft. AMSL)
Flow Zone 1					
G1U-01	617.08	608.63	604.69	602.29	605.32
G6-01	609.24	605.97	603.36	592.78	605.30
H2U-01	620.92	612.93	609.54	609.68	610.05
H5-01	617.61	595.98	594.71	596.38	595.01
I1-01	625.58	603.60	601.67	598.19	600.66
Flow Zone 2					
F2U-02	599.89	576.18	575.61	574.86	575.78
F4U-02	602.32	588.23	586.54	586.31	586.55
G1-02	616.86	594.58	592.48	591.98	593.68
G6-02	608.65	592.89	591.76	590.85	593.73
H2U-02	620.88	596.05	594.52	595.48	594.88
H5-02	617.47	595.75	594.45	592.65	594.63
I1-02	625.47	594.70	588.78	585.38	590.11
J2U-02	609.66	600.13	596.58	595.37	601.60
J5U-02	606.21	600.76	596.43	594.88	599.19
J6-02	609.23	602.37	599.77	600.07	600.12
Flow Zone 4					
AFW-2U-04	593.48	578.49	577.19	575.45	577.03
D1U-04	593.77	584.00	582.38	580.62	582.07
D2U-04	590.65	582.83	579.92	579.95	577.12
E6-04	578.23	566.62	565.64	565.16	566.43
F2U-04	599.76	579.10	578.24	576.82	578.08
F4U-04	602.19	589.67	589.01	587.67	587.78
F6-04	588.06	570.43	570.84	569.78	570.22
G1U-04	616.96	594.88	592.45	591.78	593.76
G6-04	609.15	593.22	592.24	591.01	594.63
H5-04	617.40	595.65	594.34	592.66	594.48
I1-04	625.30	589.48	585.57	584.92	588.97
J2U-04	609.42	597.31	593.89	596.25	597.56
J5U-04	606.05	592.66	588.27	587.30	593.75
J6-04	609.12	585.57	589.02	583.59	583.66
Flow Zone 5					
AFW-2U-05	593.33	578.51	577.35	575.51	576.87
AGW-1U-05	591.80	589.02	589.12	587.88	587.89
D1U-05	593.51	582.69	581.95	578.83	580.82
D2U-05	590.56	582.66	580.34	578.54	584.01
E6-05	578.04	566.97	565.96	565.49	566.62
F2U-05	599.64	579.63	578.50	577.25	578.51
F4U-05	602.06	588.38	586.23	585.61	587.16
F6-05	587.85	570.33	570.26	569.66	570.15
G6-05	609.13	592.88	592.30	590.96	594.30
H2M-05	621.59	595.02	592.58	591.12	592.10
H5-05	617.31	594.84	593.43	592.09	594.10
I1-05	625.25	553.78	554.56	553.21	552.41
J2U-05	609.30	585.76	581.67	584.21	585.37
J5U-05	605.87	585.99	581.94	582.39	584.34
J6-05	609.02	584.98	581.60	582.28	582.71
PMW-1U-05	598.00	581.61	579.18	578.71	581.20
Flow Zone 6					
ABP-7-06	575.78	Dry	Dry	Dry	Dry
AFW-1U-06	571.83	557.44	557.25	556.87	557.20
AFW-2U-06	593.22	545.31	545.28	545.03	545.13
AGW-1U-06	591.66	555.44	553.75	552.40	552.71
B2U-06	589.29	556.91	553.94	553.40	553.90
C3-06	585.78	549.60	548.44	Dry	Dry

Table 3.5

2022 Bedrock Quarterly Groundwater Elevation Summary - Piezometers
Hyde Park Landfill Site
Town of Niagara, New York

Well	Reference Elevation	Groundwater Elevation	Groundwater Elevation	Groundwater Elevation	Groundwater Elevation
		Quarter 1	Quarter 2	Quarter 3	Quarter 4
	(ft. AMSL)	3/2/2022	6/7/2022	9/6/2022	12/8/2022
		(ft. AMSL)	(ft. AMSL)	(ft. AMSL)	(ft. AMSL)
Flow Zone 6					
Continued					
D1U-06	593.25	551.35	584.14*	547.17	547.86
D2U-06	590.38	551.85	549.99	547.63	548.58
E6-06	577.99	575.10	574.13	573.45	574.09
F2M-06	599.06	553.51	551.80	550.99	550.61
F4M-06	602.05	557.25	554.34	552.03	552.89
F6-06	587.84	568.63	573.96	573.71	574.10
G1M-06	616.75	575.18	574.23	573.67	574.26
G6-06	609.09	577.31	575.42	579.02	577.82
H2M-06	621.42	583.81	585.99	585.90	582.84
H5-06	617.17	589.88	590.29	589.58	589.56
I1-06	625.15	547.13	548.73	548.82	549.18
J2M-06	608.94	555.53	554.46	554.34	553.01
J5M-06	606.22	551.59	548.76	547.08	548.74
J6-06	608.93	555.04	555.90	555.16	554.70
PMW-1U-06	597.92	550.45	550.45	550.00	548.61
Flow Zone 7					
ABP-1-07	576.44	547.88	547.34	551.21	545.48
ABP-7-07	575.73	534.81	534.09	534.58	533.92
AFW-1M-07	571.41	Dry	Dry	Dry	Dry
AFW-2M-07	593.44	526.70	526.71	526.64	526.68
AGW-1M-07	592.91	546.68	549.29	554.80	550.37
B2M-07	589.52	551.21	531.89	532.01	531.17
C3-07	585.62	548.34	545.89	542.95	545.55
D1M-07	594.15	532.84	529.31	523.81	524.55
D2M-07	590.77	540.71	526.19	524.25	525.40
E6-07	577.91	554.59	555.22	554.77	554.57
F2M-07	598.91	534.08	525.20	523.60	521.39
F4M-07	601.91	547.84	536.26	533.60	530.47
F6-07	587.68	567.40	567.68	567.55	567.58
G1M-07	616.68	584.97	579.95	578.54	579.66
G6-07	609.06	585.22	580.32	578.85	580.84
H5-07	617.05	559.84	559.97	558.64	557.79
I1-07	625.14	544.51	548.77	553.20	548.63
J5M-07	606.07	546.60	551.19	553.62	551.19
J6-07	608.85	546.61	551.07	552.87	549.88
PMW-1M-07	598.50	545.03	534.01	530.82	528.80
Flow Zone 9					
ABP-1-09	575.49	535.33	534.70	537.15	534.44
ABP-7-09	575.67	534.45	533.65	533.68	533.55
AFW-1M-09	571.12	532.60	525.46	524.54	524.60
AFW-2M-09	593.32	521.08	521.41	521.02	521.07
AGW-1M-09	592.75	547.06	549.82	554.33	549.84
B2M-09	589.34	550.56	531.86	530.96	531.07
C3-09	585.00	546.51	544.42	542.01	543.28
D1M-09	594.02	532.74	525.09	523.00	520.79
D2M-09	590.66	532.67	524.45	522.94	520.60
E6-09	577.82	552.78	553.25	552.67	553.35
F2M-09	598.71	532.47	524.19	525.38	520.40
F4M-09	601.79	532.82	524.28	529.73	520.81
F6-09	587.53	540.37	572.57	571.52	570.76
G1M-09	616.58	581.14	580.17	578.08	578.65
G6-09	608.98	585.68	581.36	586.16	581.56
H2M-09	621.32	551.88	549.09	553.02	551.42
H5-09	616.93	545.02	547.75	552.54	548.27
I1-09	624.91	563.29	563.69	563.59	564.81

Table 3.5

**2022 Bedrock Quarterly Groundwater Elevation Summary - Piezometers
Hyde Park Landfill Site
Town of Niagara, New York**

Well	Reference Elevation	Groundwater Elevation	Groundwater Elevation	Groundwater Elevation	Groundwater Elevation
		Quarter 1	Quarter 2	Quarter 3	Quarter 4
	(ft. AMSL)	3/2/2022	6/7/2022	9/6/2022	12/8/2022
		(ft. AMSL)	(ft. AMSL)	(ft. AMSL)	(ft. AMSL)
Flow Zone 9					
Continued					
J2M-09	608.77	547.66	551.68	554.12	550.97
J5M-09	605.82	546.93	551.09	553.26	550.31
J6-09	608.76	567.28	565.68	565.23	565.53
PMW-1M-09	598.34	530.41	524.38	523.44	521.26
Flow Zone 11					
AFW-1L-11	572.10	513.71	508.38	506.42	510.92
AFW-2L-11	593.43	498.03	496.81	496.15	497.18
AGW-1L-11	592.71	584.82	583.83	584.58	584.69
B2L-11	589.65	507.34	500.43	499.61	498.70
D1L-11	593.80	513.75	522.57	502.74	501.97
D2L-11	590.21	529.14	524.28	525.48	525.37
E6-11	577.72	535.37	533.50	532.33	532.41
F2L-11	598.94	555.97	555.80	556.51	555.42
F4L-11	602.22	570.78	571.74	573.41	573.99
F6-11	587.40	529.78	528.82	526.81	526.95
G1L-11	616.84	579.37	555.52	558.93	554.92
G6-11	608.89	582.20	558.50	561.46	558.21
H2L-11	620.73	558.78	557.24	555.79	555.14
H5-11	616.81	539.92	541.56	545.90	544.74
I1-11	624.75	546.15	546.26	546.48	546.71
J5L-11	607.20	553.98	546.11	547.64	544.50
J6-11	608.68	587.35	586.96	585.40	585.78
PMW-1L-11	598.84	528.93	515.27	513.63	514.10

Notes:

Dry - No water present in well
 * - Suspected measurement error
 ft. AMSL - Feet Above Mean Sea Level

Table 3.6

**2022 Bedrock Purge Well Monthly Flow Rate (GPM) Summary
Hyde Park Landfill Site
Town of Niagara, New York**

Month	PW-1U	PW-1L	PW-2UR	PW-2M	PW-2L	PW-3M	PW-3L	PW-4U	PW-5UR	PW-6UR	PW-6MR
January	0.26	9.35	1.12	0.00	0.00	0.19	6.64	0.00	0.00	0.90	0.35
February	0.04	1.76	0.20	0.00	0.00	0.03	1.39	0.00	0.00	0.16	0.51
March	0.25	8.28	1.09	0.00	0.00	0.11	2.85	0.00	0.00	0.71	0.42
April	0.28	9.05	1.22	0.00	0.00	0.10	4.28	0.00	0.00	0.96	0.31
May	0.21	8.96	1.05	0.00	0.00	0.29	5.43	*	2.49	0.83	0.24
June	0.15	6.27	0.88	8.20	0.00	1.62	5.81	*	2.32	0.67	0.32
July	0.09	5.34	0.75	1.68	0.00	2.38	5.28	*	2.04	0.55	0.36
August	0.08	6.57	0.73	0.00	0.00	1.12	5.78	0.11	1.91	0.54	0.35
September	0.02	2.75	0.28	0.00	0.00	1.90	2.42	0.05	0.76	0.21	0.47
October	0.10	3.74	0.75	11.78	0.00	2.30	4.52	0.11	1.76	0.57	0.56
November	0.11	4.53	0.80	0.00	0.60	1.52	5.36	0.13	0.00	0.69	5.67
December	0.12	5.08	0.90	0.00	0.81	1.17	4.83	0.15	0.00	0.78	5.78
Annual Average	0.14	5.97	0.81	1.81	0.12	1.06	4.55	0.06	0.94	0.63	1.28

Month	PW-7U	PW-8M	PW-8U	PW-9U	PW-10U	APW-1	APW-2
January	0.70	0.00	0.22	0.00	0.00	0.00	0.72
February	0.09	0.00	0.34	0.01	0.00	0.00	0.09
March	0.35	1.00	0.95	0.76	0.00	0.00	0.59
April	0.62	0.91	0.21	0.00	0.00	0.00	0.61
May	0.40	1.06	1.13	0.00	1.13	0.00	0.43
June	0.18	0.37	1.03	0.57	2.50	0.04	0.31
July	0.57	0.00	0.90	0.31	2.25	0.17	0.37
August	0.54	0.00	0.86	0.68	2.23	0.16	0.36
September	0.20	0.00	0.31	0.32	0.91	0.09	0.19
October	0.47	0.19	0.84	0.77	2.27	0.20	0.43
November	0.27	0.00	0.90	0.85	2.65	0.37	0.72
December	0.00	0.00	0.97	0.65	2.89	0.39	0.89
Annual Average	0.37	0.29	0.72	0.41	1.40	0.12	0.48

Notes:

GPM - Gallons per minute

* - Flow was not available due to a transmitter issue

Table 3.7a

Analytical Results Summary
Quarterly Group B Bedrock Piezometer Sampling
First Quarter 2022
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			ABP-7-09	AGW-1M-07	AGW-1M-07	AGW-1M-09	AGW-1U-06
Sample ID:			ABP-7-09-0322	AGW-1M-07-0322	C7-0322	AGW-1M-09-0322	AGW-1U-06-0322
Sample Date:			3/24/2022	3/21/2022	3/21/2022	3/21/2022	3/21/2022
Parameters	Units	Screening Level			(Duplicate)		
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	49	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	65 J	57 J	54 J	220 J	85 J

Sample Location:			B2L-11	C3-07	C3-09	D1M-09	D1U-04
Sample ID:			B2L-11-0322	C3-07-0322	C3-09-0322	D1M-09-0322	D1U-04-0322
Sample Date:			3/24/2022	3/24/2022	3/24/2022	3/21/2022	3/21/2022
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	97	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	15 J	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	350	250 U	250 U	130 J	69 J

Sample Location:			D1U-05	F2M-09	F2U-02	F2U-04	G1U-01
Sample ID:			D1U-05-0322	F2M-09-0322	F2U-02-0322	F2U-04-0322	G1U-01-0322
Sample Date:			3/21/2022	3/21/2022	3/21/2022	3/21/2022	3/24/2022
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	150 J	250 U	220 J	390	250 U

Table 3.7a

Analytical Results Summary
Quarterly Group B Bedrock Piezometer Sampling
First Quarter 2022
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:	G6-01	G6-04	G6-06	H2U-02	H5-09
Sample ID:	G6-01-0322	G6-04-0322	G6-06-0322	H2U-02-0322	H5-09-0322
Sample Date:	3/21/2022	3/21/2022	3/21/2022	3/24/2022	3/24/2022

Parameters	Units	Screening						
		Level						
Organic Acids								
2-Chlorobenzoic acid	µg/L	7,300	30 U	1700	140	30 U	88	
3-Chlorobenzoic acid	µg/L	7,300	30 U	390	34	30 U	30 U	
4-Chlorobenzoic acid	µg/L	7,300	30 U	3600	370	30 U	30 U	
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U	
Chlorendic acid	µg/L	50	250 U	87 J	250 U	150 J	180 J	

Notes:

µg/L - Micrograms per liter
J - Estimated concentration
U - Not detected at the associated reporting limit
350 - Concentration exceeds Screening Level

Table 3.7b

Analytical Results Summary
Quarterly Group B Bedrock Piezometer Sampling
Second Quarter 2022
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-7-09-0622	AGW-1M-07-0622	AGW-1M-09-0622	AGW-1U-06-0622	B2L-11-0622
Sample Date:			6/14/2022	6/16/2022	6/16/2022	6/16/2022	6/17/2022
Parameters	Units	Screening Level					
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	65
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100	100 U	100 U	52 J	100 U
Chlorendic acid	µg/L	50	250 U	120 J	250	110 J	200 J
Sample Location:							
			C3-07	C3-09	D1M-09	D1U-04	D1U-05
Sample ID:			C3-07-0622	C3-09-0622	D1M-09-0622	D1U-04-0622	D1U-05-0622
Sample Date:			6/13/2022	6/13/2022	6/16/2022	6/16/2022	6/16/2022
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	43 J	54 J	72 J	100 U
Chlorendic acid	µg/L	50	250 U	250 U	180 J	39 J	94 J

Table 3.7b

Analytical Results Summary
Quarterly Group B Bedrock Piezometer Sampling
Second Quarter 2022
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			F2M-09	F2U-02	F2U-04	G1U-01	G1U-01
Sample ID:			F2M-09-0622	F2U-02-0622	F2U-04-0622	G1U-01-0622	W7-10-0622
Sample Date:			6/17/2022	6/17/2022	6/17/2022	6/14/2022	6/14/2022
Parameters	Units	Screening Level					(Duplicate)
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	64 J	100 U	100 U	65 J	100 U
Chlorendic acid	µg/L	50	250 U	190 J	380	250 U	250 U
Sample Location:							
Sample ID:			G6-01	G6-04	G6-06	H2U-02	H5-09
Sample Date:			G6-01-0622	G6-04-0622	G6-06-0622	H2U-02-0622	H5-09-0622
			6/14/2022	6/14/2022	6/14/2022	6/17/2022	6/14/2022
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	3000	1900	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	670	460	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	6700	4600	30 U	30 U
Benzoic acid	µg/L	150,000	50 J	200 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	130 J	110 J	150 J	190 J

Notes:

µg/L - Micrograms per liter

J - Estimated concentration

U - Not detected at the associated reporting limit

380 - Concentration exceeds Screening Level

Table 3.7c

Analytical Results Summary
Quarterly Group B Bedrock Piezometer Sampling
Third Quarter 2022
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-7-09-0822	AGW-1M-07-0822	AGW-1M-09-0822	AGW-1U-06-0822	B2L-11-0822
Sample Date:			8/24/2022	9/2/2022	9/2/2022	9/13/2022	9/13/2022
Parameters	Units	Screening Level					
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	76 J	150 J	250 J	140 J	240 J
Sample Location:			C3-07	C3-09	D1M-09	D1U-04	D1U-05
Sample ID:			C3-07-0822	C3-09-0822	D1M-09-0822	D1U-04-0822	D1U-05-0822
Sample Date:			8/24/2022	8/24/2022	8/23/2022	8/23/2022	8/23/2022
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	250 U	180 J	41 J	86 J

Table 3.7c

Analytical Results Summary
Quarterly Group B Bedrock Piezometer Sampling
Third Quarter 2022
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			F2M-09	F2M-09	F2U-02	F2U-04	G1U-01
Sample ID:			F2M-09-0822	Z7-10-0822	F2U-02-0822	F2U-04-0822	G1U-01-0822
Sample Date:			9/13/2022	9/13/2022	9/12/2022	9/12/2022	9/1/2022
Parameters	Units	Screening Level		(Duplicate)			
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	250 U	170 J	380	250 U
Sample Location:							
Sample ID:			G6-01	G6-04	G6-06	H2U-02	H5-09
Sample Date:			G6-01-0822	G6-04-0822	G6-06-0822	H2U-02-0822	H5-09-0822
			8/23/2022	8/23/2022	8/23/2022	8/26/2022	9/2/2022
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	2500	920	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	550	230	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	4900	2400	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	110 J	43 J	190 J	180 J

Notes:

µg/L - Micrograms per liter

J - Estimated concentration

U - Not detected at the associated reporting limit

380 - Concentration exceeds Screening Level

Table 3.7d

Analytical Results Summary
Quarterly Group B Bedrock Piezometer Sampling
Fourth Quarter 2022
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location: Sample ID: Sample Date:			ABP-7-09 ABP-7-9-1222 1/17/2023	AGW-1M-07 AGW-1M-07-1222 1/18/2023	AGW-1M-09 AGW-1M-09-1222 1/18/2023	AGW-1M-09 W7-10-1222 1/18/2023 (Duplicate)	AGW-1U-06 AGW-1U-06-1222 1/19/2023
Parameters	Units	Screening Level					
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	39 J	34 J	160 J	180 J	97 J
Sample Location: Sample ID: Sample Date:							
			B2L-11 B2L-11-1222 1/18/2023	C3-07 C3-7-1222 1/17/2023	C3-09 C3-9-1222 1/17/2023	D1M-09 D1M-09-1222 1/19/2023	D1U-04 D1U-04-1222 1/19/2023
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	17 J	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	200 J	250 U	250 U	310	74 J

Table 3.7d

Analytical Results Summary
Quarterly Group B Bedrock Piezometer Sampling
Fourth Quarter 2022
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location: Sample ID: Sample Date:			D1U-05 D1U-05-1222 1/19/2023	F2M-09 F2M-09-1222 1/20/2023	F2U-02 F2U-02-1222 1/20/2023	F2U-04 F2U-04-1222 1/20/2023	G1U-01 G1U-01-1222 1/19/2023
Parameters	Units	Screening Level					
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	30 U	30 U	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	91 J	250 U	190 J	410	250 U
Organic Acids							
Sample Location: Sample ID: Sample Date:			G6-01 G6-01-1222 1/19/2023	G6-04 G6-04-1222 1/19/2023	G6-06 G6-06-1222 1/19/2023	H2U-02 H2U-02-1222 1/20/2023	H5-09 H5-09-1222 1/18/2023
Organic Acids							
2-Chlorobenzoic acid	µg/L	7,300	30 U	3300	220	30 U	30 U
3-Chlorobenzoic acid	µg/L	7,300	30 U	760	53	30 U	30 U
4-Chlorobenzoic acid	µg/L	7,300	30 U	8300	560	30 U	30 U
Benzoic acid	µg/L	150,000	100 U	200 U	100 U	100 U	100 U
Chlorendic acid	µg/L	50	250 U	160 J	250 U	180 J	150 J

Notes:

µg/L - Micrograms per liter

J - Estimated concentration

U - Not detected at the associated reporting limit

410 - Concentration exceeds Screening Level

Table 3.8
Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Third Quarter 2022
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			ABP-1-09	ABP-7-09	AFW-1L-11	AFW-2U-04	AFW-2U-05	AGW-1M-07	AGW-1M-09	AGW-1U-05	AGW-1U-06	B2L-11	C3-07	C3-09	D1L-11	D1M-09	D1U-04	D1U-05	D2M-09
Sample ID:			ABP-1-09-0822	ABP-7-09-0822	AFW-1L-11-0822	AFW-2U-04-0822	AFW-2U-05-0822	AGW-1M-07-0822	AGW-1M-09-0822	AGW-1U-05-0822	AGW-1U-06-0822	B2L-11-0822	C3-07-0822	C3-09-0822	D1L-11-0822	D1M-09-0822	D1U-04-0822	D1U-05-0822	D2M-09-0822
Sample Date:			9/19/2022	8/24/2022	9/19/2022	8/24/2022	8/24/2022	9/2/2022	9/2/2022	9/13/2022	9/13/2022	9/13/2022	8/24/2022	8/24/2022	8/23/2022	8/23/2022	8/23/2022	8/23/2022	8/24/2022
Parameters	Units	Screening Level																	
Volatile Organic Compounds																			
1,1,1-Trichloroethane	ug/L	200	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	0.053	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	800	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.69 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.42 J	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	0.53 J	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	600	1.0 U	0.54 J	1.0 U	1.0 U	1.0 U	0.38 J	3.4	1.0 U	1.0 U	0.34 J	1.0 U	1.0 U	10 U	0.65 J	1.0 U	1.0 U	0.22 J
1,2-Dichloroethane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	180	1.0 U	1.4	1.0 U	1.0 U	1.0 U	0.79 J	5.5	1.0 U	1.0 U	0.36 J	1.0 U	1.0 U	10 U	6.5	1.0 U	1.0 U	0.51 J
1,4-Dichlorobenzene	ug/L	75	1.0 U	1.5	1.0 U	1.0 U	1.0 U	0.63 J	5.9	1.0 U	1.0 U	0.58 J	1.0 U	1.0 U	10 U	1.7	1.0 U	1.0 U	0.71 J
2-Chlorotoluene	ug/L	120	1.0 U	7.0	1.0 U	1.0 U	1.0 U	1.3	42	1.0 U	1.0 U	4.0	1.0 U	1.0 U	10 U	9.1	1.0 U	1.0 U	2.4
3-Chlorotoluene	ug/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	ug/L	120	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.58 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	0.33 J	1.0 U	1.0 U	1.0 U
Benzene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	9.1	1.0 U	1.0 U	4.2	1.0 U	1.0 U	92	3.7	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	8.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	ug/L	1000	1.6	1.0 U	1.0 U	1.0 U	1.0 U	0.68 J	1.4	1.0 U	1.0 U	0.69 J	1.0 U	1.0 U	270	5.4	1.0 U	1.0 U	4.8
Carbon tetrachloride	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	100	1.0 U	22	1.0 U	1.0 U	1.0 U	5.5	59	1.0 U	1.0 U	13	1.0 U	0.22 J	10 U	16	1.0 U	0.85 J	6.9
Chloroethane	ug/L	3.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	80	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.2 J	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L	190	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	ug/L	70	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.38 J	0.86 J	0.50 J	0.94 J	1.9	1.0 U	1.0 U	10 U	0.50 J	1.0 U	1.0 U	1.2
cis-1,3-Dichloropropene	ug/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	350	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	700	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.3 J	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylenes	ug/L		2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.23 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	19 J	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	ug/L	30	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 J	3.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	0.92 J	1.0 U	1.0 U	0.23 J
o-Monochlorobenzotrifluoride	ug/L	50	1.0 U	0.36 J	1.0 U	1.0 U	1.0 U	0.71 J	8.5	1.0 U	1.0 U	0.39 J	1.0 U	1.0 U	10 U	1.1	1.0 U	1.0 U	0.28 J
o-Xylene	ug/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	0.24 J	1.0 U	1.0 U	0.25 J
p-Monochlorobenzotrifluoride	ug/L	50	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.6	12	1.0 U	1.0 U	0.75 J	1.0 U	1.0 U	10 U	1.9	1.0 U	1.0 U	0.61 J
Styrene	ug/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	1000	1.0 U	0.21 J	0.32 J	1.0 U	0.21 J	1.0 U	0.64 J	1.0 U	1.0 U	0.22 J	1.0 U	1.0 U	2.0 J	0.27 J	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	100	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.44 J	1.0 U	1.0 U	0.30 J	1.0 U	1.0 U	10 U	0.93 J	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	0.44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.24 J	1.0 U	1.0 U	1.2	1.0 U	1.0 U	10 U	0.34 J	1.0 U		

Table 3.8
Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Third Quarter 2022
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:			ABP-1-09	ABP-7-09	AFW-1L-11	AFW-2U-04	AFW-2U-05	AGW-1M-07	AGW-1M-09	AGW-1U-05	AGW-1U-06	B2L-11	C3-07	C3-09	D1L-11	D1M-09	D1U-04	D1U-05	D2M-09
Sample ID:			ABP-1-09-0822	ABP-7-09-0822	AFW-1L-11-0822	AFW-2U-04-0822	AFW-2U-05-0822	AGW-1M-07-0822	AGW-1M-09-0822	AGW-1U-05-0822	AGW-1U-06-0822	B2L-11-0822	C3-07-0822	C3-09-0822	D1L-11-0822	D1M-09-0822	D1U-04-0822	D1U-05-0822	D2M-09-0822
Sample Date:			9/19/2022	8/24/2022	9/19/2022	8/24/2022	8/24/2022	9/2/2022	9/2/2022	9/13/2022	9/13/2022	9/13/2022	8/24/2022	8/24/2022	8/23/2022	8/23/2022	8/23/2022	8/23/2022	8/24/2022
Parameters	Units	Screening																	
bis(2-Chloroethoxy)methane	ug/L	5	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	6	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Butyl benzylphthalate (BBP)	ug/L		8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Chrysene	ug/L	9.2	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Dibenz(a,h)anthracene	ug/L	0.0092	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Diethyl phthalate	ug/L	29000	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Dimethyl phthalate	ug/L	370000	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Di-n-butylphthalate (DBP)	ug/L	3700	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Di-n-octyl phthalate (DnOP)	ug/L	1500	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Fluoranthene	ug/L	1500	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Fluorene	ug/L	240	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Hexachlorobenzene	ug/L	1	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Hexachlorobutadiene	ug/L	0.86	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Hexachlorocyclopentadiene	ug/L	50	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 UJ	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Hexachloroethane	ug/L	4.8	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Indeno(1,2,3-cd)pyrene	ug/L	0.092	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Isophorone	ug/L	70	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Naphthalene	ug/L	6.5	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Octachlorocyclopentene	ug/L		4.4 U	4.5 U	4.4 U	4.5 U	4.5 U	4.5 U	4.5 U	4.6 U	4.6 U	4.4 U	4.5 U	4.5 U	4.6 U	4.6 U	4.5 U	4.6 U	4.5 U
Pentachlorophenol	ug/L	1	44 U	45 U	44 U	45 U	45 U	45 U	45 U	46 U	46 U	44 U	45 U	45 U	46 U	46 U	45 U	46 U	45 U
Phenanthrene	ug/L	310	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Phenol	ug/L	11000	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.7	9.3 U	8.9 U	9.3 U	8.9 U
Pyrene	ug/L	180	8.8 U	8.9 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	8.8 U	8.9 U	8.9 U	9.3 U	9.3 U	8.9 U	9.3 U	8.9 U
Organic Acids																			
2-Chlorobenzoic acid	ug/L	7300	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
3-Chlorobenzoic acid	ug/L	7300	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
4-Chlorobenzoic acid	ug/L	7300	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U
Benzoic acid	ug/L	150000	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	ug/L	50	250 U	76 J	250 U	250 U	250 U	150 J	250 J	250 U	140 J	240 J	250 U	250 U	250 U	180 J	41 J	86 J	130 J
General Chemistry																			
Sulfate	ug/L		1400000	231000	162000	73700	193000	1370000	1460000	243000	469000	1500000	316000	202000	1190000	1340000	110000	176000	1080000

Notes:

U - Not detected at the associated reporting limit

R -Data rejected

J - Estimated concentration

J+ - Estimated concentration; result may be biased high

UJ - Not detected; associated reporting limit is estimated

9.1 - Value exceeds associated screening level

Table 3.8
Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Third Quarter 2022
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		D2U-04	D2U-05	D2U-05	E6-04	E6-05	E6-06	E6-09	E6-11	F2L-11	F2M-09	F2M-09	F2U-02	F2U-04	F6-04	F6-06	F6-11	G1L-11	G1M-06	G1M-06	G1U-01	G6-01	G6-02	G6-04	
Sample ID:		D2U-04-0822	D2U-05-0822	X7-10-0822	E6-04-0822	E6-05-0822	E6-06-0822	E6-09-0822	E6-11-0822	F2L-11-0822	F2M-09-0822	Z7-10-0822	F2U-02-0822	F2U-04-0822	F6-04-0822	F6-06-0822	F6-11-0822	G1L-11-0822	G1M-06-0822	Y7-10-0822	G1U-01-0822	G6-01-0822	G6-02-0822	G6-04-0822	
Sample Date:		8/24/2022	8/24/2022	8/24/2022 (Duplicate)	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/13/2022	9/13/2022	9/13/2022	9/12/2022	9/12/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022	8/23/2022	8/23/2022	8/23/2022	
Parameters		Units																							
Volatile Organic Compounds																									
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.2	5.5
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.22 J	0.22 J	2.3
1,1-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.21 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0
1,1-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.38 J	0.48 J	0.76 J
1,2,4-Trichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.21 J	1.0 U	1.0 U
2-Chlorotoluene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.22 J	0.25 J	0.25 J
3-Chlorotoluene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	120	57	64	0.47 J	0.68 J	1.0 U	1.0 U	1.0 U	1.0 U	24	53	1.0 U	1.0 U	3.0	1.0 U	1.0 U	44	
Bromodichloromethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromoform	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromomethane (Methyl bromide)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Carbon disulfide	ug/L	1.0 U	1.0 U	1.0 U	1.8	1.0 U	1.0 U	1.0 U	1.9	14	3.8	3.3	0.46 J	0.88 J	5.1	5.8	5.5	8.0	2.5	2.4	1.0 U	1.0 U	1.0 U	1.0 U	
Carbon tetrachloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.21 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.52 J	1.8	
Chloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chloromethane (Methyl chloride)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.2	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	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.4	0.33 J	1.0 U	1.0 U	0.75 J	0.68 J	0.33 J	0.34 J	1.0 U	1.6	1.0 U	1.0 U	1.0 U	1.0 U	0.58 J	25	34	90	
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Dichlorodifluoromethane (CFC-12)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.8	1.7	2.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.40 J	1.0 U	1.0 U	0.34 J	1.0 U	1.0 U	1.0 U	
m&p-Xylenes	ug/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	60	19	19	2.0 U	2.0 U	2.0 U	0.21 J	2.0 U	0.41 J	2.0 U	1.5 J	2.0 U	2.0 U	0.57 J	2.0 U	2.0 U	0.30 J	
Methylene chloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
m-Monochlorobenzotrifluoride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0.																		

Table 3.8
Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Third Quarter 2022
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		D2U-04	D2U-05	D2U-05	E6-04	E6-05	E6-06	E6-09	E6-11	F2L-11	F2M-09	F2M-09	F2U-02	F2U-04	F6-04	F6-06	F6-11	G1L-11	G1M-06	G1M-06	G1U-01	G6-01	G6-02	G6-04
Sample ID:		D2U-04-0822	D2U-05-0822	X7-10-0822	E6-04-0822	E6-05-0822	E6-06-0822	E6-09-0822	E6-11-0822	F2L-11-0822	F2M-09-0822	Z7-10-0822	F2U-02-0822	F2U-04-0822	F6-04-0822	F6-06-0822	F6-11-0822	G1L-11-0822	G1M-06-0822	Y7-10-0822	G1U-01-0822	G6-01-0822	G6-02-0822	G6-04-0822
Sample Date:		8/24/2022	8/24/2022	8/24/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/13/2022	9/13/2022	9/13/2022	9/12/2022	9/12/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022	9/1/2022	8/23/2022	8/23/2022	8/23/2022
		(Duplicate)																						
Parameters	Units																							
bis(2-Chloroethoxy)methane	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	8.9 U	8.9 U	8.9 U	57 J	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Butyl benzylphthalate (BBP)	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Chrysene	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Dibenz(a,h)anthracene	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Diethyl phthalate	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Dimethyl phthalate	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Di-n-butylphthalate (DBP)	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Di-n-octyl phthalate (DnOP)	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Fluoranthene	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Fluorene	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Hexachlorobenzene	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Hexachlorobutadiene	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Hexachlorocyclopentadiene	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Hexachloroethane	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Indeno(1,2,3-cd)pyrene	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Isophorone	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Naphthalene	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Octachlorocyclopentene	ug/L	4.5 U	4.5 U	4.5 U	4.6 U	4.6 U	4.6 U	4.6 U	4.4 U	4.4 U	4.6 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	4.4 U	5.0 U	4.5 U	4.5 U	4.5 U
Pentachlorophenol	ug/L	45 U	45 U	45 U	46 U	46 U	46 U	46 U	44 U	44 U	46 U	44 U	44 U	44 U	44 U	44 U	44 U	44 U	44 U	44 U	50 U	45 U	45 U	45 U
Phenanthrene	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Phenol	ug/L	8.9 U	8.9 U	8.9 U	R	R	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Pyrene	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	9.3 U	9.3 U	9.3 U	8.8 U	8.8 U	9.3 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	10 U	8.9 U	8.9 U	8.9 U
Organic Acids																								
2-Chlorobenzoic acid	ug/L	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	2500
3-Chlorobenzoic acid	ug/L	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	550
4-Chlorobenzoic acid	ug/L	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	4900
Benzoic acid	ug/L	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Chlorendic acid	ug/L	250 U	89 J	93 J	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	170 J	380	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	110 J
General Chemistry																								
Sulfate	ug/L	99500	163000	160000	1450000	1500000	1420000	1070000	1540000	196000	1400000	1440000	98000	146000	523000	1350000	1740000	1380000	825000	842000	89500	95200	84300	164000

Notes:

U - Not detected at the associated reporting limit

R -Data rejected

J - Estimated concentration

J+ - Estimated concentration; result may be biased high

UJ - Not detected; associated reporting limit is estimated

9.1 - Value exceeds associated screening level

Table 3.8

**Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Third Quarter 2022
Hyde Park Landfill Site
Town of Niagara, New York**

Sample Location:		G6-05	G6-06	G6-07	G6-11	H2M-06	G6-09	H2U-01	H2U-02	H5-02	H5-04	H5-05	H5-07	H5-09	I1-01	I1-02	I1-04	I1-07	J6-02	J6-04	J6-05	J6-07	J6-11	
Sample ID:		G6-05-0822	G6-06-0822	G6-07-0822	G6-11-0822	H2M-06-0822	H2M-09-0822	H2U-01-0822	H2U-02-0822	H5-02-0822	H5-04-0822	H5-05-0822	H5-07-0822	H5-09-0822	I1-01-0822	I1-02-0822	I1-04-0822	I1-07-0822	J6-02-0822	J6-04-0822	J6-05-0822	J6-07-0822	J6-11-0822	
Sample Date:		8/23/2022	8/23/2022	8/23/2022	8/23/2022	9/19/2022	9/19/2022	9/19/2022	8/26/2022	9/2/2022	9/2/2022	9/2/2022	9/2/2022	9/2/2022	8/26/2022	8/26/2022	8/26/2022	8/26/2022	9/1/2022	9/1/2022	9/1/2022	8/25/2022	8/25/2022	
Parameters		Units																						
Volatile Organic Compounds																								
1,1,1-Trichloroethane	ug/L	2.7 J	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	85	4.1	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	18	0.94 J	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1-Dichloroethane	ug/L	7.3	0.62 J	1.0 U	1.0 U	10 U	1.0 U	1.0 U	2.4	1.0 U	1.0 U	1.0 U	1.0 U	0.60 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,1-Dichloroethene	ug/L	5.2	0.42 J	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	2.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichlorobenzene	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	0.97 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichloroethane	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.35 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,2-Dichloropropane	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,3-Dichlorobenzene	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	0.62 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
1,4-Dichlorobenzene	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	0.64 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.29 J	1.0 U	1.0 U	
2-Chlorotoluene	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	44	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.2	1.0 U	1.0 U	
3-Chlorotoluene	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
4-Chlorotoluene	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.36 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Benzene	ug/L	350	21	1.0 U	98	2.5 J	11	1.0 U	1.6	1.0 U	1.0 U	1.0 U	0.57 J	23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	88	
Bromodichloromethane	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromoform	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Bromomethane (Methyl bromide)	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Carbon disulfide	ug/L	160	10	9.1	25	130	1.1	1.0 U	2.9	0.80 J	0.47 J	0.61 J	3.3	6.0	1.0 U	1.0 U	2.2	1.0 U	1.0 U	1.0 U	3.6	35		
Carbon tetrachloride	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chlorobenzene	ug/L	27	1.1	1.0 U	1.0 U	10 U	4.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	53	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	4.4	1.0 U	1.0 U	
Chloroethane	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chloroform (Trichloromethane)	ug/L	780	38	1.0 U	1.0 U	33	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Chloromethane (Methyl chloride)	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	280	17	0.54 J	11	8.1 J	0.91 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.32 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.65 J	1.0 U	1.0 U	
cis-1,3-Dichloropropene	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Dichlorodifluoromethane (CFC-12)	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Ethylbenzene	ug/L	2.4 J	1.0 U	1.0 U	6.1	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.62 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.9	
m&p-Xylenes	ug/L	4.9 J	2.0 U	2.0 U	30	20 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	3.9	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.5 J	
Methylene chloride	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
m-Monochlorobenzotrifluoride	ug/L	5.0 U	1.0 U	1.0 U	0.26 J	10 U	1.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
o-Monochlorobenzotrifluoride	ug/L	5.0 U	1.0 U	1.0 U	0.34 J	10 U	4.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.55 J	1.0 U	1.0 U	
o-Xylene	ug/L	4.2 J	1.0 U	1.0 U	5.5	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.5	
p-Monochlorobenzotrifluoride	ug/L	5.0 U	0.55 J	0.30 J	1.2	10 U	6.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	16	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.77 J	1.0 U	1.0 U	
Styrene	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Tetrachloroethene	ug/L	4.6 J	0.69 J	0.27 J	0.23 J	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Toluene	ug/L	11	0.56 J	1.0 U	1.9	2.1 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	7.6	1.0 U	1.0 U	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	ug/L	38	2.6	1.0 U	1.0 U	8.0 J	0.77 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.39 J	1.0 U	1.0 U	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	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Trichloroethene	ug/L	460	21	0.44 J	9.6	7.6 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Trichlorofluoromethane (CFC-11)	ug/L	5.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Vinyl acetate	ug/L	10 U	2.0 U	2.0 U	2.0 U	20 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	
Vinyl chloride	ug/L	180	14	1.0 U	1.0 U	9.2 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
Xylenes (total)	ug/L	9.1 J	3.0 U	3.0 U	36	30 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	8.4	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	7.0	
Semi-volatile Organic Compounds																								
2,4,6-Trichlorophenol	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
2,4-Dichlorophenol	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	2.4 J	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
2,4-Dimethylphenol	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
2,4-Dinitrophenol	ug/L	45 U	45 U	45 U	46 U	44 U	44 U	44 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	44 U	44 U	44 U	45 U	45 U	
2-Chloronaphthalene	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
2-Chlorophenol	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
2-Nitrophenol	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
4,6-Dinitro-2-methylphenol	ug/L	45 U	45 U	45 U	46 U	44 U	44 U	44 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	44 U	44 U	44 U	45 U	45 U	
4-Chloro-3-methylphenol	ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8																		

Table 3.8
Analytical Results Summary
Fifth Quarter Group A Bedrock Piezometer Sampling
Third Quarter 2022
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		G6-05	G6-06	G6-07	G6-11	H2M-06	H2M-09	H2U-01	H2U-02	H5-02	H5-04	H5-05	H5-07	H5-09	I1-01	I1-02	I1-04	I1-07	J6-02	J6-04	J6-05	J6-07	J6-11	
Sample ID:		G6-05-0822	G6-06-0822	G6-07-0822	G6-11-0822	H2M-06-0822	H2M-09-0822	H2U-01-0822	H2U-02-0822	H5-02-0822	H5-04-0822	H5-05-0822	H5-07-0822	H5-09-0822	I1-01-0822	I1-02-0822	I1-04-0822	I1-07-0822	J6-02-0822	J6-04-0822	J6-05-0822	J6-07-0822	J6-11-0822	
Sample Date:		8/23/2022	8/23/2022	8/23/2022	8/23/2022	9/19/2022	9/19/2022	9/19/2022	8/26/2022	9/2/2022	9/2/2022	9/2/2022	9/2/2022	9/2/2022	8/26/2022	8/26/2022	8/26/2022	8/26/2022	9/1/2022	9/1/2022	9/1/2022	8/25/2022	8/25/2022	
Parameters		Units																						
bis(2-Chloroethoxy)methane		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
bis(2-Ethylhexyl)phthalate (DEHP)		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Butyl benzylphthalate (BBP)		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Chrysene		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Dibenz(a,h)anthracene		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Diethyl phthalate		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Dimethyl phthalate		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Di-n-butylphthalate (DBP)		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Di-n-octyl phthalate (DnOP)		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Fluoranthene		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Fluorene		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Hexachlorobenzene		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Hexachlorobutadiene		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Hexachlorocyclopentadiene		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Hexachloroethane		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Indeno(1,2,3-cd)pyrene		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Isophorone		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Naphthalene		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	3.9 J	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Octachlorocyclopentene		ug/L	4.5 U	4.5 U	4.5 U	4.6 U	4.4 U	4.4 U	4.4 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.4 U	4.4 U	4.4 U	4.5 U	4.5 U	
Pentachlorophenol		ug/L	45 U	45 U	45 U	46 U	44 U	44 U	44 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	45 U	44 U	44 U	44 U	45 U	45 U	
Phenanthrene		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Phenol		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Pyrene		ug/L	8.9 U	8.9 U	8.9 U	9.3 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.9 U	8.8 U	8.8 U	8.8 U	8.9 U	8.9 U	
Organic Acids																								
2-Chlorobenzoic acid		ug/L	9600	920	30 U	30 U	440	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	
3-Chlorobenzoic acid		ug/L	2400	230	30 U	30 U	73	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	
4-Chlorobenzoic acid		ug/L	27000	2400	30 U	30 U	38	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	30 U	
Benzoic acid		ug/L	700 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	
Chlorendic acid		ug/L	460 J	43 J	250 U	250 U	250 U	250 U	190 J	250 U	250 U	250 U	250 U	180 J	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	
General Chemistry																								
Sulfate		ug/L	997000	1150000	1200000	1520000	1470000	1450000	160000	244000	128000	941000	1270000	1680000	1480000	247000	241000	648000	1230000	140000	158000	157000	1390000	1820000

Notes:

U - Not detected at the associated reporting limit

R -Data rejected

J - Estimated concentration

J+ - Estimated concentration; result may be biased high

UJ - Not detected; associated reporting limit is estimated

9.1 - Value exceeds associated screening level

Table 3.9

**2022 Analytical Results Summary
Annual Bedrock Open Catch Basin
Hyde Park Landfill Site
Town of Niagara, New York**

Sample Location:	BR-OpenCatchBasin
Sample ID:	HPOPENCB-2022
Sample Date:	10/7/2022

Parameters	Units	
Organic Acids		
2-Chlorobenzoic acid	µg/L	30 U
3-Chlorobenzoic acid	µg/L	30 U
4-Chlorobenzoic acid	µg/L	30 U
Benzoic acid	µg/L	100 U
Chlorendic acid	µg/L	250 U

Notes:

U - Not detected at the associated reporting limit

Table 3.11

**2022 Analytical Results Summary
Annual AFW Composite
Hyde Park Landfill Site
Town of Niagara, New York**

			Sample Location:	AFWCOMPOSITE	AFWCOMPOSITE
			Sample ID:	AFW-C-1222	AFW-C-0323
			Sample Date:	12/22/2022	3/13/2023
Parameters	Units	Reporting Level			
Polychlorinated Biphenyls (PCBs)					
Pentachlorobiphenyl	µg/L	1	-	0.005980	
Tetrachlorobiphenyl	µg/L	1	-	0.012100	
Trichlorobiphenyl	µg/L	1	-	0.008340	
Pesticides					
alpha-BHC	µg/L	1	0.035 J	-	
beta-BHC	µg/L	1	0.046 U	-	
delta-BHC	µg/L	1	0.046 U	-	
gamma-Chlordane	µg/L	1	0.024 J	-	
Mirex	µg/L	1	0.046 U	-	
Dioxin Furans					
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	500	4.72 U	-	

Notes:

BHC - Benzene Hexachloride
 pg/L - Picograms per liter
 µg/L - Micrograms per liter
 - - Not analyzed
 J - Estimated concentration
 U - Not detected at the associated reporting limit

Table 3.12

**2022 Quarterly Hydraulic Gradient Summary
Community Monitoring Program
Hyde Park Landfill Site
Town of Niagara, New York**

		3/2/2022			6/7/2022			9/6/2022			12/8/2022		
Gradient Pairing Overburden Bedrock		Overburden Elevation (ft. AMSL)	Bedrock Elevation (ft. AMSL)	Gradient (ft./ft.)	Overburden Elevation (ft. AMSL)	Bedrock Elevation (ft. AMSL)	Gradient (ft./ft.)	Overburden Elevation (ft. AMSL)	Bedrock Elevation (ft. AMSL)	Gradient (ft./ft.)	Overburden Elevation (ft. AMSL)	Bedrock Elevation (ft. AMSL)	Gradient (ft./ft.)
CMW-1OB	CMW-1SH	571.88	565.21	0.606	576.37	563.63	1.158	576.07	562.82	1.205	573.64	563.27	0.943
CMW-2OB	CMW-2SH	590.36	573.86	1.154	587.10	572.60	1.014	581.81	563.84	1.257	590.09	563.87	1.834
CMW-3OB	CMW-3SH	577.70	555.36	1.596	575.61	554.44	1.512	572.39	550.74	1.546	572.78	554.62	1.297
CMW-4OB	CMW-4SH	574.28*	567.71	0.557	574.09	567.47	0.561	574.04	563.84	0.864	573.70	567.14	0.556
CMW-5OB	CMW-5SH	582.87	578.15	0.299	582.71	576.00	0.425	583.43*	556.24	1.721	583.52	576.62	0.437
CMW-6OB	CMW-6SH	571.86	562.06	1.021	571.81	562.26	0.995	571.75	561.77	1.040	571.85	561.93	1.033
CMW-7OB	CMW-7SH	606.90	601.76	0.359	606.15 ⁽¹⁾	598.66	0.524	606.33 ⁽¹⁾	597.97	0.575	606.35	598.76	0.531
CMW-8OB	CMW-8SH	613.51	612.44	0.103	612.68 ⁽²⁾	609.17	0.351	612.80	607.89	0.472	612.60	609.66	0.283
CMW-9OB	CMW-9SH	569.26	560.33	1.717	569.13	560.53	1.654	568.99	560.28	1.675	568.84	560.12	1.677
CMW-11OB	CMW-11SH	570.75	565.32	0.566	569.11	565.23	0.404	569.34	564.83	0.470	570.13	565.21	0.512
CMW-12OB	CMW-12SH	590.74	574.71	0.853	583.45	563.99	1.035	572.92	568.92	0.213	587.81	573.43	0.765

Notes:

ft. AMSL - Feet Above Mean Sea Level

ft./ft. - Feet per foot

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

* - Well full of water to top of casing (surcharged). Overburden groundwater elevation indicated is the well reference elevation.

-⁽¹⁾ - Well CMW-7OB was recorded as dry during this event. Bottom of well depth (sounded during monitoring event) was used to calculate gradient.-⁽²⁾ - Well CMW-8OB was recorded as dry during this event. Bottom of well depth (sounded during monitoring event) was used to calculate gradient.

Table 3.13

**2022 Community Monitoring Well Soil Vapor Monitoring
Community Monitoring Program
Hyde Park Landfill Site
Town of Niagara, New York**

September 21, 2022

75°F

Well I.D.	Time Intervals	Sampling Time (hhmm)	VOC Readings (ppmv)
SVP-1	Background	1107	0
	At 1 minute	1108	0
	At 2 minutes	1109	0
	At 3 minutes	1110	0
	At 4 minutes	1111	0
	At 5 minutes	1112	0
	At 6 minutes	1113	0
	At 7 minutes	1114	0
	At 8 minutes	1115	0
	At 9 minutes	1116	0
	At 10 minutes	1117	0
SVP-2	Background	1119	0
	At 1 minute	1120	0
	At 2 minutes	1121	0
	At 3 minutes	1122	0
	At 4 minutes	1123	0
	At 5 minutes	1124	0
	At 6 minutes	1125	0
	At 7 minutes	1126	0
	At 8 minutes	1127	0
	At 9 minutes	1128	0
	At 10 minutes	1129	0
SVP-3	Background	1132	0
	At 1 minute	1133	0
	At 2 minutes	1134	0
	At 3 minutes	1135	0
	At 4 minutes	1136	0
	At 5 minutes	1137	0
	At 6 minutes	1138	0
	At 7 minutes	1139	0
	At 8 minutes	1140	0
	At 9 minutes	1141	0
	At 10 minutes	1142	0
SVP-4	Background	1144	0
	At 1 minute	1145	0
	At 2 minutes	1146	0
	At 3 minutes	1147	0
	At 4 minutes	1148	0
	At 5 minutes	1149	0
	At 6 minutes	1150	0
	At 7 minutes	1151	0
	At 8 minutes	1152	0
	At 9 minutes	1153	0
	At 10 minutes	1154	0

**2022 Community Monitoring Well Soil Vapor Monitoring
Community Monitoring Program
Hyde Park Landfill Site
Town of Niagara, New York**

**September 21, 2022
75°F**

Well I.D.	Time Intervals	Sampling Time (hhmm)	VOC Readings (ppmv)
CMW-7OB	Background	1203	0
	At 1 minute	1204	0
	At 2 minutes	1205	0
	At 3 minutes	1206	0
	At 4 minutes	1207	0
	At 5 minutes	1208	0
	At 6 minutes	1209	0
	At 7 minutes	1210	0
	At 8 minutes	1211	0
	At 9 minutes	1212	0
	At 10 minutes	1213	0
CMW-8OB	Background	1223	0
	At 1 minute	1224	0
	At 2 minutes	1225	0
	At 3 minutes	1226	0
	At 4 minutes	1227	0
	At 5 minutes	1228	0
	At 6 minutes	1229	0
	At 7 minutes	1230	0
	At 8 minutes	1231	0
	At 9 minutes	1232	0
	At 10 minutes	1233	0

Notes:

ppmv - Parts per million by volume
VOC - Volatile Organic Compound
°F - Degrees Fahrenheit

**2022 NAPL Decanter Volume Monitoring
Hyde Park Landfill Site
Town of Niagara, New York**

	Decanter #1	Decanter #2	Decanter #3
First Quarter 2022			
March 2, 2022			
Thickness (feet)	16.1	*	3.1
Level (%)	22	26	23
Volume ⁽¹⁾ (gallons)	2,464.00	2,912.00	2,576.00
Second Quarter 2022			
June 8, 2022			
Thickness (feet)	17.7	6.0	5.35
Level (%)	28	29	32
Volume ⁽¹⁾ (gallons)	3,136.00	3,248.00	3,584.00
Third Quarter 2022			
September 7, 2022			
Thickness (feet)	19.2	7.1	6.3
Level (%)	31	28	30
Volume ⁽¹⁾ (gallons)	3,472.00	3,136.00	3,360.00
Fourth Quarter 2022			
December 9, 2022			
Thickness (feet)	16.3	4.3	4.5
Level (%)	31	28	24
Volume ⁽¹⁾ (gallons)	3,472.00	3,136.00	2,688.00

Notes:

- ⁽¹⁾ - Based on level percentage of NAPL in 11,200-gallon decanters
 * - Not measured due to obstruction in observation port
 NAPL - Non-Aqueous Phase Liquid

Table 4.2

2022 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP 1522 INT-D	HP 11222 INT-D	HP 11922 INT-D	HP 3222 INT-D	HP 3922 INT-D	HP 31622 INT-D	HP 33022 INT-D	HP 4622 INT-D	HP 41322 INT-D	HP 42022 INT-D	HP 42722 INT-D	HP 5422 INT-D	HP 51122 INT-D	HP 51822 INT-D	HP 52522 INT-D	HP 6122 INT-D
Sample Date:		1/5/2022	1/12/2022	1/19/2022	3/2/2022	3/9/2022	3/16/2022	3/30/2022	4/6/2022	4/13/2022	4/20/2022	4/27/2022	5/4/2022	5/11/2022	5/18/2022	5/25/2022	6/1/2022
Parameters	Units																
Volatile Organic Compounds																	
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	1.0 U	0.21 J	1.0 U	1.0 U	0.26 J	0.24 J	0.33 J	0.38 J	0.29 J	0.32 J	0.40 J	0.57 J	0.38 J	0.49 J	0.41 J	0.59 J
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	0.74 J	0.67 J	1.0	0.52 J	0.41 J	0.42 J	1.0 U	1.0 U	1.0 U	0.40 J	0.50 J	0.42 J	0.49 J	0.62 J	0.64 J	0.82 J
1,1-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.36 J	1.0 U
1,2-Dichlorobenzene	ug/L	0.34 J	0.29 J	0.27 J	1.0 U	0.29 J	0.34 J	0.23 J	0.32 J	0.43 J	0.31 J	0.33 J	0.35 J	0.34 J	0.32 J	0.33 J	0.32 J
1,2-Dichloroethane	ug/L	1.2	1.6	1.8	1.2	1.3	1.3	1.4	1.5	1.2	1.5	1.4	1.3	1.0 U	1.0 U	1.9	1.8
1,2-Dichloropropane	ug/L	0.41 J	0.42 J	0.64 J	1.0 U	0.31 J	0.29 J	0.35 J	1.0 U	0.48 J	1.0 U	1.0 U	0.43 J	1.0 U	1.0 U	0.49 J	0.42 J
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	0.20 J	1.0 U	1.0 U	0.28 J	0.22 J	1.0 U	0.20 J	0.21 J	1.0 U	1.0 U	1.0 U	1.0 U	0.32 J	0.22 J	0.27 J	1.0 U
2-Chlorotoluene	ug/L	5.6	5.1	4.5	4.5	4.2	4.9	4.8	4.5	4.4	4.5	5.0	5.3	5.2	5.5	4.9	5.7
3-Chlorotoluene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	ug/L	1.8	1.7	1.5	1.5	1.4	1.6	1.6	1.3	1.5	1.3	1.7	1.7	1.6	1.7	1.5	1.8
Benzene	ug/L	97	82	100	71	69	66	73	71	73	66	64	73	70	69	83	83
Bromodichloromethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	ug/L	4.7	12	19	19	5.5	22	14	21	22	23	23	4.7	1.0 U	26	28	46
Carbon tetrachloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	33	27	26	26	27	26	28	26	27	26	27	32	28	30	31	32
Chloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	1.8	2.0	1.7	1.6	2.1	2.3	1.9	1.8	1.7	1.6	1.5	2.0	1.9	2.2	1.7	2.9
Chloromethane (Methyl chloride)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	1.0	1.3	0.72 J	1.1	0.72 J	0.94 J	0.68 J	0.85 J	0.80 J	0.96 J	1.2	1.2	1.3	1.5	1.1	1.2
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	5.2	4.2	4.0	3.9	4.2	4.0	4.4	3.7	4.2	3.7	4.2	5.3	4.5	4.2	4.6	5.0
m&p-Xylenes	ug/L	7.4	6.1	5.8	5.6	6.1	5.8	5.8	5.6	5.6	5.6	6.2	7.3	6.2	6.3	6.4	6.5
Methylene chloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	ug/L	0.84 J	0.70 J	0.77 J	1.0 U	0.61 J	0.66 J	0.80 J	0.77 J	0.71 J	1.0 U	0.74 J	0.82 J	0.71 J	0.79 J	0.79 J	0.61 J
o-Monochlorobenzotrifluoride	ug/L	2.7	2.2	2.0	1.7	2.2	2.2	1.9	2.1	2.1	2.1	1.7	2.5	2.2	2.4	2.5	2.6
o-Xylene	ug/L	7.2	6.1	5.3	5.1	5.7	5.7	5.7	6.2	5.6	5.4	5.5	7.0	6.5	6.4	6.4	6.9
p-Monochlorobenzotrifluoride	ug/L	2.3	1.9	1.7	1.6	1.9	1.9	2.0	1.8	1.7	2.2	1.8	2.0	2.0	2.0	2.3	2.3
Styrene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	5.3	4.4	3.4	4.1	3.3	2.8	2.4	2.2	2.0	2.3	2.2	2.9	3.0	3.5	3.6	3.8
trans-1,2-Dichloroethene	ug/L	10	8.4	10	7.0	7.1	6.6	7.6	7.3	8.0	7.6	7.2	9.3	8.6	8.5	11	11
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	0.49 J	0.60 J	1.0 U	0.69 J	0.77 J	0.75 J	0.72 J	1.0 J	0.98 J	0.77 J	5.8	1.5	1.3	1.5	1.0	1.3
Trichlorofluoromethane (CFC-11)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	ug/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	ug/L	18	20	8.3	9.8	7.7	8.9	8.5	10	10	11	17	27	27	39	17	34
Xylenes (total)	ug/L	15	12	11	11	12	12	12	12	11	11	12	14	13	13	13	13

Notes:

J - Estimated concentration.

U - Not detected at the associated reporting limit.

µg/L - Micrograms per liter

Table 4.2

2022 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP 6822 INT-D	HP 61522 INT-D	HP 62222 INT-D	HP 62922 INT-D	HP 7622 INT-D	HP 71322 INT-D	HP 72022 INT-D	HP 72722 INT-D	HP 080322 INT-D	HP 81022 INT-D	HP 81722 INT-D	HP 82422 INT-D	HP 83122 INT-D	HP 9722 INT-D	HP 91422 INT-D
Sample Date:		6/8/2022	6/15/2022	6/22/2022	6/29/2022	7/6/2022	7/13/2022	7/20/2022	7/27/2022	8/3/2022	8/10/2022	8/17/2022	8/24/2022	8/31/2022	9/7/2022	9/14/2022
Parameters	Units															
Volatile Organic Compounds																
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	0.51 J	0.51 J	0.48 J	0.63 J	0.63 J	0.56 J	0.63 J	0.50 J	0.60 J	0.50 J	0.49 J	0.52 J	0.48 J	0.52 J	0.46 J
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	0.99 J	0.94 J	0.92 J	1.0	1.4	1.5	1.6	1.4	1.5	1.6	1.5	1.6	1.9	1.9	1.7
1,1-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	0.34 J	0.38 J	0.28 J	0.34 J	0.28 J	0.35 J	0.31 J	0.33 J	0.32 J	0.30 J	0.34 J	0.24 J	0.33 J	0.34 J	0.31 J
1,2-Dichloroethane	ug/L	2.0	2.0	2.5	2.6	2.7	3.3	3.7	3.1	3.5	3.7	3.8	3.7	4.6	5.2	4.0
1,2-Dichloropropane	ug/L	0.42 J	0.40 J	0.50 J	0.47 J	1.0 U	0.58 J	0.65 J	0.40 J	0.43 J	0.45 J	0.41 J	1.0 U	0.56 J	0.55 J	0.53 J
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	0.21 J	1.0 U	0.22 J	1.0 U	0.21 J	0.22 J	0.20 J	0.24 J	0.21 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	ug/L	6.2	5.5	5.4	5.7	5.4	6.1	5.9	4.9	5.3	5.1	4.8	5.0	5.2	5.2	5.3
3-Chlorotoluene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	ug/L	1.9	1.6	1.6	1.6	1.6	1.8	1.7	1.5	1.7	1.4	1.4	1.4	1.5	1.5	1.5
Benzene	ug/L	86	78	86	80	82	110	120	84	82	82	80	80	100	100	90
Bromodichloromethane	ug/L	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	ug/L	1.0 U	48	47	47	43	31	8.6	44	45	48	1.0 U	51	1.0 U	8.9	7.6
Carbon tetrachloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	33	31	31	32	31	35	38	31	33	32	31	29	32	32	33
Chloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	3.1	2.9	2.9	3.4	3.4	3.1	3.9	3.3	3.7	3.8	4.0	4.0	4.0	3.8	2.9
Chloromethane (Methyl chloride)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	1.3	1.2	1.1	1.3	1.2	1.3	1.4	1.0	1.3	1.2	1.2	1.1	1.2	1.2	1.1
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	4.8	4.5	4.7	5.1	4.7	5.1	5.5	4.6	4.7	4.6	4.4	4.1	4.8	4.6	4.7
m&p-Xylenes	ug/L	6.9	6.2	6.5	6.2	6.1	6.4	7.0	5.6	6.0	6.0	5.7	5.4	5.9	5.7	5.5
Methylene chloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	ug/L	1.0 U	1.0 U	0.76 J	0.65 J	1.0 U	0.77 J	0.66 J	1.0 U	0.72 J	0.59 J	0.69 J	0.71 J	0.52 J	0.53 J	0.74 J
o-Monochlorobenzotrifluoride	ug/L	2.7	2.8	2.4	2.6	2.2	2.5	2.5	2.1	2.4	2.2	2.1	2.1	2.1	1.8	2.2
o-Xylene	ug/L	7.1	6.6	6.5	6.9	6.9	7.5	7.7	6.4	6.7	6.4	6.4	6.2	6.8	6.4	6.4
p-Monochlorobenzotrifluoride	ug/L	2.3	1.9	2.2	1.8	1.7	1.9	1.9	1.6	2.1	1.6	1.6	1.6	1.4	1.5	1.6
Styrene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	4.5	4.5	5.2	5.7	5.6	7.4	8.1	6.5	7.5	7.5	7.4	7.8	8.4	8.3	8.5
trans-1,2-Dichloroethene	ug/L	11	10	11	10	11	17	19	11	13	12	12	12	16	15	11
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	1.3	1.3	1.2	1.3	1.2	1.3	1.6	1.3	1.6	1.4	1.4	1.3	1.5	1.3	1.5
Trichlorofluoromethane (CFC-11)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	ug/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	ug/L	39	36	41	52	44	19	21	35	48	46	41	40	18	16	30
Xylenes (total)	ug/L	14	13	13	13	13	14	15	12	13	12	12	12	13	12	12

Notes:

J - Estimated concentration.

U - Not detected at the associated reporting limit.

µg/L - Micrograms per liter

Table 4.2

2022 Weekly Carbon Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York

Sample Location:		HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01	HP-INTER-D-01
Sample ID:		HP 100522 INT-D	HP 101222 INT-D	HP 101922 INT-D	HP 102622 INT-D	HP 11222 INT-D	HP 11922 INT-D	HP 111622 INT-D	HP 112122 INT-D	HP 113022 INT-D	HP 12722 INT-D	HP 121422 INT-D	HP 122122 INT-D	HP 123022 INT-D
Sample Date:		10/5/2022	10/12/2022	10/19/2022	10/26/2022	11/2/2022	11/9/2022	11/16/2022	11/21/2022	11/30/2022	12/7/2022	12/14/2022	12/21/2022	12/30/2022
Parameters	Units													
Volatile Organic Compounds														
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	1.0 U	0.28 J	0.27 J	0.33 J	0.28 J	0.31 J	0.28 J	0.32 J	0.24 J	0.25 J	0.20 J	0.31 J	0.26 J
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.5	1.8	2.1	2.1	2.1	2.1	2.0	2.7	2.4	2.0	2.3	2.3	2.0
1,1-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	0.30 J	0.27 J	0.27 J	0.30 J	0.26 J	0.24 J	0.27 J	0.29 J	0.22 J	0.25 J	0.25 J	0.24 J	0.24 J
1,2-Dichloroethane	ug/L	3.4	4.5	4.6	5.2	6.6	6.5	6.9	6.9	6.1	6.7	7.6	8.9	8.1
1,2-Dichloropropane	ug/L	1.0 U	0.32 J	0.32 J	0.37 J	0.30 J	0.24 J	0.21 J	0.40 J	0.27 J	1.0 U	0.29 J+	0.27 J	0.27 J
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	ug/L	4.1	4.5	4.3	4.7	4.3	4.1	4.1	4.6	4.0	3.9	4.0	4.1	3.9
3-Chlorotoluene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	ug/L	1.3	1.4	1.4	1.5	1.3	1.2	1.2	1.4	1.2	1.1	1.3	1.2	1.2
Benzene	ug/L	69	71	66	77	56	55	49	75	51	44	50	45	40
Bromodichloromethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	ug/L	13	4.1	3.3	2.4	16	18	14	2.2	3.3	10	6.5	8.2	11
Carbon tetrachloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	27	29	28	31	28	27	27	30	26	25	23	24	24
Chloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	1.7	2.8	3.7	3.5	4.5	4.0	4.1	4.5	3.6	2.4	2.4	2.7	1.9
Chloromethane (Methyl chloride)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	ug/L	0.87 J	0.90 J	0.86 J	0.80 J	0.73 J	0.76 J	0.65 J	0.82 J	0.76 J	0.73 J	0.72 J	0.92 J	0.91 J
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	4.0	4.1	4.1	4.4	4.0	4.0	4.0	4.3	3.8	3.6	3.3	3.5	3.5
m&p-Xylenes	ug/L	5.3	5.6	5.2	5.6	5.2	4.9	4.7	4.9	4.2	3.8	3.3	3.8	3.3
Methylene chloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	ug/L	1.0 U	0.54 J	0.50 J	0.63 J	1.0 U	0.54 J	0.58 J	0.55 J	0.53 J	0.46 J	0.36 J	0.54 J	0.50 J
o-Monochlorobenzotrifluoride	ug/L	1.9	1.9	1.8	1.8	2.0	1.9	2.0	1.9	1.8	1.7	1.5	1.6	1.6
o-Xylene	ug/L	5.7	5.8	5.9	6.1	5.9	5.5	5.5	6.0	5.3	5.2	4.7	5.2	4.7
p-Monochlorobenzotrifluoride	ug/L	1.6	1.5	1.3	1.7	1.7	1.5	1.8	1.6	1.4	1.4	2.1	1.3	1.4
Styrene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	0.23 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	7.2	7.9	7.4	7.8	6.4	6.1	5.8	6.6	5.4	4.5	4.5	4.4	3.9
trans-1,2-Dichloroethene	ug/L	9.2	9.8	8.7	11	7.6	7.2	6.6	11	7.0	5.9	6.0	5.7	5.5
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	1.1	1.1	1.1	1.2	1.1	1.1	1.0	1.2	0.96 J	0.86 J	0.99 J	0.80 J	0.81 J
Trichlorofluoromethane (CFC-11)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	ug/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl chloride	ug/L	34	44	37	20	31 J	27	25	18	26	19	19	25	14
Xylenes (total)	ug/L	11	11	11	12	11	10	10	11	9.6	8.9	8.1	8.9	8.0

Notes:

- J - Estimated concentration.
- U - Not detected at the associated reporting limit.
- µg/L - Micrograms per liter

Table 4.3

**2022 Quarterly Leachate Feed APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York**

Sample Location:		PMPTKOUTLET	PMPTKOUTLET	PMPTKOUTLET	PMPTKOUTLET
Sample ID:		HP33122 INF	HP 62222 INF	HP 91422 INF	HP 121422 INF
Sample Date:		3/31/2022	6/22/2022	9/14/2022	12/14/2022
Parameters	Units				
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/L	1.3 J	2.7	3.2 J	3.2 J
1,1,2,2-Tetrachloroethane	µg/L	37	78	110	90
1,1,2-Trichloroethane	µg/L	3.8	7.7	12	8.0
1,1-Dichloroethane	µg/L	2.5 U	1.2 J	1.3 J	1.3 J
1,1-Dichloroethene	µg/L	0.58 J	0.62 J	1.7 J	1.8 J
1,2,4-Trichlorobenzene	µg/L	300	490	530	520
1,2-Dichlorobenzene	µg/L	35	68	83	73
1,2-Dichloroethane	µg/L	7.6	13	17	22
1,2-Dichloropropane	µg/L	0.63 J	1.0 J	1.3 J	1.5 J+
1,3-Dichlorobenzene	µg/L	12	23	22	19
1,4-Dichlorobenzene	µg/L	52	90	110	99
2-Chlorotoluene	µg/L	420	660	750	840
3-Chlorotoluene	µg/L	4.6	7.7	8.9	8.1
4-Chlorotoluene	µg/L	280	470	540	580
Benzene	µg/L	65	150	180	130
Bromodichloromethane	µg/L	2.5 U	2.5 U	5.0 U	5.0 U
Bromoform	µg/L	2.5 U	2.5 U	5.0 U	5.0 U
Bromomethane (Methyl bromide)	µg/L	2.5 U	2.5 U	5.0 U	5.0 U
Carbon disulfide	µg/L	4.2	25	16	12
Carbon tetrachloride	µg/L	5.2	12	6.8	16
Chlorobenzene	µg/L	260	490	580	570
Chloroethane	µg/L	2.5 U	2.5 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	89	280	340	220
Chloromethane (Methyl chloride)	µg/L	0.83 J	2.5 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	97	190	440	320
cis-1,3-Dichloropropene	µg/L	2.5 U	2.5 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	2.5 U	2.5 U	5.0 U	5.0 U
Ethylbenzene	µg/L	85	160	170	190
m&p-Xylenes	µg/L	290	560	620	670
Methylene chloride	µg/L	11	31	35	22
m-Monochlorobenzotrifluoride	µg/L	35	57	49	64
o-Monochlorobenzotrifluoride	µg/L	88	170	170	190
o-Xylene	µg/L	170	300	350	350
p-Monochlorobenzotrifluoride	µg/L	140	230	180	250
Styrene	µg/L	2.5 U	2.5 U	5.0 U	5.0 U
Tetrachloroethene	µg/L	140	22	3.4 J	66
Toluene	µg/L	360	710	800	880
trans-1,2-Dichloroethene	µg/L	2.8	4.6	4.8 J	3.2 J
trans-1,3-Dichloropropene	µg/L	2.5 U	2.5 U	5.0 U	5.0 U
Trichloroethene	µg/L	160	520	490	680
Trichlorofluoromethane (CFC-11)	µg/L	1.5 J	1.5 J	1.8 J	3.4 J
Vinyl acetate	µg/L	5.0 U	5.0 U	10 U	10 U
Vinyl chloride	µg/L	7.6	55	56	19
Xylenes (total)	µg/L	450	860	970	1000

Table 4.3

**2022 Quarterly Leachate Feed APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York**

Sample Location:		PMPTKOUTLET	PMPTKOUTLET	PMPTKOUTLET	PMPTKOUTLET
Sample ID:		HP33122 INF	HP 62222 INF	HP 91422 INF	HP 121422 INF
Sample Date:		3/31/2022	6/22/2022	9/14/2022	12/14/2022
Parameters	Units				
Semi-volatile Organic Compounds					
2,4,6-Trichlorophenol	µg/L	27 U	9.3 U	2.7 J	8.8 U
2,4-Dichlorophenol	µg/L	69	120	130	140
2,4-Dimethylphenol	µg/L	27 U	9.3 U	1.5 J	8.8 U
Semi-volatile Organic Compounds (Continued)					
2,4-Dinitrophenol	µg/L	140 U	46 U	44 U	44 U
2-Chlorobenzoic acid	µg/L	1500	3500	4300	3000
2-Chloronaphthalene	µg/L	27 U	9.3 U	8.8 U	8.8 U
2-Chlorophenol	µg/L	27 U	5.7 J	4.9 J	8.8 U
2-Nitrophenol	µg/L	27 U	9.3 U	8.8 U	8.8 U
3-Chlorobenzoic acid	µg/L	750	1600	2000	1400
4,6-Dinitro-2-methylphenol	µg/L	140 U	46 U	44 U	44 U
4-Chloro-3-methylphenol	µg/L	27 U	9.3 U	8.8 U	2.3 J
4-Chlorobenzoic acid	µg/L	1400	3400	4200	2600
4-Nitrophenol	µg/L	140 U	46 U	44 U	44 U
Acenaphthene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Acenaphthylene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Anthracene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Benzo(a)anthracene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Benzo(a)pyrene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Benzo(b)fluoranthene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Benzo(g,h,i)perylene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Benzoic acid	µg/L	3500	8100	9200	7400
bis(2-Chloroethoxy)methane	µg/L	27 U	9.3 U	8.8 U	8.8 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	27 U	9.3 U	8.8 U	8.8 U
Butyl benzylphthalate (BBP)	µg/L	27 U	9.3 U	8.8 U	8.8 U
Chlorendic acid	µg/L	3000	5000	5900	4600
Chrysene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Dibenz(a,h)anthracene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Diethyl phthalate	µg/L	27 U	9.3 U	8.8 U	8.8 U
Dimethyl phthalate	µg/L	27 U	1.6 J	8.8 U	1.8 J
Di-n-butylphthalate (DBP)	µg/L	27 U	9.3 U	8.8 U	8.8 U
Di-n-octyl phthalate (DnOP)	µg/L	27 U	9.3 U	8.8 U	8.8 U
Fluoranthene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Fluorene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Hexachlorobenzene	µg/L	27 U	3.0 J	5.3 J	3.8 J
Hexachlorobutadiene	µg/L	13 J	9.3 U	8.1 J	14
Hexachlorocyclopentadiene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Hexachloroethane	µg/L	27 U	5.2 J	1.1 J	5.8 J
Indeno(1,2,3-cd)pyrene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Isophorone	µg/L	27 U	9.3 U	8.8 U	8.8 U
Naphthalene	µg/L	27 U	9.3 U	8.8 U	8.9
Octachlorocyclopentene	µg/L	14 U	4.6 U	4.4 U	4.4 U
Pentachlorophenol	µg/L	140 U	46 U	19 J	44 U
Phenanthrene	µg/L	27 U	9.3 U	8.8 U	8.8 U
Phenol	µg/L	620	1300	1200	940
Pyrene	µg/L	27 U	9.3 U	8.8 U	8.8 U

Notes:

J - Estimated concentration.

U - Not detected at the associated reporting limit.

µg/L - Micrograms per liter

Table 4.4

**2022 Quarterly Sac Bed Interstage APL Sampling
Hyde Park Landfill Site
Town of Niagara, New York**

Sample Location:		SAC INTERSTAGE	SAC INTERSTAGE	SAC INTERSTAGE	SAC INTERSTAGE	SAC INTERSTAGE
Sample ID:		HP 33122 SAC	HP 62222 SAC	HP 91422 SAC	HP92622 SAC	HP121422 SAC
Sample Date:		3/31/2022	6/22/2022	9/14/2022	9/26/2022	12/14/2022
Parameters	Units					
Polychlorinated Biphenyls (PCB)						
Pentachlorobiphenyl	pg/L	26200 J	91300 J	-	148000 J	309000 J
Tetrachlorobiphenyl	pg/L	35300 J	135000 J	-	181000 J	391000 J
Trichlorobiphenyl	pg/L	10500 J	64300 J	-	92000 J	164000 J
Total PCBs	µg/L	.072 J	.29 J	-	.42 J	864000 J
Dioxin Furans						
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	pg/L	114	458	1920	-	1720

Notes:

- - Not applicable
- J - Estimated concentration
- pg/L - Picograms per liter
- µg/L - Micrograms per liter

Appendices

Appendix A

Institutional and Engineering Controls Certification Form

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation

625 Broadway, 11th Floor, Albany, NY 12233-7020

P: (518)402-9543 | F: (518)402-9547

www.dec.ny.gov

2/14/2023

Joseph Branch
Project Manager
OXY-Glenn Springs Holdings, Inc.
7601 Old Channel Trail
Montague, MI 49437
Joseph_Branch@oxy.com

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal

Site Name: Hooker-Hyde Park Landfill

Site No.: 932021

Site Address: 4825 Hyde Park Boulevard
Town Of Niagara, NY 14305

Dear Joseph Branch:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site-specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at <http://www.dec.ny.gov/regulations/67386.html>) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **April 30, 2023**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Professional Engineer (PE). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.



All site-related documents and data, including the PRR, must be submitted in electronic format to the Department of Environmental Conservation. The required format for documents is an Adobe PDF file with optical character recognition and no password protection. Data must be submitted as an electronic data deliverable (EDD) according to the instructions on the following webpage:

<https://www.dec.ny.gov/chemical/62440.html>

Documents may be submitted to the project manager either through electronic mail or by using the Department's file transfer service at the following webpage:

<https://fts.dec.state.ny.us/fts/>

The Department will not approve the PRR unless all documents and data generated in support of the PRR have been submitted using the required formats and protocols.

You may contact Andrew Zwack, the Project Manager, at 716-851-7284 or andrew.zwack@dec.ny.gov with any questions or concerns about the site. Please notify the project manager before conducting inspections or field work. You may also write to the project manager at the following address:

New York State Department of Environmental Conservation
700 Delaware Ave

Buffalo, NY 14209-2202

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

ec: w/ enclosures

ec: w/ enclosures

Andrew Zwack, Project Manager
Stanley Radon, Hazardous Waste Remediation Supervisor, Region 9

GHD - John Pentilchuk - john.pentilchuk@ghd.com
GHD - Margaret Popek - margaret.popek@ghd.com

The following parcel owner did not receive an ec:

Niagara Mohawk Power Corp - Parcel Owner
Occidental Chemical Corporation - Parcel Owner

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.
- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site No. **932021** **Site Details** **Box 1**

Site Name Hooker-Hyde Park Landfill

Site Address: 4825 Hyde Park Boulevard Zip Code: 14305
City/Town: Town Of Niagara
County: Niagara
Site Acreage: 30

Reporting Period: March 31, 2022 to March 31, 2023

- | | YES | NO |
|--|-------------------------------------|-------------------------------------|
| 1. Is the information above correct? | ☒ | ☐ |
| If NO, include handwritten above or on a separate sheet. | | |
| 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? | ☐ | ☒ |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? | ☐ | ☒ |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? | ☐ | ☒ |
| If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form. | | |
| 5. Is the site currently undergoing development? | ☐ | ☒ |

- | | Box 2 | |
|--|-------------------------------------|--------------------------|
| | YES | NO |
| 6. Is the current site use consistent with the use(s) listed below?
Closed Landfill | ☒ | ☐ |
| 7. Are all ICs in place and functioning as designed? | ☒ | ☐ |

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
130.11-1-3	Occidental Chemical Corporation	Ground Water Use Restriction Landuse Restriction Monitoring Plan O&M Plan
		Surface Water Use Restriction
Same as parcel with SBL number 130.11-4.1		
130.11-1-4.1	Occidental Chemical Corporation	Ground Water Use Restriction Landuse Restriction Building Use Restriction Surface Water Use Restriction Monitoring Plan O&M Plan

Occidental, the United States and State of New York:

Stipulation and Judgement Approving Settlement Agreement, January 19, 1981
 Stipulation on Requisite Remedial Technology, November 1, 1985
 Enforcement Decision Document for Requisite Remedial Technology; November 11, 1985
 Performance Monitoring Plan, July 31, 2006
 Declaration of Restrictive Covenants and Environmental Easement, August 11, 2010

Legacy Restriction: "3. Restrictions on Use: The following restrictions apply to the use of the Property, run with the land, and are binding on the Grantor: the Property shall not be used in any manner that would interfere with or adversely affect the implementation, integrity, or effectiveness of the Response Action performed at the Site, including, but not limited to, a) the extraction of on-site groundwater, b) any digging, excavation, extraction of materials, construction, or other activity outside the requirements of the Response Action that would disturb the cap placed upon the Landfill at the Site, or c) other activity that would disturb or interfere with any portion of the Response Action for the Site enumerated in the RRT Stipulation."

130.11-1-5.1 Niagara Mohawk Power Corp

7.2 acre portion only

Monitoring Plan
O&M Plan

Occidental, the United States and State of New York:

Stipulation and Judgment Approving Settlement Agreement, January 19, 1981
 Stipulation on Requisite Remedial Technology; November 1, 1985
 Enforcement Decision Document for Requisite Remedial Technology, November 11, 1985
 Performance Monitoring Plan, July 31, 2006

Description of Engineering Controls

Parcel

Engineering Control

130.11-1-3

Point-of-Entry Water Treatment
Groundwater Treatment System
Groundwater Containment
Fencing/Access Control
Monitoring Wells

Granular activated carbon treatment facility that handles aqueous phase leachate (APL) and non-aqueous phase leachate (NAPL) generated from the landfill and offsite sources.

130.11-1-4.1

Groundwater Treatment System
Monitoring Wells
Cover System
Groundwater Containment
Leachate Collection
Fencing/Access Control

The below engineering controls are from the Declaration of Restrictive Covenants and Environmental Easement August 11, 2010 and other documentation that are the most applicable to the parcel and community wide remediation.

Landfill cap. Landfill cap source control wells. Landfill perimeter capping. Collection and containment of aqueous phase liquids (APL) and non-aqueous phase liquids (NAPL) in the overburden. Collection and containment of APL and NAPL in the bedrock. Industrial protection program by sealing of sumps and manholes. Bloody run excavation with new culvert installation, cleaned of existing and/or slip lined. Niagara Gorge face soil and visibly contaminated rock excavated and disposed of in the landfill. Niagara Gorge face seeps remediation by APL plume pumping wells through groundwater flow zones.

130.11-1-5.1

7.2 acre portion only

Groundwater Treatment System
Cover System
Groundwater Containment
Leachate Collection
Fencing/Access Control
Monitoring Wells

The below engineering controls are from documentation that are the most applicable to the parcel and community wide remediation.

Landfill cap. Landfill cap source control wells. Landfill perimeter capping. Collection and containment of aqueous phase liquids (APL) and non-aqueous phase liquids (NAPL) in the overburden. Collection and containment of APL and NAPL in the bedrock. Industrial protection program by sealing of sumps and manholes.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

- (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

**IC CERTIFICATIONS
SITE NO. 932021**

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Joseph A. Branch at 7601 Old Channel Trail, Montague, MI 49437,
print name print business address

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.


Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

4-28-2023
Date

EC CERTIFICATIONS

Box 7

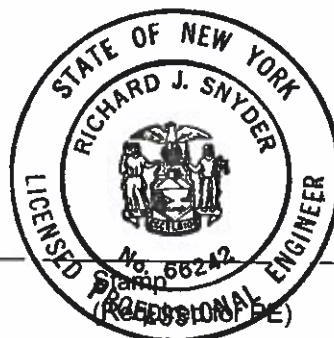
Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Richard Snyder at 2055 Niagara Falls Blvd., Niagara Falls, NY 14304
print name print business address

am certifying as a Professional Engineer for the Remedial Party
(Owner or Remedial Party)


Signature of Professional Engineer, for the Owner or
Remedial Party Rendering Certification



March 28 2023
Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

- I. Executive Summary: (1/2-page or less)
 - A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
 - B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
 - 1. progress made during the reporting period toward meeting the remedial objectives for the site
 - 2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
 - C. Compliance
 - 1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
 - 2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
 - D. Recommendations
 - 1. recommend whether any changes to the SMP are needed
 - 2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
 - 3. recommend whether the requirements for discontinuing site management have been met.
- II. Site Overview (one page or less)
 - A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
 - B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.
- III. Evaluate Remedy Performance, Effectiveness, and Protectiveness

Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.
- IV. IC/EC Plan Compliance Report (if applicable)
 - A. IC/EC Requirements and Compliance
 - 1. Describe each control, its objective, and how performance of the control is evaluated.
 - 2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
 - 3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
 - 4. Conclusions and recommendations for changes.
 - B. IC/EC Certification
 - 1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).
- V. Monitoring Plan Compliance Report (if applicable)
 - A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
 - B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
 - C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
 - D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
 - E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.
- VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
 - A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
 - B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
 - C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated

the ability of each component of the remedy subject to O&M requirements to perform as designed/expected.

- D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.
- E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

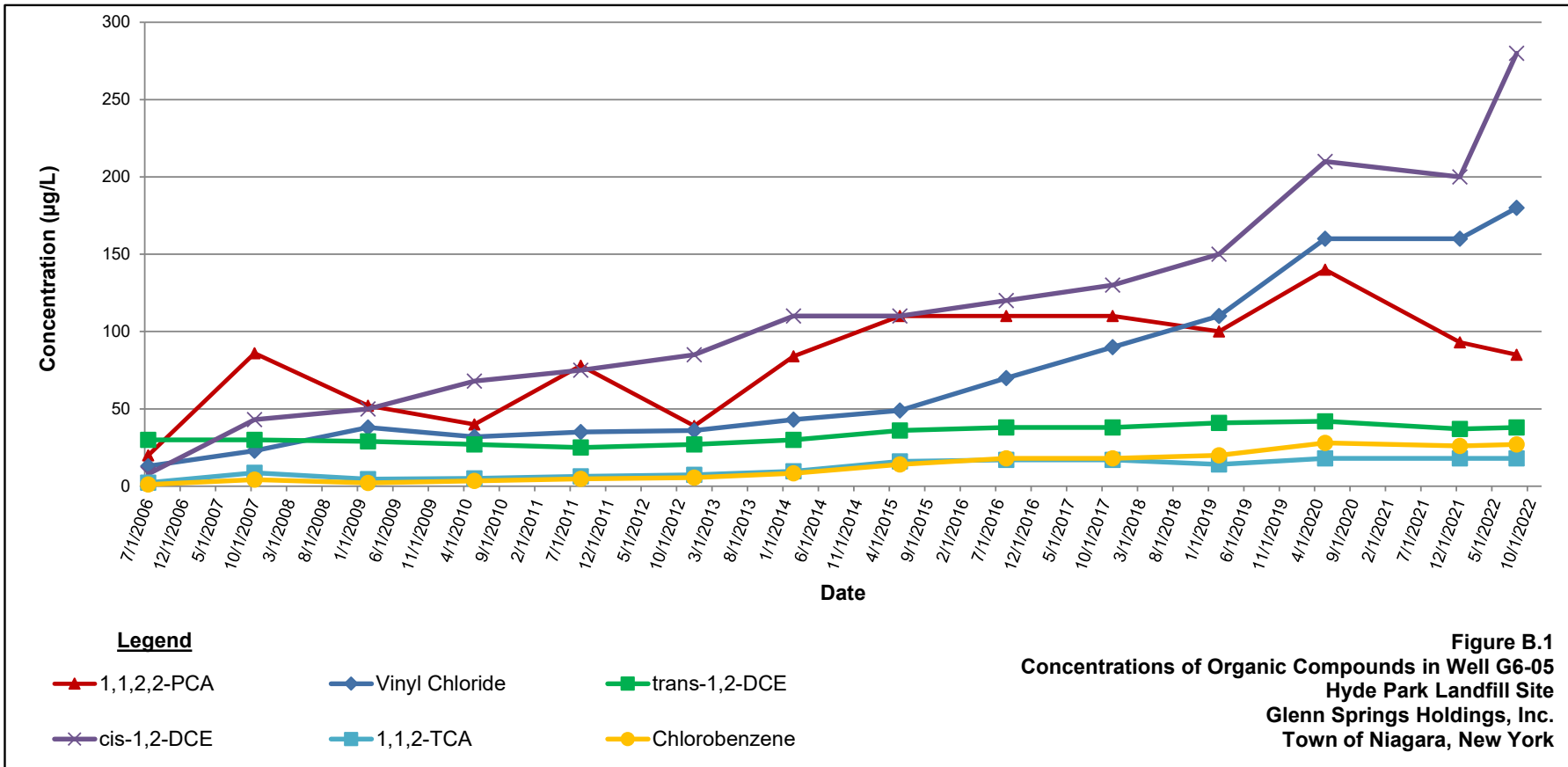
- A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
 - 1. whether all requirements of each plan were met during the reporting period
 - 2. any requirements not met
 - 3. proposed plans and a schedule for coming into full compliance.
- B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.
- C. Future PRR Submittals
 - 1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
 - 2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

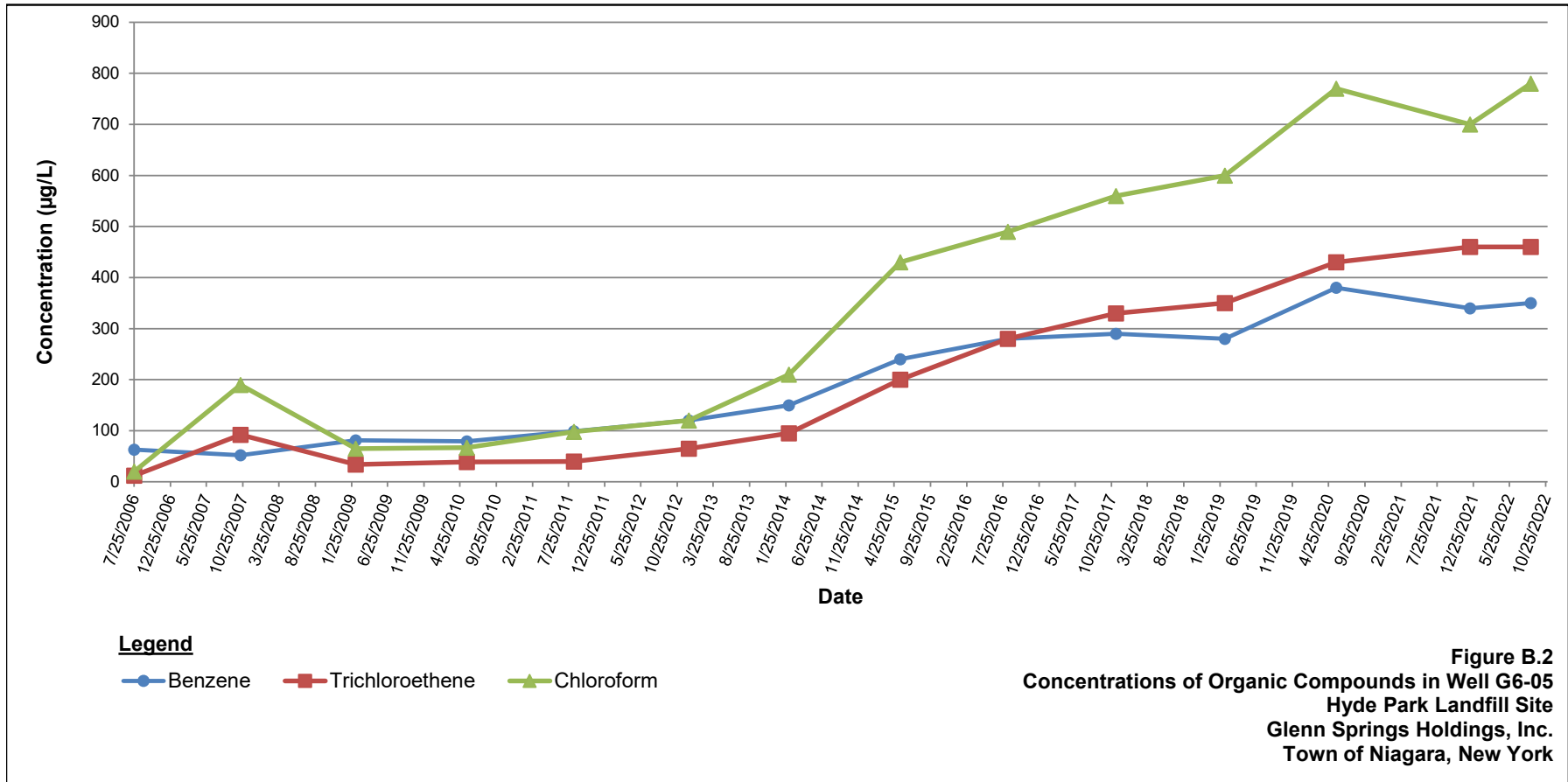
VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

Appendix B

Well G6-05 Organic Compound Concentrations





Appendix C

Monitoring Well Gauging and Sampling Logs



Glenn & Springs Holdings, Inc.

A subsidiary of Occidental Petroleum

HP Well Inspection

Date: 3/9/2022			Inspected By: David Tyran						Weather:													
Well Number:	Inspected By:	Inspection Date:	Access:	Installed Depth:	Sounded Depth: (TOR)	Location 1:	Type 2:	Exterior ID:	Interior ID:	Condition of Well Casting:	FM - Surface Water:	FM - Water in Curb Box:	Condition of Curb Box:	Concrete Base:	Gasket:	Bolts:	Lid:	J-plug or Slip Cap:	Locks (NA if inside plant)	NAPL Present:	NAPL Thickness:	
ABP-1-07	DJT	3/9/2022	Y		33.39	P	FM	Y	Y	G	N	N	G	G	Y	Y	G	Y	Y	N		
Notes: List Corrective Actions Required to Repair Deficiencies:																						
ABP-1-09	DJT	3/9/2022	Y		44.42	P	SU	Y	Y	G	N	N	G	G	Y	Y	G	Y	Y	N		
Notes: List Corrective Actions Required to Repair Deficiencies:																						
ABP-7-06	DJT	3/9/2022	Y		21.90	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N		
Notes: List Corrective Actions Required to Repair Deficiencies:																						
ABP-7-07	DJT	3/9/2022	Y		43.36	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N		
Notes: List Corrective Actions Required to Repair Deficiencies:																						
ABP-7-09	DJT	3/9/2022	Y		50.83	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N		
Notes: List Corrective Actions Required to Repair Deficiencies:																						
AFW-1L-11	DJT	3/9/2022	Y		77.78	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N		
Notes: List Corrective Actions Required to Repair Deficiencies:																						
AFW-1M-07	DJT	3/9/2022	Y		38.87	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N		
Notes: List Corrective Actions Required to Repair Deficiencies:																						
AFW-1M-09	DJT	3/9/2022	Y		47.51	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N		
Notes: List Corrective Actions Required to Repair Deficiencies:																						
AFW-1U-06	DJT	3/9/2022	Y		17.66	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N		
Notes: List Corrective Actions Required to Repair Deficiencies:																						
AFW-2L-11	DJT	3/9/2022	Y		104.58	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N		
Notes: List Corrective Actions Required to Repair Deficiencies:																						
AFW-2M-07	DJT	3/9/2022	Y		67.37	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N		
Notes: List Corrective Actions Required to Repair Deficiencies:																						
AFW-2M-09	DJT	3/9/2022	Y		76.23	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N		
Notes: List Corrective Actions Required to Repair Deficiencies:																						



Glenn & Springs Holdings, Inc.

A subsidiary of Occidental Petroleum

HP Well Inspection

Date: 3/9/2022 Inspected By: David Tyran Weather:																					
Well Number:	Inspected By:	Inspection Date:	Access:	Installed Depth:	Sounded Depth: (BGS)	Location 1:	Type 2:	Exterior ID:	Interior ID:	Condition of Well Casting:	FM - Surface Water:	FM - Water in Curb Box:	Condition of Curb Box:	Concrete Base:	Gasket:	Bolts:	Lid:	J-plug or Slip Cap:	Locks (NA if inside plant)	NAPL Present:	NAPL Thickness:
AFW-2U-04	DJT	3/9/2022	Y		22.67	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
AFW-2U-05	DJT	3/9/2022	Y		31.60	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
AFW-2U-06	DJT	3/9/2022	Y		48.48	P	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
AGW-1L-11	DJT	3/9/2022	Y		100.48	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
AGW-1M-09	DJT	3/9/2022	Y		74.36	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
AGW-1U-06	DJT	3/9/2022	Y		41.98	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
B2L-11	SG/DJT	3/25/2022	Yes		97.63	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
B2M-07	SG/DJT	3/25/2022	Yes		59.29	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
B2M-09	SG/DJT	3/25/2022	Yes			P	SU	Yes	Yes	Good	NA	N	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: Well obstructed @ 59.82' List Corrective Actions Required to Repair Deficiencies:																					
B2U-06	SG/DJT	3/25/2022	Yes		40.16	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
C3-06	DJT	3/9/2022	Y		37.63	P	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
C3-07	DJT	3/9/2022	Y		60.49	P	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					



Glenn & Springs Holdings, Inc.

A subsidiary of Occidental Petroleum

HP Well Inspection

Well Inspection Report																					
Well Number:		Date: 3/9/2022				Inspected By: David Tyran				Weather: Clear, 60-70°F, Light Wind											
Well Number:	Inspected By:	Inspection Date:	Access:	Installed Depth:	Sounded Depth: (BGS)	Location 1:	Type 2:	Exterior ID:	Interior ID:	Condition of Well Casting:	FM - Surface Water:	FM - Water in Curb Box:	Condition of Curb Box:	Concrete Base:	Gasket:	Bolts:	Lid:	J-plug or Slip Cap:	Locks (NA if inside plant)	NAPL Present:	NAPL Thickness:
C3-09	DJT	3/9/2022	Y		69.45	P		Y	Y	G	NA	NA	G	G	NA	NA	G	N	Y	N	
Notes:							List Corrective Actions Required to Repair Deficiencies:														
CMW-11 OB	DJT	5/6/2022	Y		4.08	P	FM	Y	Y	G	N	N	G	G	Y	Y	G	N	N	N	
Notes:							List Corrective Actions Required to Repair Deficiencies:														
CMW-11 SH	DJT	5/6/2022	Y		16.46	P	FM	Y	Y	G	N	N	G	G	Y	Y	G	Y	Y	N	
Notes:							List Corrective Actions Required to Repair Deficiencies:														
CMW-12 OB	DJT	5/6/2022	Y		22.78	P	FM	Y	Y	G	N	N	G	G	Y	Y	G	N	N	N	
Notes:							List Corrective Actions Required to Repair Deficiencies:														
CMW-12 SH	DJT	5/6/2022	Y		49.21	P	SU	Y		G	NA	NA	NA	G	NA	NA	G	Y	Y	Y	2.40
Notes:							List Corrective Actions Required to Repair Deficiencies:														
CMW-1 OB	DJT	5/6/2022	Y		14.23	P	FM	Y	Y	G	N	N	G	G	Y	N	G	Y	Y	N	
Notes:							List Corrective Actions Required to Repair Deficiencies:														
CMW-1 SH	DJT	5/6/2022	Y		22.86	P	FM	Y	Y	G	N	N	G	G	Y	N	G	Y	Y	N	
Notes:							List Corrective Actions Required to Repair Deficiencies:														
CMW-2 OB	DJT	3/9/2022	Y		19.27	P	FM	Y	N	G	N	N	G	G	NA	NA	G	NA	NA	N	
Notes:							List Corrective Actions Required to Repair Deficiencies:														
CMW-2 SH	DJT	3/9/2022	Y		41.38	P	FM	Y	N	G	N	N	G	G	NA	NA	G	Y	Y	N	
Notes:							List Corrective Actions Required to Repair Deficiencies:														
CMW-3 OB	DJT	5/6/2022	Y		16.44	P	FM	Y	Y	G	N	N	G	G	Y	NA	G	NA	N	N	
Notes:							List Corrective Actions Required to Repair Deficiencies:														
CMW-3 SH	DJT	5/6/2022	Y		37.09	P	FM	Y	Y	G	N	Y	G	G	Y	NA	G	Y	Y	N	
Notes:							List Corrective Actions Required to Repair Deficiencies:														
CMW-4 OB	DJT	5/6/2022	Y		7.27	P	FM	Y	Y	G	N	Y	G	P	Y	NA	G	NA	N	N	
Notes: Several large cracks in the concrete base.							List Corrective Actions Required to Repair Deficiencies: Replace concrete base.														



Glenn & Springs Holdings, Inc.

A subsidiary of Occidental Petroleum

HP Well Inspection

Date: 3/9/2022

Inspected By: David Tyran

Weather:

Well Number:	Inspected By:	Inspection Date:	Access:	Installed Depth:	Sounded Depth: (BGS)	Location 1:	Type 2:	Exterior ID:	Interior ID:	Condition of Well Casting:	FM - Surface Water:	FM - Water in Curb Box:	Condition of Curb Box:	Concrete Base:	Gasket:	Bolts:	Lid:	J-plug or Slip Cap:	Locks (NA if inside plant)	NAPL Present:	NAPL Thickness:
E6-05	DJT	3/23/2022	Y		29.66	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: See E6-04																					
E6-06	DJT	3/23/2022	Y		46.67	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: See E6-04																					
E6-07	DJT	3/23/2022	Y		68.63	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: See E6-04																					
E6-09	DJT	3/23/2022	Y		77.52	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: See E6-04																					
E6-11	DJT	3/23/2022	Y		104.48	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: See E6-04																					
F2L-11	SG/DJT	3/25/2022	Yes		125.63	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes:																					
F2M-06	SG/DJT	3/25/2022	Yes		66.04	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes:																					
F2M-07	SG/DJT	3/25/2022	Yes		89.10	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes:																					
F2M-09	SG/DJT	3/25/2022	Yes		96.69	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes:																					
F2U-02	SG/DJT	3/25/2022	Yes		28.28	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes:																					
F2U-04	SG/DJT	3/25/2022	Yes		44.26	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes:																					
F2U-05	SG/DJT	3/25/2022	Yes		52.64	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes:																					



Glenn & Springs Holdings, Inc.

A subsidiary of Occidental Petroleum

HP Well Inspection

Date: 3/9/2022

Inspected By: David Tyran

Weather:

Well Number:	Inspected By:	Inspection Date:	Access:	Installed Depth:	Sounded Depth: (BGS)	Location 1:	Type 2:	Exterior ID:	Interior ID:	Condition of Well Casting:	FM - Surface Water:	FM - Water in Curb Box:	Condition of Curb Box:	Concrete Base:	Gasket:	Bolts:	Lid:	J-plug or Slip Cap:	Locks (NA if inside plant)	NAPL Present:	NAPL Thickness:
F4L-11	SG/DJT	3/25/2022	Yes		123.98	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
F4M-06	SG/DJT	3/25/2022	Yes		65.67	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
F4M-07	SG/DJT	3/25/2022	Yes		88.57	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
F4M-09	SG/DJT	3/25/2022	Yes		95.91	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
F4U-02	SG/DJT	3/25/2022	Yes		28.16	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
F4U-04	SG/DJT	3/25/2022	Yes		44.02	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
F6-04	DJT	3/23/2022	Y		37.81	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
F6-05	DJT	3/23/2022	Y		45.26	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
F6-06	DJT	3/23/2022	Y		61.66	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
F6-07	DJT	3/23/2022	Y		81.02	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
F6-09	DJT	3/23/2022	Y		89.86	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
F6-11	DJT	3/23/2022	Y		125.78	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					



Glenn & Springs Holdings, Inc.

A subsidiary of Occidental Petroleum

HP Well Inspection

Date: 3/9/2022

Inspected By: David Tyran

Weather:

Well Number:	Inspected By:	Inspection Date:	Access:	Installed Depth:	Sounded Depth: (BGS)	Location 1:	Type 2:	Exterior ID:	Interior ID:	Condition of Well Casting:	FM - Surface Water:	FM - Water in Curb Box:	Condition of Curb Box:	Concrete Base:	Gasket:	Bolts:	Lid:	J-plug or Slip Cap:	Locks (NA if inside plant)	NAPL Present:	NAPL Thickness:
G1-02	DJT	3/31/2022	Y		53.45	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	Y	0.84
Notes: List Corrective Actions Required to Repair Deficiencies:																					
G1L-11	DJT	3/31/2022	Y		146.78	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
G1M-06	DJT	3/31/2022	Y		90.54	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
G1M-07	DJT	3/31/2022	Y		110.07	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
G1M-09	DJT	3/31/2022	Y		118.98		SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
G1U-01	DJT	3/31/2022	Y		31.14	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
G1U-04	DJT	3/31/2022	Y		65.47	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
G6-01	SG/DJT	3/25/2022	Yes		22.34	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
G6-02	SG/DJT	3/25/2022	Yes		46.74	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
G6-04	SG/DJT	3/25/2022	Yes		59.04	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
G6-05	SG/DJT	3/25/2022	Yes		67.06	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
G6-06	SG/DJT	3/25/2022	Yes		90.06	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					



Glenn & Springs Holdings, Inc.

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HP Well Inspection

Date: 3/9/2022

Inspected By: David Tyran

Weather:

Well Number:	Inspected By:	Inspection Date:	Access:	Installed Depth:	Sounded Depth: (BGS)	Location 1:	Type 2:	Exterior ID:	Interior ID:	Condition of Well Casting:	FM - Surface Water:	FM - Water in Curb Box:	Condition of Curb Box:	Concrete Base:	Gasket:	Bolts:	Lid:	J-plug or Slip Cap:	Locks (NA if inside plant)	NAPL Present:	NAPL Thickness:
G6-07	SG/DJT	3/25/2022	Yes		105.98	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
G6-09	SG/DJT	3/25/2022	Yes		113.99	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
G6-11	SG/DJT	3/25/2022	Yes		143.18	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
H2L-11	SG/DJT	3/25/2022	Yes		144.46	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
H2M-05	SG/DJT	3/25/2022	Yes		73.10	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
H2M-06	SG/DJT	3/25/2022	Yes		91.08	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
H2M-09	SG/DJT	3/25/2022	Yes		117.07	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
H2U-01	SG/DJT	3/25/2022	Yes		27.59	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
H5-01	SG/DJT	3/25/2022	Yes		25.27	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
H5-02	SG/DJT	3/25/2022	Yes		47.56	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
H5-04	SG/DJT	3/25/2022	Yes		64.53	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
H5-05	SG/DJT	3/25/2022	Yes		72.48	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					



HP Well Inspection

Date: 3/9/2022																					Inspected By: David Tyran		Weather:									
Well Number:	Inspected By:	Inspection Date:	Access:	Installed Depth:	Sounded Depth: (BGS)	Location 1:	Type 2:	Exterior ID:	Interior ID:	Condition of Well Casting:	FM - Surface Water:	FM - Water in Curb Box:	Condition of Curb Box:	Concrete Base:	Gasket:	Bolts:	Lid:	J-plug or Slip Cap:	Locks (NA if inside plant)	NAPL Present:	NAPL Thickness:											
H5-06	SG/DJT	3/25/2022	Yes		89.42	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N												
Notes:																					List Corrective Actions Required to Repair Deficiencies:											
H5-07	SG/DJT	3/25/2022	Yes		107.68	P	SU	Yes	Yes	NA	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N												
Notes:																					List Corrective Actions Required to Repair Deficiencies:											
H5-09	SG/DJT	3/25/2022	Yes		116.20	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N												
Notes:																					List Corrective Actions Required to Repair Deficiencies:											
H5-11	SG/DJT	3/25/2022	Yes		155.58	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N												
Notes:																					List Corrective Actions Required to Repair Deficiencies:											
I1-01	DJT	3/9/2022	Y		32.31	P	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	Y	N												
Notes:																					List Corrective Actions Required to Repair Deficiencies:											
I1-02	DJT	3/9/2022	Y		53.98	P	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	Y	N												
Notes:																					List Corrective Actions Required to Repair Deficiencies:											
I1-04	DJT	3/9/2022	Y		69.18	P	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	Y	N												
Notes:																					List Corrective Actions Required to Repair Deficiencies:											
I1-05	DJT	3/9/2022	Y		78.02	P	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	Y	N												
Notes:																					List Corrective Actions Required to Repair Deficiencies:											
I1-06	DJT	3/9/2022	Y		93.88	P	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	Y	N												
Notes:																					List Corrective Actions Required to Repair Deficiencies:											
I1-07	DJT	3/9/2022	Y		114.38	P	SU	Y	Y	G	NA	NA	G	G	NA	NA	NA	N	Y	N												
Notes:																					List Corrective Actions Required to Repair Deficiencies:											
I1-09	DJT	3/9/2022	Y		122.73	P	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	Y	N												
Notes:																					List Corrective Actions Required to Repair Deficiencies:											
I1-11	DJT	3/9/2022	Y		157.41	P	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	Y	N												
Notes:																					List Corrective Actions Required to Repair Deficiencies:											



Glenn & Springs Holdings, Inc.

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HP Well Inspection

Date: 3/9/2022

Inspected By: David Tyran

Weather:

Well Number:	Inspected By:	Inspection Date:	Access:	Installed Depth:	Sounded Depth: (BGS)	Location 1:	Type 2:	Exterior ID:	Interior ID:	Condition of Well Casting:	FM - Surface Water:	FM - Water in Curb Box:	Condition of Curb Box:	Concrete Base:	Gasket:	Bolts:	Lid:	J-plug or Slip Cap:	Locks (NA if inside plant)	NAPL Present:	NAPL Thickness:
J2M-06	DJT	3/9/2022	Y		66.11	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J2M-09	DJT	3/9/2022	Y		95.00	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J2U-02	DJT	3/9/2022	Y		25.74	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J2U-04	DJT	3/9/2022	Y		38.61	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J2U-05	DJT	3/9/2022	Y		48.43	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J5L-11	SG/DJT	3/25/2022	Yes		124.83	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J5M-06	SG/DJT	3/25/2022	Yes		66.83	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J5M-07	SG/DJT	3/25/2022	Yes		86.69	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J5M-09	SG/DJT	3/25/2022	Yes		95.16	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J5U-02	SG/DJT	3/25/2022	Yes		25.72	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J5U-04	SG/DJT	3/25/2022	Yes		41.11	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J5U-05	SG/DJT	3/25/2022	Yes		49.41	S	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					



Glenn & Springs Holdings, Inc.

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HP Well Inspection

Date: 3/9/2022

Inspected By: David Tyran

Weather:

Well Number:	Inspected By:	Inspection Date:	Access:	Installed Depth:	Sounded Depth: (BGS)	Location 1:	Type 2:	Exterior ID:	Interior ID:	Condition of Well Casting:	FM - Surface Water:	FM - Water in Curb Box:	Condition of Curb Box:	Concrete Base:	Gasket:	Bolts:	Lid:	J-plug or Slip Cap:	Locks (NA if inside plant)	NAPL Present:	NAPL Thickness:
J6-02	DJT	3/9/2022	Y		21.36	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J6-04	DJT	3/9/2022	Y		36.73	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J6-05	DJT	3/9/2022	Y		44.12	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J6-06	DJT	3/9/2022	Y		60.67	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J6-07	DJT	3/9/2022	Y		81.39	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J6-09	DJT	3/9/2022	Y		91.72	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
J6-11	DJT	3/9/2022	Y		119.36	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
PMW-1L-11	DJT	5/6/2022	Y		111.50	S	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	N	Y	1.91
Notes: List Corrective Actions Required to Repair Deficiencies:																					
PMW-1M-07	DJT	5/6/2022	Y		73.29	S	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	N	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
PMW-1M-09	DJT	5/6/2022	Y		83.36	S	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	N	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
PMW-1U-05	DJT	5/6/2022	Y		38.90	S	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	N	N	Y	0.14
Notes: List Corrective Actions Required to Repair Deficiencies:																					
PMW-1U-06	DJT	5/6/2022	Y		55.89	S	SU	Y	Y	G	NA	NA	G	G	NA	NA	G	NA	N	Y	1.27
Notes: List Corrective Actions Required to Repair Deficiencies:																					



Glenn & Springs Holdings, Inc.

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HP Well Inspection

Date: 3/9/2022

Inspected By: David Tyran

Weather:

Well Number:	Inspected By:	Inspection Date:	Access:	Installed Depth:	Sounded Depth: (BGS)	Location 1:	Type 2:	Exterior ID:	Interior ID:	Condition of Well Casting:	FM - Surface Water:	FM - Water in Curb Box:	Condition of Curb Box:	Concrete Base:	Gasket:	Bolts:	Lid:	J-plug or Slip Cap:	Locks (NA if inside plant)	NAPL Present:	NAPL Thickness:
OMW-1	SG/DJT	3/25/2022	Yes		9.25	S	SU	Yes	Yes	Good	NA	NA	NA	Good	NA	NA	Good	Yes	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OMW-10R	DJT	5/6/2022	Y		16.50	P	FM	Y	Y	G	N	N	G	G	N	N	G	Y	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OMW-11R	DJT	3/31/2022	Y		13.53	S	FM	Y	Y	G	N	Y	G	G	N	N	G	Y	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OMW-12R	DJT	5/6/2022	Y		6.73	P	FM	Y	Y	G	N	N	G	G	N	Y	G	Y	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OMW-13R	DJT	3/31/2022	Y		15.57	S	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	Y	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OMW-14R	DJT	3/31/2022	Y		13.37	S	FM	Y	Y	G	N	Y	G	G	Y	N	G	Y	N	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OMW-15	DJT	3/31/2022	Y		8.44	S	SU	Y	Y	G	NA	NA	NA	P	NA	NA	G	Y	Y	N	
Notes: Concrete pad is broken into several large chunks List Corrective Actions Required to Repair Deficiencies: Replace concrete pad																					
OMW-16R	DJT	3/31/2022	Y		8.90	S	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	Y	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OMW-2	SG/DJT	3/25/2022	Yes		7.02	S	SU	Yes	Yes	Good	NA	NA	NA	Good	NA	NA	Good	Yes	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OMW-4R	DJT	3/9/2022	Y		16.50	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	Y	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OMW-5R	DJT	5/6/2022	Y		14.35	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	Y	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OMW-6	DJT	5/6/2022	Y		8.47	P	FM	Y	Y	G	N	N	G	G	Y	N	G	Y	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					



Glenn & Springs Holdings, Inc.

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HP Well Inspection

Date: 3/9/2022

Inspected By: David Tyran

Weather:

Weather:

Well Number:	Inspected By:	Inspection Date:	Access:	Installed Depth:	Sounded Depth: (BGS)	Location 1:	Type 2:	Exterior ID:	Interior ID:	Condition of Well Casting:	FM - Surface Water:	FM - Water in Curb Box:	Condition of Curb Box:	Concrete Base:	Gasket:	Bolts:	Lid:	J-plug or Slip Cap:	Locks (NA if inside plant)	NAPL Present:	NAPL Thickness:
OMW-7	DJT	3/9/2022	Y		14.81	P	SU	Y	Y	G	NA	NA	NA	NA	NA	NA	G	Y	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OMW-8R	DJT	3/9/2022	Y		10.99	P	SU	Y	Y	G	NA	NA	NA	NA	NA	NA	G	Y	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OMW-9	DJT	5/6/2022	Y		14.56	P	FM	Y	Y	G	N	N	G	G	Y	Y	G	Y	N	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
SC-2	DJT	4/12/2022	Y		34.80	S	SU	Y	NA	G	NA	NA	NA	G	NA	NA	NA	NA	N	Y	0.90
Notes: List Corrective Actions Required to Repair Deficiencies:																					
SC-3	DJT	4/12/2022	Y		49.17	S	SU	Y	NA	G	NA	NA	NA	G	NA	NA	NA	NA	N	Y	2.53
Notes: List Corrective Actions Required to Repair Deficiencies:																					
SC-4	DJT	4/12/2022	Y		49.12	S	SU	Y	NA	G	NA	NA	NA	G	NA	NA	NA	NA	N	Y	2.35
Notes: List Corrective Actions Required to Repair Deficiencies:																					
SC-5	DJT	4/12/2022	Y		32.41	S	SU	Y	NA	G	NA	NA	NA	G	NA	NA	NA	NA	N	Y	0.11
Notes: List Corrective Actions Required to Repair Deficiencies:																					
SC-6	DJT	4/12/2022	Y		39.24	S	SU	Y	NA	G	NA	NA	NA	G	NA	NA	NA	NA	N	Y	0.15
Notes: List Corrective Actions Required to Repair Deficiencies:																					
Wet Well C	DJT	3/31/2022	Y		18.86	P	FM	Y	N	G	N	NA	Wet well	Wet well	NA	NA	G	NA	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
Wet Well D	DJT	3/31/2022	Y		22.31	S	FM	Y	N	G	Wet well	Wet well	Wet well	Wet well	NA	NA	G	NA	N	Y	0.13
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OEW-1	DJT	4/12/2022	Y		29.81	S	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	N	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OEW-2	DJT	4/12/2022	Y		29.56		SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	N	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					



Glenn & Springs Holdings, Inc.

A subsidiary of Occidental Petroleum

HP Well Inspection

Date: 3/9/2022 Inspected By: David Tyran Weather:

Well Number:	Inspected By:	Inspection Date:	Access:	Installed Depth:	Sounded Depth: (BGS)	Location 1:	Type 2:	Exterior ID:	Interior ID:	Condition of Well Casting:	FM - Surface Water:	FM - Water in Curb Box:	Condition of Curb Box:	Concrete Base:	Gasket:	Bolts:	Lid:	J-plug or Slip Cap:	Locks (NA if inside plant)	NAPL Present:	NAPL Thickness:
OEW-3	DJT	4/12/2022	Y		37.16	S	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	N	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OEW-4	DJT	4/12/2022	Y		43.34		SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	N	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OEW-5	DJT	4/12/2022	Y		34.56	S	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	N	Y	0.06
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OEW-6	DJT	4/12/2022	Y		21.76	S	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	N	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OEW-7	DJT	4/12/2022	Y		25.35	S	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	NA	N	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
AGW-1M-07	DJT	3/9/2022	Y		64.52	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
AGW-1U-05	DJT	3/9/2022	Y		25.90	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	N	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
F4U-05	SG/DJT	3/25/2022	Yes		52.43	P	SU	Yes	Yes	Good	NA	N	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
H2U-02	SG/DJT	3/25/2022	Yes		48.05	P	SU	Yes	Yes	Good	NA	NA	NA	NA	NA	NA	Good	NA	Yes	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					
OMW-3	DJT	3/9/2022	Y		13.63	P	SU	Y	Y	G	NA	NA	NA	G	NA	NA	G	Y	Y	N	
Notes: List Corrective Actions Required to Repair Deficiencies:																					

COMMENTS:

Well No.: G6-01

Sampling Event: 202203-WG-Q-

SSOW Code: 273-402-

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park Quarterly w/l/s

Ref. No.: 11225877

Personnel: Shawn Gardner

GHD

Date: 3/21/2022 9:09:15 AM

Monitoring Well Data

Well Diameter:

Screen Material: Unknown

Screen Start Depth: 588.14000

Screen End Depth: 586.14000

Screen Length: 2

Constructed Well Depth: 22.559999

Ref Point Elev: 609.24

Static Water Depth:

Static Water Elev: 3.23

ft bref

fit

ft bref

ft bref

Measured Well Depth: 22.559999

Water Column Length:

Measurement Type:

Sampling Method: T95

[illegible]

Field Parameters:	Comments: 5 min@ 1000 ml
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Iron:

Sulfide:

Total Volume	1.09
Purged ():	

Sample ID			Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Container #
G6-01-0322			N	WG	G	3/21 9:40		Organic Acid	1

	Pumping Rate (mL/min)	Depth to Water (')	Drawdown from Initial Water Level (')	Temperature	Conductivity (')	Turbidity	DO (')	pH	ORP (')	Volume Purged, Vp (')	No. of Well Screen Volumes Purged
Time											
3/21 9:40				10.4	1.08	21.7	2.16	6.73	133.5		

Well No.: D1U-05

Sampling Event: 202203-WG-Q-

SSOW Code: 273-402-

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park Quarterly w/lis

Ref. No.: 11225877

Personnel: Shawn Gardner

GHD

Date: 3/21/2022 11:38:29

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 51.0

Measured Well Depth: 51.0

Screen Material: Unknown

Water Column Length: 40.51

Screen Start Depth: 559.56000

Ref Point Elev: 593.51

ft

Screen End Depth: 557.56000

Static Water Depth: 10.49

Screen Length: 2

Static Water Elev: 583.02

[illegible]

Field Parameters:	Comments: 5 min@ 1000 mil
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iron.

Sulfide:

Sample ID

Type

Matrix

omp/Grab

DateTime

Filtered

Analysis

Container #

D1U-05-0322	N	WG	G	3/21 12:15		Organic Acid	1

Time	Pumping Rate (mL/min)	Depth to Water (')	Drawdown from Initial Water Level (')	Temperature	Conductivity (')	Turbidity	DO (')	pH	ORP (')	Volume Purged, Vp (')	No. of Well Screen Volumes Purged
3/21 12:13			-10.49	13.2	2.03	17.2	2.73	6.99	-77.2		

Monitoring Well Record for Low-Flow Purging

Date: 3/21/2022 10:26:22

Well Diameter:

Well Diameter:

Screen Start Depth: 504.16000

Screen End Depth: 502.16000

Screen Length: 2

Ref Point Elev: 598.71

Static Water Depth: 65.22

Static Water Elev: 533.49

Water Column Length: 36.78

Measurement Type:

Sampling Method: T95

Field Parameters:	Comments: 5 min@ 1000 ml
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Sulfide:

Total Volume Purged (l):	1.36
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Analysis

Container #

F2M-09-0322	N		WG	G	3/21 11:20	Organic Acid					1
	Pumping Rate (mL/min)	Depth to Water (')	Drawdown from Initial Water Level (')	Temperature	Conductivity (')	Turbidity	DO (')	pH	ORP (')	Volume Purged, Vp (')	No. of Well Screen Volumes Purged
3/21 11:16			-65.22	13.1	25.88	1.29	4.11	6.38	-226.7		

Monitoring Well Record for Low-Flow Purging

Date: 3/21/2022 10:23:47

Sampling Method: T95

Field Parameters:	Comments: 5 min@ 677 mil
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Sulfide:

Sample ID	Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Container #
F2U-02-0322	N	WG	G	3/21 10:55		Organic Acid	1

Time	Pumping Rate (mL/min)	Depth to Water (')	Drawdown from Initial Water Level (')	Temperature	Conductivity (')	Turbidity	DO (')	pH	ORP (')	Volume Purged, Vp (')	No. of Well Screen Volumes Purged
3/21 10:53			-23.93	12.8	2.62	47.6	3.00	6.90	-115.2		

Monitoring Well Record for Low-Flow Purging

Date: 3/21/2022 10:25:13

Sampling Method: T95

Sulfide:

Sample ID			Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Container #
F2U-04-0322			N	WG	G	3/21 11:05		Organic Acid	1

Time	Pumping Rate (mL/min)	Depth to Water (')	Drawdown from Initial Water Level (')	Temperature	Conductivity (μS/cm)	Turbidity	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged
3/21 11:03			-20.81	12.9	2.87	2.23	4.46	6.90	-124.3		

Monitoring Well Record for Low-Flow Purging

GHD

Date: 3/21/2022 11:41:33

atic Water Elev: 534.31

Field Parameters:	Comments: 5 min@ 1000 mil
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Sulfide:

Sample ID	Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Container #
D1M-09-0322	N	WG	G	3/21 12:35		Organic Acid	1

Time	Pumping Rate (mL/min)	Depth to Water (')	Drawdown from Initial Water Level (')	Temperature (°C)	Conductivity (µS/cm)	Turbidity (NTU)	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (')	No. of Well Screen Volumes Purged
3/21 12:33			-59.71	13.3	7.34	220	3.66	6.63	-231.4		

Well No.: D1U-04

Sampling Event: 202203-WG-Q-

SSOW Code: 273-402-

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park Quarterly w/ls

Ref. No.: 11225877

Personnel: Shawn Gardner

Date: 3/21/2022 11:38:36

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 51.0

Measured Well Depth: 51.0

Screen Material: Unknown

Screen Start Depth: 569.99000

Ref Point Elev: 593.77 ft

Screen End Depth: 567.99000

Static Water Depth: 9.58

Screen Length: 21

Static Water Elev: 584.19

[illegible]

Field Parameters:	Comments: 5 min@ 1000 mil
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iron:

Sulfide:

Sample ID			Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Container #
D1U-04-0322			N	WG	G	3/21 12:00		Organic Acid	1

Time	Pumping Rate (mL/min)	Depth to Water (')	Drawdown from Initial Water Level (')	Temperature	Conductivity (')	Turbidity	DO (')	pH	ORP (')	Volume Purged, Vp (')	No. of Well Screen Volumes Purged
3/21 12:00			-9.58	13.2	1.37	8.46	3.49	7.10	-40.7		

Well No.: AGW-1U-06

Sampling Event: 202203-WG-Q-

SSOW Code: 273-402-

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park Quarterly w/l/s

Ref. No.: 11225877

Personnel: Shawn Gardner

Date: 3/21/2022 12:56:56

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 52.0

Measured Well Depth: 52.0

Screen Material: Unknown

ft

Screen Start Depth: 551.81000 ft

Ref Point Elev: 591.66

Screen End Depth: 549.81000 ft

Static Water Depth: 36.81

Screen Length: 2 ft

Static Water Elev: 554.85

Measurement Type:

Sampling Method: T95

[illegible]

Field Parameters: Comments: 11 min@ 103 mil

iron:

Sulfide:

Sample ID			Type		Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Container #
AGW-1U-06-0322				N	WG	G	3/21 13:30		Organic Acid	1

	Pumping Rate (mL/min)	Depth to Water (')	Drawdown from Initial Water Level (')	Temperature	Conductivity (')	Turbidity	DO (')	pH	ORP (')	Volume Purged, Vp (')	No. of Well Screen Volumes Purged
3/21 13:29			-36.81	12.7	3.72	7.43	8.95	7.04	-133.0		

Well No.: AGW-1M-09

Sampling Event: 202203-WG-Q-

SSOW Code: 273-402-

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park Quarterly w/l/s

Ref. No.: 11225877

Personnel: Shawn Gardner

Date: 3/21/2022 1:00:36 PM

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 94.0

Measured Well Depth: 94.0

Screen Material: Unknown

Screen Start Depth: 520.51000Ref Point Elev: 592.75 ft

Screen End Depth: 518.51000

Static Water Depth: 46.19

Screen Length: 21

Static Water Elev: 546.56

Measurement Type:

Sampling Method: T95[illegible]

Field Parameters:	Comments: 5min@ 1000 mil
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Iron:

Sulfide:

Sample ID			Type		Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Container #
AGW-1M-09-0322				N	WG	G	3/21 14:00		Organic Acid	1

Time	Pumping Rate (mL/min)	Depth to Water (')	Drawdown from Initial Water Level (')	Temperature	Conductivity (')	Turbidity	DO (')	pH	ORP (')	Volume Purged, Vp (')	No. of Well Screen Volumes Purged
3/21 13:56			-46.19	13.8	4.70	2.62	2.29	6.81	-165.2		

Well No.: AGW-1M-07

Sampling Event: 202203-WG-Q-

SSOW Code: 273-402-

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park Quarterly w/ls

Ref. No.: 11225877

Personnel: Shawn Gardner

Date: 3/21/2022 12:59:23

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 94.0

Measured Well Depth: 94.0

Screen Material: Unknown

Screen Start Depth: 530.51000

Ref Point Elev: 592.91
ft

Screen End Depth: 528.51000

Static Water Depth: 46.73

Screen Length: 2 f

Static Water Elev: 546.18

Measurement Type:

Sampling Method: T95

[illegible]

Field Parameters: Comments: 5 min@ 1000mill

iron:

Sulfide:

Sample ID	Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Container #
AGW-1M-07-0322	N	WG	G	3/21 13:45		Organic Acid	1
C7-0322	FD	WG	G	3/21 13:45		Organic Acid	1

	Pumping Rate (mL/min)	Depth to Water (')	Drawdown from Initial Water Level (')	Temperature (°C)	Conductivity (µS/cm)	Turbidity (NTU)	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (')	No. of Well Screen Volumes Purged
3/21 13:44			-46.73	13.9	5.71	7.49	1.01	6.82	-48.1		

Well No.: G6-04

Sampling Event: 202203-WG-Q-

SSOW Code: 273-402-

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park Quarterly w/l/s

Ref. No.: 11225877

Personnel: Shawn Gardner

Date: 3/21/2022 9:11:22 AM

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 59.09 ft bref

Measured Well Depth: 59.09 ft

Screen Material: Unknown

Screen Start Depth: 551.52000 ft

Ref Point Elev: 609.15 ft

Screen End Depth: 549.52000 ft

Static Water Depth: 15.29 ft bref

Measurement Type:

Screen Length: 2 ft

593.86

Sampling Method: T95

[illegible]

Field Parameters:	Comments: 5 min@ 1000 mil
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Total Volume
Purged (l):

1.04

Iron:

Sulfide:

Sample ID	Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Container #
G6-04-0322	N	WG	C	3/21 9:55		Organic Acid	1

Time	Pumping Rate (mL/min)	Depth to Water (')	Drawdown from Initial Water Level (')	Temperature (°C)	Conductivity (µS/cm)	Turbidity (NTU)	DO (mg/L)	pH	ORP (mV)	Volume Purged, Vp (L)	No. of Well Screen Volumes Purged
3/21 9:52			-15.29	11.2	1.39	10.0	2.27	6.67	-162.3		

Well No.: G1U-01

Sampling Event: 202203-WG-Q-

SSOW Code: 273-402-

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park Quarterly w/Is

Ref. No.: 11225877

Personnel: Shawn Gardner

GHD

Date: 3/24/2022 10:06:24

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 68.699997

Measured Well Depth: 68.699997

Screen Material: Unknown

Water Column Length: 60.91

Screen Start Depth: 588.11000

Ref Point Elev: 617.08

Screen End Depth: 586.11000

Static Water Depth: 7.79

Measurement Type:

Screen Length: 21

Static Water Elev: 609.29

[illegible]

Field Parameters: **Comments:** 5 min@1000 mil

Total Volume	1.54
Purged (l):	

Iron:

Sulfide:

Sample ID	Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis	Container #				
G1U-01-0322	N	WG	G	3/24 10:25		Organic Acid	1				
Time	Pumping Rate (mL/min)	Depth to Water (')	Drawdown from Initial Water Level (')	Temperature	Conductivity (')	Turbidity	DO (')	pH	ORP (')	Volume Purged, Vp (')	No. of Well Screen Volumes Purged
3/24 10:23			-7.79	8.2	0.79	95.7	3.58	6.98	89.2		

Well No.: H5-09

Sampling Event: 202203-WG-Q-

SOW Code: 273-402-

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park Quarterly w/Is

Ref. No.: 11225877

Personnel: Shawn Gardner

GHD

Date: 3/24/2022 10:38:22

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 168.0

Measured Well Depth: 168.0

Screen Material: Unknown

Screen Start Depth: 502.80000

Ref Point Elev: 616.93

14

Screen End Depth: 500.80000

Static Water Depth:

Measurement Type:

Screen Length: 2 ft

Static Water Elev: 546.76

Sampling Method: T95

[illegible]

Field Parameters:
Comments: 5 min @1000 mil

Total Volume	1.05
Purged ():	

Iron:

Sulfide:

Sample ID		Type	Matrix	Comp/Grab	Date/Time	Filtered	Analysis		Container #	
H5-09-0322		N	WG	G	3/24 11:05		Organic Acid		1	
Time	Pumping Rate (mL/min)	Depth to Water (')	Drawdown from Initial Water Level (')	Conductivity (')	Turbidity	DO (')	pH	ORP (')	Volume Purged, Vp (')	No. of Well Screen Volumes Purged
3/24 11:02			-70.17	11.4	22.59	9.22	0.84	6.69	-194.2	

[illegible]

Well No.: AGW-1M-07
Sampling Event: 202206-WG-Q-Bedrock

Ref. No.: 11225877-31-410

Monitoring Well Data

Well Diameter:	125	Constructed Well Depth:	94.0	Measured Well Depth:	<u>94.0</u>
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Screen Material:	Unknown	Screen Volume:	.13	Water Column Length:	49.59
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Screen Start Depth:	530.51000	ft	Ref Point Elev:	592.91	ft
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Screen End Depth:	528.51000	ft	Static Water Depth:	44.41	Measurement Type:	Screen
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Screen Length:	2	ft
Static Water Elev:	548.5	
Sampling Method:	Waterra pump	

[illegible]

Field Parameters:

Comments:

Total Volume
Purged (gal):

1000ml for 5 mins

of Screen
Volumes:[illegible]

Well No.: AGW-1M-09 Sampling Event: 202206-WG-Q-Bedrock

Project Name:	Hydco Park Quarterly GW sampling	Ref. No.:	11225877-31-410	Personnel:	David Tyrann	GHD	Date:	6/16/2022 9:54:21 AM
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Monitoring Well Data

Well Diameter:	<u>1.25</u>	Constructed Well Depth:	<u>94.0</u>	Measured Well Depth:	<u>94.0</u>
Screen Material:	<u>Unknown</u>	Screen Volume:		Water Column Length:	<u>49.74</u>
Screen Start Depth:	<u>520.51000</u>	Ref Point Elev:	<u>592.75</u>	Measurement Type:	<u>Screen</u>
Screen End Depth:	<u>518.51000</u>	Static Water Depth:	<u>44.26</u>	Sampling Method:	Waterra pump
Screen Length:	2	Static Water Elev:	<u>548.49</u>		

[illegible]

Field Parameters:	Comments:

Total Volume Purged (gal):	# of Screen Volumes:	Q
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1000ml for 5 mins

[illegible]

Ref. No.: 11225877-31-410

Monitoring Well Data

Constructed Well Depth: 52.0

Screen Volume: .83

591.66 ft

Measurement Type: Screen

Sampling Method: Waterra pump

[illegible]

Field Parameters:

Comments:

Total Volume 0

103 ml for 11 mins

Sample ID

Type

Matrix Comp/Grab

Filtered

Analysis

Container #

[illegible]

Well No.: B2L-11

Project Name: Hyde Park Quarterly GW sampling

Screen Length: 2

Static Water Elev: 500.16

Sampling Method: Waterra pump

[illegible]

Q	Total Volume	Purged (gal):
1	100	100
2	200	200
3	300	300
4	400	400
5	500	500
6	600	600
7	700	700
8	800	800
9	900	900
10	1000	1000

[illegible]

Well No.: C3-07

Project Name: Hyde Park Quarterly GW sampling

Monitoring Well Data

Well Diameter:

Screen Material: Unknown

Screen Start Depth: 527.18000

Screen End Depth: 525.18000

Screen Length: 2

Constructed Well Depth: 86.0

Screen Volume:

Ref Point Elev: 585.62

Static Water Depth: 39.41

Static Water Elev: 546.21

Measured Well Depth: 86.0

Water Column Length: 46.59

Measurement Type: Screen

Sampling Method: Water a pump

[illegible]

Field Parameters:

Comments:

1000ml for 5 min

Total Volume
Purged (gal):

of Screen Volumes:

[illegible]

SSOW Code: 273-402-D02-3100

Project Name: Hyde Park Quarterly GW sampling

Ref. No.: 11225877-31-410

Personnel: David Tyran

GHD

Date: 6/13/2022 1:33:14 PM

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 86.0

Measured Well Depth: 86.0

Screen Material: Unknown

Screen Volume:

11

Water Column Length: 45.54

Screen Start Depth: 518.14000

Ref Point Elev: 585

Screen End Depth: 516.14000

Static Water Depth: 40.46

Screen Length: 2

Static Water Elev: 544.54

Measurement Type: Screen

Sampling Method: Water a pump

[illegible]

Field Parameters:

Comments:

Total Volume Purged (gal):	Q

1000ml for 5 minutes

[illegible]

Well No.: D1M-09 Sampling Event:

Hydro Bark Quarterly GW sampling

Water Column Length: 20.35

Continuous Method: $W(a+b)$

Total Volume 0

of Screen

[illegible]

Monitoring Well Record for Low-Flow Purging

Date: 6/16/2022 10:38:27

Measured Well Depth: 51.0

Water Column Length: 38.6

Measurement Type: Screen

Sampling Method: Waterra pump

Total Volume
Purged (gal):
of Screen
Volumes:

Container #

[illegible]

Well No.: D1U-05 Sampling Event: 202206-WG-Q-Bedrock

Project Name: Hyde Park Quarterly GW sampling

Well Diameter:	<u>1.25</u>	Constructed Well Depth:	<u>51.0</u>	Measured Well Depth:	<u>51.0</u>
Screen Material:	<u>Unknown</u>	Screen Volume:		Water Column Length:	<u>37.4</u>
Screen Start Depth:	<u>559.56000</u>	Ref Point Elev:	<u>593.51</u>		
Screen End Depth:	<u>557.56000</u>	Static Water Depth:	<u>13.60</u>	Measurement Type:	<u>Screen</u>
Screen Length:	2	Static Water Elev:	<u>579.91</u>	Sampling Method:	<u>Water</u>

Field Parameters:	Comments:				Total Volume Purged (gal):	# of Screen Volumes:
1000ml for 5 mins						

1000ml for 5 mins

[illegible]

Well No : F2M-09 Sampling Event: 202206-WG-Q-Bedrock

Project Name:	Hyde Park Quarterly GW sampling	Ref. No.:	11225877-31-410
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Well Diameter:	1.25	Constructed Well Depth:	<u>102.0</u>	Measured Well Depth:	<u>102.0</u>
----------------	------	-------------------------	--------------	----------------------	--------------

Screen Material:	<u>Unknown</u>	Screen Volume:	Water Column Length:	<u>27.58</u>
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Screen End Depth:	502.16000	ft	Static Water Depth:	<u>74.42</u>	Measurement Type:	<u>Screen</u>
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Sampling Method: Waterra pump²

Field Parameters:	Comments:	Total Volume Purged (gal):
		0

Comments:

of Screen Volumes:

[illegible]

Well No.: F2U-02

Project Name: Hyde Park Quarterly GW sampling

Well Diameter:	<u>1.25</u>
Screen Material:	<u>Unknown</u>
Screen Start Depth:	<u>573.72000</u>
Screen End Depth:	<u>571.72000</u>
Screen Length:	2

Sampling Method: Waterra pump

Total Volume Purged (gal):	Q
# of Screen Volumes:	

677ml per minute for 5 minutes

[illegible]

Well No.: F2U-04 Sampling Event: 202206-WG-Q-Bedrock

Hydro Park Quarterly GW sampling

Monitoring Well Data

Well Diameter:	125	Constructed Well Depth:	61.0	Measured Well Depth:	61.0
----------------	-----	-------------------------	------	----------------------	------

Screen Material:	Unvacuum
Screen Volume:	Water Column Length: 39.45

Screen Start Depth:	557.64000	ft
Ref Point Elev:	599.76	ft

Static Water Depth: 21.55

Measurement Type: Screen

Static Water Elev:	578.21
Sampling Method:	Waterra pump

[illegible][illegible]

	Q
Total Volume	
Purged (gal):	

1000ml for 5 minutes

[illegible]

Well No.: G1U-01

Site Name: Hyde Park Quarterly GW sampling

Screen Length: 2

Static Water Elev: 605.78

Sampling Method: Wattera pump

Total Volume	0
Purged (gal):	

Sample ID		Date		Time		Location		Weather		Operator		Notes	
G1U-01-0622		N	WG	G	6/14 12:40		Organic Acid				3		
W7-10-0622		FD	WG	G	6/14 12:40		Organic Acid				3		

Well No.: G6-01
Sampling Event: 202206-WG-Q-Bedrock

Hydr Park Quarterly GW sampling	Ref No.:	11225877-31410	Personnel:	David Tyrant	Date:	6/14/2022 10:26:18
						GHD

Monitoring Well Data

Well Diameter: 1.25

Constructed Well Depth: 22.559999

ft bref

Measured Well Depth: 22.559999

ii.

Screen Material: Unknown

Screen Volume: .13 (percentage)

Water Column Length: 18.06

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Screen Start Depth: 588.14000

Ref Point Elev: 609.24

fi

Screen End Depth: 586.14000

Static Water Depth: 4.50

ft bref

Measurement Type: Screen

Screen Length: 2

Static Water Elev: 604.74ft bref

Sampling Method: Waterra pump.

[illegible]

Field Parameters:	Comments:

Total Volume
Purged (gal):

1000ml per min for 5 min

of Screen
Volumes:[illegible]

Well No.: G6-04 Sampling Event: 202206-WG-Q-Bedrock

Ref. No.: 11225877-31-410

Well Diameter:

Well Diameter: 1.25

Screen Material: Unknown

Screen Start Depth: 551.52000

Screen End Depth: 549.52000

Screen Length: 2

Constructed Well Depth: 59.09

Screen Volume: .13

Ref Point Elev: 609.15

Static Water Depth: 16.30

Static Water Elev: 592.85

ft bref

ft

ft bref

ft bref

Measured Well Depth: 59.09

Water Column Length: 42.79

Measurement Type: Screen

Sampling Method: Waterra pump

[illegible]

Field Parameters:	Comments: MS/MSD taken here.
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Q	Total Volume	Purged (gal):
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
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86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		

1000 ml per min for 5 min

of Screen
Volumes:

[illegible]

Well No.: G6-06

Under Dark Quarterly CW sampling

Screen Length: 2

Static Water Elev: 578.19

ft bref

Sampling Method: Waterra pump:

[illegible]

Q

of Screen

[illegible]

Well No.: H2U-02

Project Name: Hyde Park Quarterly GW sampling

Static Water Elev: 594.57

Field Parameters:[illegible]

Well No.: H5-09

Hyde Park Quarterly GW sampling

549.03

Field Parameters:

1000ml per min for 5 min

[illegible]

Well No.: ABP-1-09

Project Name: Hyde Park 5th Quarter GW Sampling

Screen Length: ft Static Water Elev: 532.84 Ft

Sampling Method: Foot valve

Field Parameters:	Comments:	Total Volume Purged (gal):	# of Screen Volumes:
115ml for 13 mins			

115ml for 13 mins

[illegible]

Well No.: ABP-7-09

Ref. No.: 12579737-

Monitoring Well Data

Constructed Well Depth: 47.2000001

Water Column Length: 3.61

ft

Ref Point Elev: 575.67

Measurement Type: Screen

Sampling Method: Foot valve

[illegible]

Field Parameters:

Comments:

Total Volume	0
--------------	---

of Screen
Volumes:

Sample ID

Type

Matrix

Comp/C

DateTime

Filtered

Analysis

Container #

[illegible]

Well No.: AFW-2U-04

Project Name: Hyde Park 5th Quarter GW Sampling

Monitoring Well Data

Well Diameter:	1.25	Constructed Well Depth:	60.0	Measured Well Depth:	60.0
----------------	------	-------------------------	------	----------------------	------

Screen Material:	Unknown	Screen Volume:	.08	Water Column Length:	42.09
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Screen Start Depth:	572.09	ft
Ref Point Elev:	593.48	ft

Screen End Depth:	570.9	ft	Static Water Depth:	17.91	Measurement Type:	Screen
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Screen Length:	1.19	ft	Static Water Elev:	575.57	ft	Sampling Method:	Foot valve
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[illegible]

Field Parameters:

Comments:

Total Volume

Purged (gal):

of Screen

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

AFW-2U-04-0822	N	WG	G	8/24 13:35	VOCs, SVOCs, Sulfate, Organic Acid	7

[illegible]

Well No.: D1L-11

Project Name: Hyde Park 5th Quarter GW Sampling

Monitoring Well Data

Well Diameter: 1.25 In

Screen Material: Unknown

Screen Start Depth: 489.71

Screen End Depth: 487.71

Screen Length: 2 ft

[illegible]

Field Parameters:

Comments:

Total Volume
Purged (gal):

of Screen Volumes:

[illegible]

Well No.: D1M-09

Sampling Event: 202208-WG-A-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 12579737-

Personnel: Kevin Miller

GHD

Date: 8/23/2022 1:51:52 PM

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 86.0

Measured Well Depth: 86.0

Screen Material: Unknown

Screen Volume:

Screen Start Depth: 515.02

Ref Point Elev: 594.02Screen End Depth: 513.02

Static Water Depth: 70.25

Measurement Type: Screen

Screen Length: 21

Static Water Elev: 523.77

Sampling Method: Foot valve

[illegible]

Field Parameters:

Comments:

Total Volume 7 95

of Screen
Volumes:[illegible]

Well No.: D1U-04

Sampling Event: 202208-WG-A-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 12579737-

Personnel: Kevin Miller

GHD

Date: 8/23/2022 1:08:36 PM

Monitoring Well Data

Well Diameter:

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Constructed Well Depth:

51.0

Screen Material: Unknown

Screen Volume:

Screen Start Depth: 569.99

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Ref Point Elev:

593.77

Screen End Depth: 567.99

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Static Water Depth:

14.21

Screen Length: 2

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Static Water Elev:

579.56

Measurement Type: Screen

Sampling Method: Foot valve

[illegible]

Field Parameters:

Comments:

Total Volume
Purged (gal):

of Screen Volumes:

15

[illegible]

Well No.: D2M-09

Sampling Event: 202208-WG-A-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 12579737-

Personnel: Kevin Miller

GHD

Date: 8/23/2022 1:51:27 PM

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 86.0

Measured Well Depth: 86.0

Screen Material: Unknown

Screen Volume: .13

Water Column Length: 18.05

Screen Start Depth: 515.48

Ref Point Elev: 590.66

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Screen End Depth: 513.48

Static Water Depth: 67.95

Measurement Type: Screen

Screen Length: 2

Static Water Elev: 522.71

Sampling Method: Foot valve

[illegible]

Field Parameters:

Comments:Total Volume
Purged (gal):

of Screen Volumes:

[illegible]

Well No.: E6-05

Project Name: Hyde Park 5th Quarter GW Sampling

Monitoring Well Data

Well Diameter: 1.25

Water Column Length: 93.74

Screen Volume:

Screen Material: Unknown

ft

Ref Point Elev: 578.04

ft

Screen Start Depth: 550.42

Measurement Type: Screen

Static Water Depth: 12.56

ft

Screen End Depth: 548.42

Sampling Method: Foot valve

Static Water Elev: 565.48

ft

Screen Length: 2

[illegible]

Field Parameters:

Comments:

148 mL/min for 47 min

Total Volume	23.92
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of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

Date Time

Filtered

Analysis

Container #

[illegible]

Well No.: E6-06

Sampling Event: 202208-WG-A-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 12579737-

Personnel: Kevin Miller

GHD

Date: 9/12/2022 8:37:52 AM

Monitoring Well Data

Well Diameter: 1.25

Constructed Well Depth: 106.3

Measured Well Depth: 106.3

Screen Material: Unknown

Screen Volume:

Water Column Length: 101.99

Screen Start Depth: 531.33

Ref Point Elev: 577.99

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Screen End Depth: 529.33

Static Water Depth: 4.31

Measurement Type: Screen

Screen Length: 2

Static Water Elev: 573.68

Sampling Method: Foot valve

[illegible]

Field Parameters:

Comments:

1000mL/min for 5 min

Sample ID

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Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

[illegible]

Well No.: F2U-02

Sampling Event: 202208-WG-A-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 12579737-

Personnel: Kevin Miller

GHD

Date: 9/12/2022 1:28:24 PM

Monitoring Well Data

Well Diameter: 1.25

Constructed Well Depth: 61.0

Measured Well Depth: 61.0

Screen Material: Unknown

Screen Volume:

Water Column Length: 35.9

Screen Start Depth: 573.72

Ref Point Elev: 599.89

Screen End Depth: 571.72

Static Water Depth: 25.10

Measurement Type: Screen

Screen Length: 21

Static Water Elev: 574.79

Sampling Method:

[illegible]

Field Parameters:

Comments:

677 mL/min for 5 min

Total Volume	16 98
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of Screen
Volumes:

Sample ID

Type I

Matrix

Comp/Grab

Filtered

Analysis

Container #

F2U-02-0822	N	WG	G	9/12 13:45	VOCs, Sulfate, SVOCs, Organic Acid	7

[illegible]

Well No.: F6-06

Project Name: Hyde Park 5th Quarter GW Sampling

Screen Length: 21

Field Parameters:

of Screen Volumes:

[illegible]

Monitoring Well Record for Low-Flow Purging

Date: 9/1/2022 8:54:20 AM

Monitoring Well Data

Measured Well Depth: 147.0

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[illegible]

Field Parameters:

Comments:

1000mL/min for 5 minutes

Total Volume
Purged (gal):

[illegible]

Monitoring Well Record for Low-Flow Purging

Date: 9/1/2022 8:36:29 AM

Sampling Method: Foot Valve

1000mL/min for 5 minutes

Container #

[illegible]

Well No.: G6-02

Project Name: Hyde Park 5th Quarter GW Sampling

Well Diameter:	<u>1.25</u>	In	Constructed Well Depth:		Measured Well Depth:
Screen Material:	<u>Unknown</u>		Screen Volume:		Water Column Length:
Screen Start Depth:	<u>563.92</u>	ft	Ref Point Elev:	<u>608.65</u>	ft
Screen End Depth:	<u>561.92</u>	ft	Static Water Depth:	<u>17.32</u>	Measurement Type:
Screen Length:	<u>2</u>	ft	Static Water Elev:	<u>591.33</u>	Screen
					Sampling Method:
					Foot valve

Field Parameters:	Comments:	Total Volume Purged (gal):	# of Screen Volumes:	Q

[illegible]

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 12579737-

Personnel: Kevin Miller

GHD

Date: 8/23/2022 10:24:49

Monitoring Well Data

Well Diameter: 1.25 In

Constructed Well Depth: 90.129997

ft bref

Measured Well Depth: 90.129997 ft

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Screen Material: Unknown

Screen Volume:

fi

Screen Start Depth: 520.42Ref Point Elev: 609.09

ft ■

Screen End Depth: 518.42

Static Water Depth: 32.77ft bref

Measurement Type: Screen

Screen Length: 2

Static Water Elev: 576.32

ft bref

Sampling Method: Foot valve

[illegible]

Field Parameters:

Comments:

Total Volume 11 66

of Screen Volumes:

Sample ID			Type		Matrix	Comp/Grab	Date/Time	Filtered	Analysis			Container #
	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged	
G6-06-0822				N	WG	G	8/23 10:35		VOCs, Sulfate, SVOCs, Organic Acid			7

[illegible]

Well No.: H2U-01

Sampling Event: 202208-WG-A-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 12579737-

Personnel: Kevin Miller

GHD

Date: 9/14/2022 9:18:08 AM

Monitoring Well Data

Well Diameter: 1.25

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Constructed Well Depth: 56.0

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Measured Well Depth: 56.0 Ft

Screen Material: Unknown

Screen Volume: .13

gal

Water Column Length: 41.8 Ft

Screen Start Depth: 595.67

ft.

Ref Point Elev: 620.92

ft.

Screen End Depth: 593.67

ft

Static Water Depth: 14.20

19

Measurement Type: Screen

Screen Length: 25

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tatic Water Elev: 606.72

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Sampling Method: Foot valve

[illegible]

Field Parameters:

Comments:

Total Volume	0
Purged (gal):	

[illegible]

Well No.: H5-04

Sampling Event: 202208-WG-A-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 12579737-

Personnel: Jacob Kawecki

GHD

Date: 9/2/2022 8:49:48 AM

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 168.0

Measured Well Depth: 168.0

Screen Material: Unknown

Screen Volume:

Screen Start Depth: 554.9

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Screen End Depth: 552.9

Static Water Depth: 24.78

Screen

Screen Length: 2

Static Water Elev: 592.62

Sampling Method: Foot Valve

[illegible]**Field Parameters:**

Comments:

271 mL/min for 55 min

Total Volume Purged (gal):

of Screen Volumes:

[illegible]

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 12579737-

Personnel: Kevin Miller

GHD

Date: 8/26/2022 11:08:49

Monitoring Well Data

Well Diameter: 1.25

Constructed Well Depth: 156.2

Measured Well Depth: 156.2

Screen Material: Unknown

Screen Volume: .13

Water Column Length: 129.28

Screen Start Depth: 595.33

ft — **Ref Point Elev: 625.58**

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Screen End Depth: 593.33

Static Water Depth: 26.92

Measurement Type: Screen

Screen Length: 23

Static Water Elev: 598.66

Sampling Method: Foot valve

[illegible]

Field Parameters:

Comments:

Total Volume

0

77 ml for 66 mins

0-9

[illegible]

Well No.: I1-02

Sampling Event: 202208-WG-A-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 12579737-

Personnel: Kevin Miller

GHD

Date: 8/26/2022 11:09:50

Monitoring Well Data

Well Diameter: 1.25

Constructed Well Depth: 156.2

Measured Well Depth: 156.2

Screen Material: Unknown

Screen Volume: .13

Water Column Length: 116.26

Screen Start Depth: 573.26

ft 625.47
Ref Point Elev:

Screen End Depth: 571.26

Static Water Depth: 39.94

Screen

Screen Length: 21

Static Water Elev: 585.53

Sampling Method: Foot valve

[illegible]

Field Parameters:

Comments:

Total Volume
Purged (gal):

of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

[illegible]

Well No.: J6-11

Sampling Event: 202208-WG-A-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 12579737-

Personnel: Kevin Miller

GHD

Date: 8/25/2022 10:56:17

Monitoring Well Data

Well Diameter: 1.25

Constructed Well Depth: 120.0

Measured Well Depth: 120.0

Screen Material: Unknown

Screen Volume: .13

Water Column Length: 97.48

Screen Start Depth: 491.36

Ref Point Elev: 608.68

Screen End Depth: 489.36

Static Water Depth: 22.52

Screen

Screen Length: 2

Static Water Elev: 586.16

Foot valve

[illegible]

Field Parameters:

Comments:

Total Volume
Purged (gal):

of Screen Volumes:

Sample ID

Type

Matrix

Comp/Grab

DateTime

Filtered

Analysis

Container #

[illegible]

Well No.: TRIPBLANK

Sampling Event: 202208-WG-A-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 11149902

Personnel: Jacob Kawecki

Date: 9/1/2022 9:31:18 AM

Monitoring Well Data

Well Diameter:

Constructed Well Depth:

Measured Well Depth:

Screen Material:

Water Column Length:

Screen Start Depth:

Ref Point Elev:

Screen End Depth:

Static Water Depth:

Measurement Type:

Screen Length:

Static Water Elev:

Sampling Method:

[illegible][illegible]

Well No.: AGW-1M-09

Project Name: Hyde Park 5th Quarter GW Sampling

Monitoring Well Data

Well Diameter:	1.25	In	Constructed Well Depth:	94.0	Measured Well Depth:
Screen Material:	Unknown				
Screen Start Depth:	520.51	ft	Ref Point Elev:	592.75	Water Column Length:
Screen End Depth:	518.51	ft	Static Water Depth:	39.87	Well Volume:
Screen Length:	2	ft	Static Water Elev:	552.88	Measurement Type:
					Well
					Sampling Method:
					Foot valve

[illegible]

Field Parameters:

Comments:

1000mL/min for 5 min

Total Volume Purged (gal):	15.08
# of Well Volumes:	

Sample ID

Type

Matr

Comp/

DateTime

Filtered

Analysis

Container #

AGW-1M-09-0822	N	WG	G	9/2 13:10	VOCs, Sulfate, SVOCs, Organic Acid	7

[illegible]

Well No.: J6-04

Project Name: Hyde Park 5th Quarter GW Sampling

Well Diameter:	<u>1.25</u>	In	Constructed Well Depth:	<u>120.0</u>	Measured Well Depth:
Screen Material:	<u>Unknown</u>				Water Column Length:
Screen Start Depth:	<u>574.44</u>	ft	Ref Point Elev:	<u>609.12</u>	ft
Screen End Depth:	<u>572.44</u>	ft	Static Water Depth:	<u>27.69</u>	Well Volume:
Screen Length:	<u>2</u>	ft	Static Water Elev:	<u>581.43</u>	Measurement Type:
					Well
					Sampling Method:
					Foot valve

Field Parameters:	Comments:	Total Volume Purged (gal):	# of Well Volumes:
287mL/min for 8 min			

[illegible]

Well No.: J6-05

Sampling Event: 202208-WG-A-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 11149902

Personnel: Jacob Kawecki

Date: 9/1/2022 11:13:10 AM

Monitoring Well Data

Well Diameter:

3

Constructed Well Depth:

120.0

Measured Well Depth:

Screen Material: Unknown

Water Column Length:

Screen Start Depth: 566.92

fi

Ref Point Elev:

609.02

Well Volume:

Screen End Depth: 564.92

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Static Water Depth:

28.99

Measurement Type:

Screen Length: 2

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Static Water Elev:

580.03

Sampling Method:

[illegible]

Field Parameters:

Comments:

1000mL/min for 5 minutes

Total Volume Purged (gal):
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
5000
5100
5200
5300
5400
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5600
5700
5800
5900
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6100
6200
6300
6400
6500
6600
6700
6800
6900
7000
7100
7200
7300
7400
7500
7600
7700
7800
7900
8000
8100
8200
8300
8400
8500
8600
8700
8800
8900
9000
9100
9200
9300
9400
9500
9600
9700
9800
9900
10000

of Well Volumes:

Sample ID

Type

Matr

Comp/Grab

DateTime

Filtered

Analysis

Container #

[illegible]

Well No.: TRIPBLANK

Sampling Event: 202208-WG-A-Bedrock

SSOW Code: **273-402-D02-3100**

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park 5th Quarter GW Sampling

Ref. No.: 11149902

Personnel: Kevin Miller

GHD

Date: 9/13/2022 10:46:13

Monitoring Well Data

Well Diameter:

Constructed Well Depth:

Measured Well Depth:

Screen Material:

Water Column Length:

Screen Start Depth:

Ref Point Elev:

Screen End Depth:

Static Water Depth:

Measurement Type:

Screen Length:

Static Water Elev:

Sampling Method:

[illegible][illegible]

Well No.: ABP-7-09

Project Name: Hyde Park Quarterly GW Sampling

Monitoring Well Data

Well Diameter:

Screen Material: Unknown

Screen Start Depth: 536.97

Screen End Depth: 524.97

Screen Length: 12

Constructed Well Depth: 47.200001

Ref Point Elev: 575.67 ft

Ref Point Elev: 575.67

Static Water Depth: 38.71

Static Water Elev: 536.96

Measured Well Depth: 47.200001

Water Column Length: 8.49

Measurement Type:

Sampling Method: Jerk tube

[illegible]

Total Volume	1.63
Purged (gal):	

Comments:

Field Parameters:

[illegible]

Well No.: AGW-1M-07

Project Name: Hyde Park Quarterly GW Sampling

Monitoring Well Data

Well Diameter:

Screen Material: Unknown

Screen Start Depth: 530.51

Screen End Depth: 528.51

Screen Length: User Entry

Constructed Well Depth: 94.0

Screen Volume:

Ref Point Elev: 592.91

Static Water Depth: 45.50

Static Water Elev: 547.41

Measured Well Depth: 94.0

Water Column Length: 48.5

Measurement Type: Screen

Sampling Method: Jerk tube

[illegible]

Field	Comments:

Total Volume
Purged (gal):

of Screen Volumes:

Container #

[illegible]

Well No.: AGW-1M-09

Personnel: Kevin Miller

Date: 1/18/2023 8:36:14 AM

Well Diameter:

Screen Material: Unknown

Screen Start Depth: 520.51

Screen End Depth: 518.51

Screen Length: User Entry

Constructed Well Depth: 94.0

Screen Volume:

Ref Point Elev: 592.75

Static Water Depth: 42.78

Static Water Elev: 549.97

Measured Well Depth: 94.0

Water Column Length: 51.22

Measurement Type: Screen

Sampling Method: Jerk tube

Screen Length: _____ ft						Static water Elev.: 049.57'						
	Pumping Rate (mL/min)	Depth to Water (ft BREF)	Drawdown from Initial Water Level (ft)	Temperature Deg C	Conductivity (mS/cm)	Turbidity NTU	DO (mg/L)	pH	TDS (mg/L)	ORP (millivolts)	Volume Purged, Vp (gal)	No. of Well Screen Volumes Purged
Time			Precision Required	±% 3	±% 3	±% 10 Or ± 10	±% 10	± 0.1		± 10		
1/18 11:36	1000		-42.78	10.5	4.84	23.5	2.75	7.31		-263.4		
1/18 11:37	1000		-42.78	10.8	4.84	22	2.67	7.27		-277.8	0	
1/18 11:38	1000		-42.78	10.8	4.78	27.2	2.60	7.20		-282.9	0	
1/18 11:39	1000		-42.78	10.7	4.71	22.7	2.63	7.15		-286.6	.3	
1/18 11:41	1000		-42.78	10.8	4.70	19.5	2.72	7.13		-289.2	.71	
											Total Volume	71

Field Parameters:

Comments:

Total Volume
Purged (gal):

of Screen Volumes:

Container #

[illegible]

[illegible]

Well No.: C3-07

Hydro-Bark Quarterly GW Sampling

Monitoring Well Data

Well Diameter:

Screen Material: Unknown

Screen Start Depth: 527.18

Screen End Depth: 525.18

Screen Length: 2

Constructed Well Depth: 86.0

Ref Point Elev: 585.62
ft

Static Water Depth: 38.76

Static Water Elev: 546.86

Measured Well Depth: 86.0

Water Column Length: 47.24

Measurement Type:

Sampling Method: Jerk tube

[illegible]

Field Parameters:

Comments:

Total Volume	12.61
Purged (gal):	

[illegible]

[illegible]

Project Name: Hyde Park Quarterly GW Sampling

Monitoring Well Data

Constructed Well Depth: 102.0

Water Column Length: 24.54

Screen Volume:

ft 1

Ref Point Elev: 598.7

Measurement Type: Screen

Static Water Depth: 77.46

Sampling Method: Jerk tubing

[illegible]

Field Parameters:

Comments:

Total Volume
Purged (gal):

of Screen Volumes:

Container #

[illegible]

Well No.: F2U-02

Project Name: Hyde Park Quarterly GW Sampling

Monitoring Well Data

Well Diameter:

Screen Material: Unknown

Screen Start Depth:	573.72	ft
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Screen End Depth:	571.72	ft
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Screen Length: User Entry

Constructed Well Depth: 61.0

Screen Volume:

Ref Point Elev: 599.89
ft

Static Water Depth: 23.51

Static Water Elev: 576.38

Measured Well Depth: 61.0

Water Column Length: 37.49

Measurement Type: Screen

Sampling Method: Jerk tubing

[illegible]

Field Parameters:

Comments:

Total Volume	63
Purged (gal):	

of Screen
Volumes:[illegible]

Well No.: F2U-04

Sampling Event: 202212-WG-Q-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park Quarterly GW Sampling

Ref. No.: 11230216-D23105

Personnel: Kevin Miller

GHD/

Date: 1/19/2023 2:59:38 PM

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 61.0

Screen Material: Unknown

61.0

Measured Well Depth: 61.0

Water Column Length: 40.69

Screen Start Depth: 557.64

Ref Point Elev: 599.76

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Screen End Depth: 555.64

Static Water Depth: 20.31Measurement Type: Screen

Screen Length:

579.45

Sampling Method: Jerk tubing

[illegible]

Field Parameters:

Comments:

Total Volume
Purged (gal):

of Screen Volumes:

Sample ID

Type

Matrix Comp/Grab

Filtered

Analysis

Container #

[illegible]

Well No.: G1U-01

Sampling Event: 202212-WG-Q-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park Quarterly GW Sampling

Ref. No.: 11230216-D23105

Personnel: Kevin Miller

GHD

Date: 1/19/2023 11:11:23

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 68.6999997

Measured Well Depth: 68.699997

Screen Material: Unknown

Screen Start Depth: 588.11

Ref Point Elev: 617.08

ft

Screen End Depth: 586.11

Static Water Depth: 9.67

Measurement Type:

Screen Length: 21

Static Water Elev: 607.41

Sampling Method: Jerk tube

[illegible]

Field Parameters:

Comments:

Total Volume
Purged (gal):

31 16

[illegible]

Well No. : G6-01

Date: 1/19/2023 11:14:02

ft brefWater Column Length: 19.8 ftJerk tubing

Field Parameters:	Comments:		

Total Volume	13.11
Purged (gal):	

[illegible]

Well No.: G6-04

Sampling Event: 202212-WG-Q-Bedrock

SSOW Code: 273-402-D02-3100

Monitoring Well Record for Low-Flow Purging

Project Name: Hyde Park Quarterly GW Sampling

Ref. No.: 11230216-D23105

Personnel: Kevin Miller

GHD

Date: 1/19/2023 11:14:17

Monitoring Well Data

Well Diameter:

Screen Material: Unknown

Screen Start Depth: 551.52

Screen End Depth: 549.52

Screen Length: 2

Constructed Well Depth:

Ref Point Elev: 609.15

Static Water Depth: 15.71

Static Water Elev: 593.44

ft bref

11

ft bref

ft bref

Measured Well Depth: 59.09 ft

Water Column Length: 43.38 ft

Measurement Type:

Sampling Method: Jerk tubing

[illegible]

Field Parameters:

Comments:

Total Volume	25.61
Purged (gal):	

[illegible]

Well No.: G6-06

Project Name: Hyde Park Quarterly GW Sampling

Ref. No.: 11230216-D23105

Personnel: Kevin Miller

GHD

Date: 1/19/2023 11:14:39

Monitoring Well Data

Well Diameter:

Screen Material: Unknown

Constructed Well Depth:

ft bref

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Measured Well Depth: 90.129997

ft.

Screen Start Depth: 520.42 ft

Ref Point Elev: 609.09

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Screen End Depth: 518.42 ft

Static Water Depth: 31.32

ft bref

Measurement Type:

Screen Length: 2 ft

Static Water Elev: 577.77ft bref

Jerk tubing

[illegible]

Field Parameters:

Comments: MS/MSD taken here

Total Volume	21.98
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[illegible]

Monitoring Well Record for Low-Flow Purging

SSOW Code: 273-402-D02-3100

Sampling Event: 202212-WG-Q-Bedrock

Well No.: H2U-02

Project Name: Hyde Park Quarterly GW Sampling

Ref. No.: 11230216-D23105

Personnel: Kevin Miller

GHD

Date: 1/17/2023 10:50:22

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 56.0

Measured Well Depth: 56.0

Screen Material: Unknown

Screen Volume:

Water Column Length: 33.31

Screen Start Depth: 575.08

Ref Point Elev: 620.88

Screen End Depth: 573.08

Static Water Depth: 22.69

Screen Length: 2

Static Water Elev: 598.19

Measurement Type: Screen

Sampling Method: Jerk tube

[illegible]

Field Parameters:

Comments:

Total Volume	83
Purged (gal):	

[illegible]

Monitoring Well Record for Low-Flow Purging

Date: 1/18/2023 12:15:01

Sampling Method: Jerk tube

Total Volume 51

Container #

[illegible]

Project Name: HP Annual APL Flux Monitoring

Monitoring Well Data

Well Diameter:

Constructed Well Depth:

Measured Well Depth:

Screen Material:

UNKNOWN

Screen Start Depth:

ft bgs

Ref Point Elev:

41

Screen End Depth:

ft bqs

Static Water Depth:

Measurement Type:

Screen Length:

fit bqs

Static Water Elev:

User Entry

Online/direct sample port

[illegible]

Field Parameters:

Comments:

Total Volume
Purged (gal):[illegible]

Ref. No.: 11230216-D23105

Monitoring Well Data

Constructed Well Depth:

Water Column Length:

Screen Material: UNKNOWN

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569.89

ft bgs

Screen Start Depth: 42.6

Measurement Type:

Static Water Depth:

ft bqs

Screen End Depth: 77

Sampling Method: Inline/direct sample port

[illegible]Total Volume
Purged (gal):

Comments:

Field Parameters:

[illegible]

Monitoring Well Data

Measured Well Depth:

Constructed Well Depth: 60.0

Water Column Length: User Entry

Screen Material: Unknown

Screen Start Depth:	572.09	ft
Ref Point Elev:	593.48	ft

Measurement Type:

Static Water Depth: 16.37

Sampling Method: Jerker

Static Water Elev: 577.11[illegible]

Field Parameters:

Comments:

Total Volume	3.33
Purged (gal):	

[illegible]

Monitoring Well Data

Well Diameter:

Constructed Well Depth: 60.0

Measured Well Depth:

Screen Material: Unknown

Screen Start Depth:	563.85	ft
Ref Point Elev:	593.33	ft

Ref Point Elev: 593.33

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Screen End Depth:	561.85	ft	Static Water Depth:	16.40
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Static Water Depth:

fi

Screen Length:	2	ft	Static Water Elev:	576.93
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Static Water Elev:

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Sampling Method: Jerker

[illegible]

Field Parameters:

Comments:

Total Volume Purged (gal):	10.77
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[illegible]

Monitoring Well Data

Well Diameter:	Constructed Well Depth: 80.599998	Measured Well Depth:
Screen Material: Unknown		Water Column Length: User Entry

Screen Start Depth:	<u>496.45</u>	ft	<u>572.1</u>	ft
Screen End Depth:	<u>494.45</u>	ft	<u>60.10</u>	
Screen Length:	<u>2</u>	ft	<u>512</u>	

[illegible]

Field Parameters:	Comments:

Total Volume Purged (gal):	8.94
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[illegible]

Date: 12/21/2022 12:26:07

Personnel: Jacob Kawecki

Ref. No.: 11230216-D23105

Project Name: HP Annual APL Flux Monitoring

Monitoring Well Data

Measured Well Depth:	User Entry
Water Column Length:	User Entry

Constructed Well Depth: 29.0

Well Diameter:

Screen Material:

Ref Point Elev: 571.83 ft

Screen Start Depth:

Measurement Type:

Static Water Depth: 14.57

Screen End Depth:

Sampling Method: Jerker

Static Water Elev: 557.26

Screen Length:

[illegible]

Field Parameters:

Comments:

Total Volume Purged (gal):	11.44
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[illegible]

Project Name: HP Annual APL Flux Monitoring

Ref. No.: 11149902

Personnel: Jacob Kawecki

Date: 12/22/2022 9:11:57

Monitoring Well Data

Constructed Well Depth:

Measured Well Depth: 47.70

Screen Material:

Water Column Length: 29.1

Screen Start Depth:

Well Volume: 29.1

Static Water Depth: 18.60

Measurement Type: Well

Static Water Elev: User Entry

Sampling Method: Bailer

[illegible]

Field Parameters:

Comments: $(47.70 - 16.60) \cdot .65 = 18.915$ gallons

Total Volume Purged (gal):	75.66
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of Wells
Volumes:[illegible]

Monitoring Well Record for Low-Flow Purging

Date: 12/21/2022 1:46:22

Sampling Method: Jerker

Total Volume Purged (gal):	<u>8.46</u>
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[illegible]

Monitoring Well Record for Low-Flow Purging

Date: 12/21/2022 12:26:07

Sampling Method: Jerker

[illegible]

Monitoring Well Record for Low-Flow Purging

Date: 12/21/2022 10:34:52

Sampling Method: Jerker

Total Volume Purged (gal):	<u>3.33</u>
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[illegible]

Monitoring Well Record for Low-Flow Purging

Date: 12/21/2022 9:44:06

Sampling Method: Inline/direct sample port

[illegible]

Total Volume Purged (gal): 0

Sample ID	Type	Matrix	Comp/Grab	DateTime	Filtered	Analysis	Container #
AFW-C-1222	N	WG	C	12/21 9:44		Dioxins, PEST	4
AFW-C-0323	N	WG	C	3/13 12:47		PCB	2

[illegible]

Monitoring Well Record for Low-Flow Purging

Date: 12/21/2022 9:55:47

Sampling Method: Inline/direct sample port

Total Volume Purged (gal):	0
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[illegible]



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